

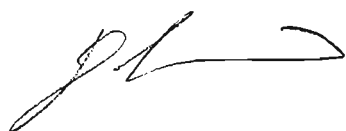
**THE CASE FOR CRITICAL THOUGHT:  
AN INVESTIGATION INTO CONTEMPORARY DETERMINIST  
KNOWLEDGE, ITS SOCIAL EFFECTS, AND THE ALTERNATIVE OFFERED  
BY A 'MODE 2' APPROACH TO TEACHING, LEARNING AND RESEARCH**

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Submitted in fulfillment of the requirements for the degree of Doctor of Philosophy in the  
Department of Philosophy, University of Natal, Durban, 2002.

*Declaration*

I declare that this thesis is my own work and that all sources I have used have been acknowledged by means of complete references.

A handwritten signature in black ink, appearing to be 'JS', with a long horizontal stroke extending to the right.

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May 2002

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Abstract

This thesis is centrally concerned with the current neo-liberal world order and its effects upon society. It is concerned to expose the contradictions and weaknesses within the knowledge systems that underpin our political reality. It considers economics as the determining discourse of neo-liberal politics, analytic biology as its determining discourse of individual persons, and analytic and neo-pragmatist philosophy as its leading systems of thought. In each case it finds a linear rationalism compatible with the determinist materialism of neo-Darwinism, and indeed explicitly invoking Darwin. This seems to vindicate Manuel Castells's finding of this 'Knowledge Society' as driven by 'an abstract, universal instrumentalism'. The thought systems of this economic liberalism have seen politics subsumed within economics, de-humanising most of the institutions of the earlier Liberal tradition, to the detriment of both freedom and democracy. But it disputes Castells's assumption that this is a necessary reality and finds in neo-liberal education the exception to this dehumanising trend. Revitalised as 'Mode 2' knowledge production, this form of teaching, learning and research is found to be ideally suited to challenge the underpinnings of the very social order which initially produced it. The thesis as a whole is designed to employ Mode 2 methods in order to support this contention. Using this approach it seeks to demonstrate that in place of neo-Darwinism the ideas of the South African natural scientist Eugene Marais, concerning the significance of conscious thought itself within evolution, can provide a more convincing epistemology than the behaviourism and materialism of analytic biology. It finds John Maynard Keynes's acceptance of economics as a moral and not a natural science, more

logically convincing and more inherently useful for social reconstruction than the current mathematicisation of economic theory. Prevalent philosophical approaches appear to serve only to reinforce the systems of thought already found (and found wanting) in politics, biology and economics. But again these philosophies are shown to be vulnerable to a Mode 2 critique, particularly employing the ontological understanding of the contemporary pragmatist philosopher Joseph Margolis, whose strong version of relativism allows for both bivalent and multivalent truth values more appropriate to understanding the complex realities of ethical and democratic societies.

## INTRODUCTION

The jury is out as to whether humanity is able genuinely to think for itself, or whether its thought processes, along with other human attributes of personality and ability, being gene and neuron-based, are in effect determined by rational processes and potentially discoverable by science. My research indicates that, while the latter view is very much in the ascendant at present, the former is the stronger case. This is a dispute in which there is clearly a lot at stake for educators, and our argument for an independent critical consciousness is one that this thesis sets out to prove 'beyond reasonable doubt'.

When I began this study some five years ago the problem presented itself to me rather differently. As an educator living in the New South Africa, then less than three years old, it was apparent that democracy was already running into severe difficulties. The western world, along with our new government, appeared to be increasingly concerned with the economy rather than with humanity, and few of the promised democratic reforms in education looked possible from that perspective. And yet the world applauded us, our exemplary constitution, our statesmanlike President. How could this situation have arisen? Beginning from this question, the research developed from an investigation of the South African transition to democracy and the education policies that followed that, to an investigation of the economic ordering of society that seemed somehow to be at the heart of the problem. This led inevitably to consideration of doctrines of 'survival of the fittest' and to the growing realisation that beyond neoclassical economic theory, every

dominant thought system I investigated seemed similarly to endorse Darwin and the idea that linear systems determine life. But then the research ran into difficulties. One of my supervisors complained that while it was fairly clear what I was against, it was much less clear what I was for. ‘Thought itself’ seemed both an inadequate reply, and an impossible starting point for a library search. However a five-year research project has to have its moments of serendipity, and for me there were two. The first was when I picked out Eugene Marais’s *Soul of the Ape* from my daughter’s bookshelf in Johannesburg – and found that I had discovered the alternative epistemology that I required to counter Darwin and Freud – one backed by strong scientific evidence, and with powerful links to education. The second breakthrough happened when I traveled to the High Tatras in Eastern Slovakia to give a paper at a philosophy symposium on Pragmatism. Again it was clear what I was against – Richard Rorty’s post-analytic pragmatism, as the heart of what seemed to me western society’s distorted vision of contemporary Liberalism. But my luck was holding and the keynote speaker there was Joseph Margolis. On reading his book *The Truth about Relativism* when I returned to South Africa, I discovered a wise and flexible ontology that could counter Rorty and the analytic tradition. Both Marais’s epistemology and Margolis’s ontology fitted perfectly with the educational interpretation of contemporary ‘Mode 2’ educational theory and practice that I wished to endorse. The thesis as presented follows this same trajectory.

The first chapter therefore describes South Africa’s transition to democracy and finds that this political transformation can only be understood in the context of powerful economic and business influences operating both inside and outside of the country at that time. The

compromises that were made between different stakeholders in the transition involved an acceptance by all of them of a globally dominant 'Washington Consensus' economic orthodoxy. The evidence seems strong that the political agenda of social transformation became a casualty in this process as earlier government-driven or 'demand-side' economic growth policies designed to support the poor, were jettisoned in favour of 'structural adjustment', 'fiscal discipline' and 'inflation targeting' strategies aimed at bringing South Africa into the global economy.

The second chapter focuses upon education policy in these same years, and finds that the influences that drove the political takeover necessarily also affected the new government's agenda for education. The assumed need to follow 'Washington Consensus' economic policies restricted the policy options available for educational reform along with other social policy agendas. However, the study finds that while the physical restraints caused by limited funding were severe, they were not sufficient to explain the extent of non-delivery in education, given the expertise and experience available within the educational community, and the expressed interest of a concerned public. The mindset that was able to accept a narrow rationalism within economics appears to have been as influential in restricting the conception of innovative and apt policy responses for particularly South African educational problems more generally. The absence of any understanding that policy had an option to value contextualised critical thought independently of accepted expert models (often from abroad) and not only the accompanying economic manifestation of this mindset, seem to be indicated here.



The third chapter opens the discussion beyond South Africa in order to discover the source of this instrumental political and economic reasoning within the global phenomenon of 'neo-liberalism'. The object was to tease out the historical trajectory from an earlier political Liberalism to the current economic one. The most significant common aspect that emerges from this study is the downplaying of agency in the current situation as against its central role in the earlier Liberal tradition. This has allowed for the phenomenon of a society driven, as Manuel Castells says, by de-personalised economic power itself. This 'power without agency' being reliant upon market information and not upon human thought, has apparently led to the peculiarly neo-liberal conflation of 'knowledge' with 'information', 'freedom' with 'deregulation', and society with economics to the extent that 'socioeconomic' becomes a single concept. This instrumental reason that dehumanises social institutions necessarily lessens the very individual freedom and democracy that were the original basis of political Liberalism. But this change has apparently been driven largely by what are understood to be 'economic realities' rather than by any more theoretical political commitment to a new order on the part of populations or their governments. The final section of this chapter then investigates education in the Liberal tradition and finds that it represents a marked exception to the general trend. Neo-liberal imperatives towards greater innovation for economic competitive advantage appear to have led to a broadened concept beyond traditional 'liberal education'. Revitalised in the idea of 'Mode 2' approaches to teaching, learning and research, this new approach seeks to transcend older forms and institutions of learning, in innovative, transdisciplinary and problem-based ways that cannot avoid the employment of critical conscious thought. Paradoxically therefore this

form of education emerges as uniquely appropriate to critique the society that gave it birth. It is the approach to research that is employed throughout the thesis.

The fourth chapter therefore digs deeper still in order to expose the underpinnings of knowledge that led to the current understanding that individuals and societies are amenable to analysis and control through instrumental reason. It first investigates analytic biology and its focus upon the mapping of the human genome as instances of our understanding of ourselves as the predetermined objects of science, able to be comprehended through rational codes. It finds strong evidence that this neo-Darwinian approach is inadequate, particularly in its failure to account for the nature of consciousness itself. By contrast an alternative evolutionary understanding reached by the South African natural scientist Eugene Marais towards the beginning of the twentieth century, sees individual consciousness as itself the pre-eminent evolutionary adaptation enabling those species that acquired it, and particularly mankind, to survive and prosper. The second half of the chapter goes on to investigate the neo-liberal understanding of societies as the simple aggregation of rationally determinable individuals within comparable logically determinable economic wholes. However economics, it is suggested, can in fact be understood more fruitfully as a human and moral science, not amenable in the last instance to mathematical calculation – endorsing the understanding of John Maynard Keynes in the first half of the twentieth century.

The final chapter finds the very same adherence to materialism, rationalism and Darwinism in the most influential current schools of western philosophical thought -

analytic philosophy and post-analytic pragmatism. Through an investigation of two of the principal works of Richard Rorty (probably today's most public philosopher) both the analytic method that he adopts and the postmodern neo-pragmatist denial of epistemology to which he resorts, are found inadequate to comprehend human thought and agency. This Rortyan acceptance of a linear scientific rationality and its negation in the denial of philosophical truths can be seen as compatible with each of the neo-liberal approaches already investigated. I suggest that a useful counterpoise to this philosophy can be found in the work of the contemporary pragmatist philosopher, Joseph Margolis, whose support of a 'robust form of relativism' can encompass both bivalent and multivalent truths consistent with the acceptance of both disciplinary knowledge, and social uncertainty. This is a position compatible with freedom of thought to discover and to seek truths, some discoverable and others, more elusive, that must remain permanently as moral and political choices.

The research therefore identifies a central tension in that the educational theory and practice most favoured in the western world in the current neo-liberal era recommends strategies of thought strangely at odds with the theory and practice of the dominant disciplines whose mastery must be the target of this same education. The educational theories of 'constructivism', 'outcomes based education' (OBE) and – the particular focus of this thesis – 'Mode 2 knowledge production', all favour an epistemology arising within the critical consciousness of individual human beings<sup>1</sup> in collaboration with their peers and their teachers and in close connection with the real world. They all favour an

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<sup>1</sup> As indicated, this is true only of an *educational* interpretation of Mode 2 but not of Mode 2 as it operates in practice in the commercial world and as it is described by its principal theorist, Michael Gibbons.

education focussed upon the solving of real social problems, in context, across disciplines in a democratic and accountable way. But the very society that demands this education would appear at the same time to deny it. The thesis suggests that this situation can only be resolved by Mode 2 knowledge production first applying itself, as an educational catalyst, to those disciplinary understandings that seem perversely to stand in the way of their own, and hence to western society's, advancement. It suggests that this role as catalyst and questioner is ideally the role of education – and of philosophy – and thus of a Philosophy of Education for the twenty-first century. I conclude with a brief 'addendum' illustrating the current situation in the teaching of commerce disciplines in South Africa. This sketches the unresolved educational tensions that exist between the disciplinary knowledge taught in faculties of commerce, and its increasingly insistent educational 'other'.

The thesis is therefore very much more wide-ranging than might be considered the accepted norm – but it hopes through this to illustrate the educational philosophy it advocates – holistic, reflexive, inter-disciplinary, problem-posing, socially and economically accountable, and prepared to challenge entrenched academic norms of knowledge production wherever necessary. The knowledge that it hopes to induce is not only that resulting from the research itself, but also (and equally) that new knowledge demanded from the reader which education seeks – be this through interest, provocation, laughter or rebuttal. Thus where there are lacunae (as any project touching upon politics, philosophy, economics, genetics, history and education in the space of two hundred odd pages, must involve) the hope is that these lacunae are themselves pregnant and

productive of further argument and research. The aim is therefore less the presentation of a *finished* thesis and more the contribution that this set of ideas (carefully selected in themselves) may make to that 're-enchantment of the world' that the best of post-modern thought would have us aspire to. This 're-enchantment' is not to be understood as in any way mythical or mystical, but rather arises from the recovered opportunities of conscious thought itself.

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## CHAPTER 1

### The South African Transition

*This chapter describes events that influenced South Africa's development as an emerging democracy within a neo-liberal global context in the decade from 1990 - 2000. It suggests that the more popular definition of our status as an 'emerging market' is the dominant one, in effect excluding, both conceptually and practically, the full realisation of democracy.*

#### **1. Introduction.**

In 1990 there were powerful democratic as well as anti-democratic, and 'other-than-democratic', forces in South Africa. There was a leadership reconciled to accommodation with the former colonial forces for reasons both noble and practical. There was an enthusiastic but inexperienced (and often illiterate) new electorate, and a parliamentary tradition, distorted by apartheid, but which nonetheless went back to the early days of the century, along with a western style legal system that had had some success in standing against arbitrary rule. Majority rule had until recently been a radical left agenda and not a liberal democratic one in the eyes of the old regime, while the capitalist system had represented 'the oppressors' to the liberation movement. In addition, elements of specifically African non-democratic factionalism made civil war a very real possibility until about a fortnight before the elections. (Inkatha Freedom Party stickers had to be appended to voting forms that had been printed without them). The fragility of this new recruit to democracy was therefore evident, but the goodwill of the world and within the country was immense. Most importantly a new constitution embodying the very best in

liberal democratic jurisprudence had been drawn up and adopted in 1993. This situation would therefore seem to provide a classic opportunity for observing how the neo-liberal world order, at that moment globally unchallenged, would operate to sustain or undermine this neophyte democratic state.

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## *2. Context.*

It is significant for this discussion to remember that the history of the ANC goes back to 1912 and that for much of that history the ANC represented the educated petit bourgeois amongst the African population rather than the radical left. However the liberation movement from the 1960s had taken a more militant direction which relied ideologically upon broadly Marxist ideas and particularly those of the utopian socialist 'Freedom Charter' adopted in 1955. This was a time when most anti-colonial forces in Africa saw the Soviet model as their goal, and economically therefore this stance implied a belief in nationalisation. As late as February 1990, just before his release from prison, Mandela was still able to say that: 'the nationalisation of mines, banks and monopoly industries is the policy of the ANC and a change or modification of our views in this regard is inconceivable'<sup>1</sup>.

However, once out in the real world Mandela was to experience that high point of global free market capitalism which made it even more inconceivable that South Africa could resist the tide of history. The spectacular collapse of systems of 'actually existing socialism' in Eastern Europe from 1989 was matched in South Africa by the longer-term

discrediting amongst the business community (whether English speaking or Afrikaans) of the ironically similar 'statist' apartheid economic system, as corrupt, undemocratic, inefficient and repressive. However, the speed with which contemporary hegemonic economic thinking reversed and replaced more recent socialist ideas amongst the new ruling party was perhaps surprising. Within two years of his previous defense of command economies Mandela was saying:

Even if we leave aside the merits of the economic debate there is a political reality facing us. The business community worldwide is not going to have any truck with a government that wants to nationalize. It's a reality. Do you want to fly in the face of reality? You can't do it ... We are well aware that if you cannot cooperate with business you cannot succeed in generating growth. (Words recalled by Alec Erwin after Mandela's return from the World Economic Forum in Davos Switzerland 1992)<sup>ii</sup>.

And by 1994, Mandela was prepared to argue, at a Congress of South African Trades' Unions (COSATU) Congress, for the need to emulate South East Asian low wage economies: 'Unless we sacrifice, [unless] we have that determination to tighten our belts ... it is going to be difficult to get our economy to grow'<sup>iii</sup>. These ideas are interesting not only for the evidence they provide of Mandela's pragmatic approach but also for the conflation that he unquestioningly assumes between political reality, 'the business community worldwide', and the ability to create economic growth. The Cosatu speech clearly indicates acceptance of the classic neo-liberal defense of 'short-term pain for long-term gain'. The *political* need for growth is spelt out more clearly in his preface to the ANC's 'Reconstruction and Development Programme' (RDP): 'Democracy will have little content and indeed will be short lived if we cannot address our socio-economic



problems within an expanding and growing economy'<sup>iv</sup>. Mandela of course was not an economist whereas Thabo Mbeki and other ANC members returning from exile, were. The exiles were generally seen to be fairly moderate and liberal.

Therefore by 1994 the ANC government-in-waiting found themselves on the horns of a dilemma, which was (and still is) only partially understood. They believed that democracy remained fragile and, understandably, that economic prosperity was necessary for its consolidation. Social redress, and thus the satisfaction of the majority with the new dispensation, would only be possible if the country could access the means to enrich its poorest citizens. But they had been persuaded that acquiring these means was dependent upon economic policies that might make poverty worse in the short term. And even if growth were achieved in the long run, this economy would be able to address social needs only in a 'trickle-down' or 'top-down' way since that is its rationalist, non-interventionist, stance. For the new government wholeheartedly to accept global economic orthodoxy would therefore mean overriding immediate political imperatives and thus effectively being prepared to give democracy itself 'little content'. That their political goals could therefore be *incompatible* with their economic means, and not simply difficult to achieve by these means in the short term, was a conclusion increasingly difficult to escape, but apparently as difficult to circumvent.

While the RDP document in its 'Vision Objectives' for 'building the economy' appears to offer a somewhat different centre path, this is in fact misleading. The document states:

The fundamental principles of our economic policy are democracy, participation and development. We are convinced that neither a commandist central planning system nor an unfettered free market system can provide adequate solutions to the problems confronting us. Reconstruction and development will be achieved through the leading and enabling role of the state, a thriving private sector, and active involvement by all sectors of civil society which in combination will lead to sustainable growth’.

The Reconstruction and Development Programme was the deal struck between the more moderate ANC and their alliance partners, the South African Communist Party (SACP), the Congress of South African Trades Unions (COSATU) and the National Union of Mineworkers of South Africa (NUMSA). The political compromise this involved is clearly illustrated in the document above. But whether such a middle route was feasible in practice is doubtful. While Mandela understood that ‘economic debate’ was still possible (see above) he was prepared to concede more pragmatically that the business approach was now ‘reality’. What is not so obvious is that we are in fact dealing here with two ideologies, one discredited as outdated and unworkable but *both* employing very similar linear decontextualised reason to deal with complex interrelated social and political factors. *Neither* is therefore able to address social and political transformation and full liberal democracy directly. This situation is misleading in exactly the same way that Tony Blair and Anthony Giddens’s idea of a ‘Third Way’ which embraces current economic thinking while trying to find a new path, is misleading. In order for something different from either Washington Consensus *or* socialist thinking to prevail it would be necessary to consider economics differently – as the art of how ordinary, uninformed, emotional and only reasonably rational, humanity deals with the problems associated with the management of their resources – and *from this starting point* to tackle particular

political and social problems appropriately. The evidence is strong that the hypothesis of rational expectations, which underlies all present orthodox economic thinking, is unsustainable<sup>vi</sup>. (See Chapter 4 for further discussion of this). But this does not entail the abandonment of economic theory in toto – only this objectivist version of it. Politicians responsible for economic policy in the New South Africa, in the light of this would have had to contextualise their economic thinking within the framework of their political mandate and of the Constitution (although there were some economically conservative elements written into the constitution, as will be discussed). That this was never done and whether it *might have been done*, the following discussion will try to illustrate.

Although current economic theory is discussed at more length in Chapter 4, a brief consideration of the nature of ‘Washington Consensus’ thinking which is criticised here may be helpful. Washington Consensus thinking is defined by Hein Marais as ‘a compilation of adjustments ... aimed at freeing the capitalist system from inefficiencies and contradictions attributed to the interventionist or regulatory activities of states’<sup>vii</sup>. It was conceived in the context of a long term decline in the growth of real manufacturing and mining industries and the crisis in oil prices in the 1970s which increased the developing world’s debt burden, and made repayment more urgent from the point of view of the West. There were two principal responses to this situation. Firstly, global deregulated money markets became a new source of speculative investment in the absence of more traditional ‘real economy’ sources of wealth. Secondly new economies in the third world were encouraged to liberalise their money markets and open up their economies to world trade and the penetration of multinational companies. The International Monetary Fund and the World Bank’s role has been to provide support for

this. Their neo-liberal policies operate to sustain it through a discouragement of government (public) spending, and the encouragement of the private sector and their opening up to world markets. Hence their insistence upon ‘fiscal discipline’ and ‘structural adjustment’ and the liberalisation of trade and money markets in ‘emerging’ countries. Western countries and particularly the United States have benefited greatly from the system over the last decades. The richest, and therefore most powerful, sections of all western populations and the small westernised sectors of other countries’ populations have benefited likewise from the support given to private sector enterprise. Whether ‘Washington Consensus’ thinking is likely to be sustainable in the long term is however questionable.

### *3. The acceptance of hegemony.*

An examination of the circumstances of the ANC’s enthusiastic embracing of neo-liberalism in the years just before and after it came to power will provide evidence for the power of this paradigm at this time on global thinking, and for its impact on ANC domestic policy, as well as providing the foundation for a more specific exploration of its impact upon education policy, to be examined in the following chapter.

The years between 1990 and 1994 saw an all-out effort by the business community within South Africa to bring the incoming government around to their own way of thinking. Numerous ‘scenario planning’ workshops were held under business auspices all within broadly neo-liberal frameworks<sup>viii</sup>. ‘The pat view was that the ANC “saw the light” thanks to the determination of business to “patiently and systematically educate blacks into the economic realities of the world”<sup>ix</sup>. But it was not necessary that the new

government become entirely convinced of the economic validity of the arguments, provided that they were convinced that the political realities facing them *required* that they take this particular economic route. When Nicoli Nattrass suggests that ‘as the ANC leadership began to worry about ensuring long-term sustainable growth – and hence also its long-term political future, its policies became more pro-business’<sup>x</sup> she is herself assuming a conflation of growth with economic and political ‘reality’.

Hein Marais suggests that one of the scenario planning initiatives – the *Mont Fleur* scenario – can be seen as particularly responsible for ‘assisting the march of orthodoxy’ partly because of the ‘range of progressive (including ANC) economists and union figures who were drawn into the exercise’<sup>xi</sup>. This scenario was broadly supportive of orthodox macro-economic policy and was strong in its ‘disapproval of redistributive state spending’<sup>xii</sup>. It was convened several months before the final report of the Macro-Economic Research Group (MERG) – a policy strategy written from an alternative economic perspective, and one commissioned by the ANC themselves in 1991. (The kinds of alternative economic strategies offered by MERG are discussed below). MERG’s influence was minimal however since by the time it presented its findings the ANC were particularly anxious to calm international fears in the run up to the elections. Where leading economists and leading nations globally made similar assumptions it would have been difficult for the ANC (whose own economists were acknowledged to be inexperienced<sup>xiii</sup>) to have held to a different line. When international support, personal gain, gains for their party, and their class (the middle class always gains most from neo-liberal policy), were to be won in addition, the pressure proved irresistible.

*The marginalisation of opposing forces – COSATU and the SACP.* The silence of groups whose political and economic agendas could be seen as *directly opposed to* the tenets of neo-liberalism however requires some additional explanation beyond the fact that they were the ANC's 'alliance partners' and could be expected to follow its lead. COSATU represented a reasonably powerful and well-organised Trades Union movement, weakened somewhat by the recruitment of many of its best people into posts within the new government (this perhaps adding to the puzzle about the government's willing compliance with orthodoxy), but nonetheless a significant force with a potentially powerful constituency. Tensions existed in the labour movement between the skilled and the unskilled – between an elite fraction with aspirations to produce high quality and innovative manufactured goods and compete successfully on the global market (clearly dovetailing neatly with the aspiration of business) and the unskilled and unemployed. The commitment of COSATU to the interests of the unemployed was questionable. The elite fraction could also be accused of being prepared to push wages up to a point where mechanisation became very attractive to employers. But despite these complications the labour movement as a whole could be relied upon to put continued pressure on government and industry to halt job losses, create employment, challenge privatisation and encourage affirmative action in the workplace. COSATU must be seen at the least as an additional spur to the government to seek transformation or face unpleasant future political consequences.

It must also be remembered that neither the SACP within the Government of National Unity (GNU), nor the Pan African Congress (PAC) outside of it, gained more than a fraction of the votes cast in 1994. Not only were their numbers low but their voices were

muted. Overall the weakness of extremist parties at the time of transition might have surprised political forecasters of earlier decades. But this mirrored a global trend of the post-Cold War era and can be linked to a growing political apathy created by a belief that government is a matter of apolitical administration. Low voter turnout particularly amongst the South African youth in 1999 would seem to confirm the existence of this phenomenon in this country. It may also reflect the peculiarly African phenomenon of the persistence in power of winning parties for several decades beyond independence – a situation linked to power and patronage. The ANC's alliance partners could overall be seen therefore only as a *potential* brake on neo-liberal policies, and a *potential* spur to finding more people-friendly solutions to economic problems.

#### ***4. The consolidation of orthodoxy.***

The advice given to South African policy-makers by the IMF and the World Bank prior to the GNU's assumption of power is indicative of the direction of global economic policy thinking. As with the business-driven scenarios, these plans diverge a little from each other, the World Bank reflecting the slightly more progressive and open-minded direction it was advocating at that time. While it supported 'continued fiscal discipline' it conceded that labour should not 'bear the brunt of reduction in real wages'<sup>xiv</sup>. The IMF was prepared to make no such concession. Its '*Key Issues in the South African Economy*' report was indicative of its narrowly orthodox macro-economic thinking.

<sup>xiv</sup> 'Along with [reducing] the budget deficit, lowering inflation and maintaining macro-economic stability, liberalised trade and financial relations were posed as prerequisites for increased exports, foreign investment and access to credit. It warned against 'excessive' government

expenditures on education, health, training and complementary infrastructure, while declaring that the 'remedy for structural unemployment is to increase the productivity of labour, to lower the real wage, or some combination of the two'<sup>xv</sup>.

This approach was very close to the 'Normative Economic Model' (NEM), drawn up by the outgoing apartheid regime and released in March 1993. Although both NEM and the IMF reports were rejected by the ANC and COSATU at the time, the GEAR policy of 1996 'would contain several of [their] elements'<sup>xvi</sup>. The influence of these ideas was becoming increasingly pervasive.

*The independence of the Reserve Bank.* Another significant step taken in late 1993 was the insertion of a clause in the constitution that guaranteed the independence of the Reserve Bank. This step was taken by the ANC leadership without consultation and it effectively put monetary policy beyond the influence of Parliament. This clause states that the Reserve Bank's 'primary object is to protect the value of the currency in the interest of balanced and sustainable economic growth'. This, as Hein Marais argues, prevents the Bank, constitutionally, from taking measures in favour of fuller employment if these should jeopardise price stability, and it is in fact more conservative than the equivalent ruling in the United States where the Federal Reserve is required to pursue full employment *and* price stability<sup>xvii</sup>. This significantly anti-democratic step was also taken by Tony Blair soon after he came to power and numerous countries have followed suit during the late 1990s in the interests of economic orthodoxy<sup>xviii</sup> and the 'insulation and autonomy of policymakers from popular pressures'<sup>xix</sup>. If economics is a science it is of course rational to leave monetary policy to the experts. And the official excuse given



three years later for the conservative nature of the GEAR policy suggests that this was exactly the argument of the government. A document sent to provincial leaders admits that ‘certain measures in GEAR are similar to many neoliberal packages’<sup>xx</sup> but this is *‘because there is an objective character about certain economic relations’*<sup>xxi</sup>. In effect ‘[t]he quest for policies acceptable to business proceeded as if the process was politically and ideologically neutral, and could be appended to a set of strategic (and politically palatable) social objectives’<sup>xxii</sup>.

Equally significant for a consideration of the ongoing march of South African neo-liberalism is the reasoning of Mandela. ‘We argued for the independence of the Bank ... not only because we are committed to the sound economic management of the country, but also because we want to send out a strong signal to the international and local business and financial communities that we are serious about this commitment’<sup>xxiii</sup>.

*The Growth, Employment and Redistribution (GEAR) policy.* Just as the decision on the independence of the Reserve Bank was taken by the ANC leadership without consultation, so the introduction of the Growth, Employment and Redistribution (GEAR) strategy three years later took even Mandela by surprise. ‘I confess even the ANC learnt of GEAR far too late – when it was almost complete’<sup>xxiv</sup>. COSATU and the SACP were to be allowed to ‘negotiate the details’ but the fundamentals were declared by Finance Minister Trevor Manuel to be ‘non-negotiable’<sup>xxv</sup>. Again one of the primary objectives appears to have been to win the approval of international business – ‘to signal to potential investors ... commitment to prevailing orthodoxy’<sup>xxvi</sup>.

The economic pillars of GEAR were fiscal austerity (the reduction of government debt) that would in turn reduce interest payments due from the government, allowing (eventually) for increased social spending. Tax should not exceed 25 percent (later 26,5) of GDP. Increased government revenue would be derived from higher economic growth and improved revenue collection, while growth would depend upon private sector investment to be induced by their (presumed) positive reaction to lower government deficits. Private sector investment would also involve partnerships with the public sector through privatisation programmes, which would reduce the cost to the state of upgrading infrastructure. There would be no direct government spending. The conservative argument behind a lack of any direct government intervention is not only the threat of inflation, but also the fear that government investment will ‘crowd out’ private investment. The alternative position is that government spending provides expansion and growth which *encourages* private sector investment – an argument for ‘crowding in’. That this policy was put together hurriedly and that its fundamentals, such as the relationship between growth and employment, were not thoroughly examined was admitted even by its architects<sup>xxvii</sup>. It was in fact based upon several ‘leaps of faith’<sup>xxviii</sup>.

GEAR ‘established targets of a 6.1 percent growth rate and the creation of 409 000 jobs per annum by the year 2000, and it proposed an accelerated programme of privatisation, deregulation and fiscal restraint. Foreign exchange was liberalised even further ... Fiscal restraint was to be achieved by rationalisation of the public sector, the elimination and scaling down of some social services, [and] budgetary reform.’<sup>xxix</sup>. The balance of GEAR’s successes measured against its failures four years on, is instructive. Figures weighing its projections against actual performance show that ‘the government policy

appears to have been remarkably successful in the areas of fiscal restraint, tariff reductions, and inflation control ... and significantly off the mark on the real economy (growth and employment'<sup>xxx</sup>). The fiscal deficit as a percentage of GDP was projected by GEAR to be maintained at 3.7 percent. 3.1 percent was achieved. Real government consumption as percentage of GDP was projected by GEAR as 19.0 percent and 19.6 percent was achieved. Inflation was targeted at 8.2 percent and as low a figure as 6.6 percent was achieved. By 2001 the government could be satisfied that 'the overall budget shows an increase in expenditure which is more than matched by increased revenues thereby reducing the budget deficit over the period ... since 1994 improved tax collection has allowed the Treasury to increase expenditure without increasing the budget deficit.'<sup>xxxi</sup>.

On the other hand, real private sector investment growth had been targeted at 11.7 percent but only achieved 1.2 percent (calling in question the argument for 'crowding out' above), GDP growth was projected as 4.2 percent and achieved 2.4 percent. (This fair to middling level of growth becomes less encouraging when broken down by sector however. There was growth in transport and communication, finance, real estate, business services and general government services, while there was a *decline* in the 'real economy' sectors of agriculture, mining and manufacturing<sup>xxxii</sup>). Most telling of all 'annual change in formal, non agricultural employment' was projected to achieve 270 000 *new* jobs per year while in fact 125 200 jobs were being *lost* per year by 1999.

Therefore, being contextualised, the nature and outcome of the GEAR strategy, as South Africa's 'home grown' Washington Consensus package, might have been predicted. It

met the needs of financial directives very nicely. That it could not meet the social needs of the electorate was predictable. Its own internal logic was also problematic, since the independence of the Reserve Bank meant that the internal interests of a country-specific policy would be superseded when global financial imperatives decided differently. Interest rates in South Africa soared to 17 percent in response to the South East Asian crisis in 1997-8, indicating that an independent central bank will be sensitive to international financial requirements first, even if this is detrimental to internal investment. The 'sound fundamentals' so often referred to are not sound economic fundamentals *tout court*, but rather sound for an economy which wants to take part in the logic of current global finance. They are good rules of the game while the game is still in play.

### ***5. The alternatives.***

The argument that a small, weak state had (and has) no alternative but to take the route laid down for it by international financial and trade bodies supported by the world's leading nations, rests upon at least three possible premises. Firstly economic 'objectivity' – if there are known rules that govern economic activity and western economists since the 1970s have discovered them, to ignore them would be absurd and presumably disastrous for the successful management of the economy. Secondly, power – the globalised world weakens the ability of nations to take an independent stance and the withdrawal of economic and trading support or the imposition of sanctions by powerful nations might be disastrous to the economy of such a state. (Direct force of arms can probably be ruled

out). Thirdly, economic pragmatism – ‘Washington Consensus’ approaches, it may more plausibly be argued, may not be the final word on economics, but they nonetheless represent the accumulated wisdom of the currently most successful nations – and any previous alternatives tried have demonstrably been worse. Therefore to imagine that a small inexperienced state could find other and better alternatives is, at best, unlikely, at worst probably disastrous. Let us examine each of these arguments more closely.

(1) The first argument is dealt with further in Chapter 4, but it can be briefly suggested here that economics as a human science deals with the conscious decisions of human beings. These can never be treated as amenable to mathematical calculation, since people are driven by various motives besides profit maximisation. It is also the case that their knowledge is too imperfect to allow them to act entirely ‘rationally’ however much they might wish to, and the range of contingent circumstances operating on the economy as a whole cannot be calculated and certainly cannot be predicted.

(2) The argument which focuses upon the weakened nation state in the context of global power has in fact been used frequently by the ANC itself to excuse policy which might be unpalatable to the electorate. But in reality GATT (the forerunner of the World Trade Organisation) was prepared to see South Africa take a less ruthless trade liberalisation route than it chose to take. And the idea of punitive sanctions being imposed upon Mandela’s government, if they were seen to be trying to protect and revive the fortunes of the recent victims of apartheid, tests credulity. Sanctions are not imposed by inhuman ‘flows’ but by flesh and blood human beings – with a keen eye on the media. Perhaps the most interesting consideration is however the fate of the former Rhodesia whose internal

economy boomed as a result of an international trade blockade during their unilateral declaration of independence period. New industries were established and new jobs created<sup>xxxiii</sup>. This route is not suggested as a solution, but it is a reminder that the variables in economic contexts are multiple.

(3) The third premise is the most plausible, until we realise South Africa's place in the global pecking order. More closely borne out by the facts is the argument that the smaller states, which have liberalised their money markets, are the most vulnerable to speculative and unpredictable downswings. Their powerlessness once voluntarily *in the loops* is greater than when voluntarily more autonomous. And the argument that the accumulated wisdom of the powerful is inevitably worth listening to, is hardly borne out by history. Rather, a system that works well for them, but demonstrably works badly for others and those others comparable to oneself, should be the more carefully scrutinised. And finally it is untrue that alternative solutions have all been found wanting. The only alternative to 'capitalism as we know it' is not 'socialism as we knew it'. By far the most progressive periods in the recent history of the west, periods when the poor were getting demonstrably richer, were in the 1930s during the New Deal in America and in the 1950s and 1960s, after the Second World War in Europe. At both periods society was still deemed to exist and social democratic economic solutions were sought. It is true that no final solutions were found in either case, and that a large number of independent variables operated beyond the specifics of Keynesian economic policies (indeed only a modified form of Keynes's ideas were employed particularly in the latter case). But the historical evidence would seem to indicate that developmental situations require something on these lines if they are to have any chance of success. There are differences

between Keynes's ideas on stimulating demand (rather than supply) in order to expand the economy; the interpretation of these ideas as a 'special case' within orthodox economics; and policies of government intervention as part of a moderate socialist framework. Philosophically however the thinking behind all of these stems from a common understanding that politics and human welfare should be the starting point of economic policy and the idea underlying *this* is that there is no 'objective' nature about economics, which is a human and ethical discipline.

Solutions falling broadly within this 'humanist' group of ideas were in fact proposed by various economists and groupings of economic policy analysts before and after the achievement of formal democracy in South Africa. None of these were heeded at the time, but there is an interesting suggestion that the tide may be turning somewhat in their favour in the 2001 budget. The alternative policy direction suggested, and rejected, included Hein Marais, Samir Amin and Bernard Founou's research into experiences of democratic transitions in Africa, the Macro-Economic Research Group set up by the ANC in 1991 (mentioned above), the National Institute for Economic Policy in their document '*Making the RDP work*' and, most significantly, the 'base document' for the RDP itself. This base document is significant as a joint initiative of COSATU, the SACP, NUM and the ANC and was the price the alliance partners extracted for their support of the ANC. In envisaging an enlarged role for the state in a situation where development is a priority, all of these were in effect following the lead of the Asian newly industrial countries – until 1997 held up by orthodox economists as the model to be followed. The World Bank itself in a 1994 review argued that:

The ability of governments to be economically selective should be assessed on a case-by-case basis rather than assumed absent ... the external environment ... and the stimulus, often provided by government intervention in the factor and product markets, are usually the determinants of success<sup>xxxiv</sup>

MERG, for instance, recommended that the state be involved directly in investing in social and physical infrastructure (including public school building projects), in providing advisory boards for large companies, involving supervision of mergers and acquisitions and ensuring control and oversight of the Reserve Bank. It also recommended a more gradual relaxation of exchange controls than was in fact implemented.

An interesting analysis has been done recently which argues that the 2001 budget marks something of a reversal towards the ideals of MERG, while purporting to be a logical development of GEAR's original reasoning. 'Changing Gear? The 2001 Budget and Economic Policy in South Africa' by Professor Vishnu Padayachee and Imraan Valodia of the University of Natal, suggests that the ANC's explanation that the 'economic fundamentals' had to be in place first, before any expansion, such as the one projected in this budget, could be attempted, does not fit with the facts of GEAR – or even with its title. (Although it may in fact link to an unstated determination on the ANC's part to abide by international guidelines until well established in power). The projections of GEAR clearly envisaged growing investment, and growing job creation to happen *along*



with their fiscal austerity measures, but this proved illusory<sup>1</sup>. Padayachee and Valodia suggest that:

Although it may be too early to tell, the ANC has acknowledged tacitly that its market friendly approach, though pleasing international capital, has not addressed successfully the economic challenges facing South Africa. This is not to suggest that we believe that there has been a decisive shift in the underlying thrust and character of ANC economic policy. Rather, we argue that, in the face of the failure of its orthodox policies, we are beginning to see the emergence of unorthodox and more interventionist economic policy ideas within the ANC government<sup>xxxv</sup>. And 'Whereas the post-1994 policy package has focussed on supply-side approaches to growth, we are beginning to witness a more active role of the state generally, and more specifically in the areas of employment creation, industrial policy, economic growth and poverty alleviation'<sup>xxxvi</sup>.

They also argue that the stability that GEAR aimed for was no more crucial to achieve in 1994 than it is now. In either case monetary stability is open to external shocks and the more so if interventionist government policies rather than conservative ones are followed – but without intervention no social – that is no political – goals can be achieved. There are also signs (post 2000) that growing dissatisfaction of COSATU over privatisation schemes may be an issue on which the government moves, or the alliance founders,

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<sup>1</sup> An interesting parallel is the approach of Tony Blair in his recent 2001 election campaign. Blair admitted the dire state of the United Kingdom's health and education sectors but argued that the economy had been strengthened during his first term in office. Now in this second term the real social issues could be addressed. No amount of public relations could in fact have sold a British electorate the idea that a Labour government would severely disadvantage the poor for a whole four years before beginning to support essential services. And yet an apathetic public was prepared to accept this idea after the event. In the 2001 elections only the Liberal Democrats realistically promised an increase in taxes in order to achieve social goals.

particularly if anti-neoliberal sentiments gaining ground in other countries find support amongst dissatisfied groups in South Africa.

The danger therefore remains that anger with a mechanistic system that clearly operates in the favour of specific elements of society to the exclusion of others, will result in its replacement with an opposing discredited centralised system, or with anarchy (rejection of all systems) or fundamentalism (acceptance of divine ones).

The need is rather to give up the search for universal systems and to rely upon contextualised experience (conscious thought) within the framework of rules of law and election promises. The indications are that strong retribution will not descend upon South Africa in this event. Modest changes in the most recent budget, if understood from this epistemology (and not seen as a reversal to a socialist one) might be, or be consciously re-thought into being, the beginning of such a development.

## ***6. Conclusion***

The evidence suggests that pressure from the international community upon South Africa as a newly democratic state was in the direction of an economic liberalism, which in effect inhibited both government autonomy and support for programmes of development in the interests of the majority of the electorate. Thus the anti-democratic and anti-liberal direction of neo-liberalism generally is indicated. Chapter 2 will explore the specific influences of this thinking upon the direction and outcome of education policy in South Africa over the same period.

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  - iii Marais, H 2001 *South Africa: Limits to Change*. Second Edition (Cape Town: University of Cape Town Press) p138
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  - v RDP p78
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  - xvii *ibid* p217
  - xviii Padayachee V (Member of the South African Reserve Bank) Personal comment 2001
  - xix Marais p162
  - xx *ibid* p163
  - xxi *ibid.*
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  - xxiii *ibid* p134
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## CHAPTER 2

## Education for a Democratic/ Globally Competitive South Africa

*This chapter develops the analysis of post-apartheid policy in South Africa explored in the previous chapter, focussing specifically upon educational policy over the same period. It seeks to draw parallels between the wider picture and its educational sub-set, and through an examination of the failure to implement educational policy, to point to the likely failure of social policy more generally, when informed by instrumental economic thinking.*

### **1. The Context.**

Education had been intimately associated with the liberation struggle in South Africa since educational issues sparked the Soweto uprising of 1976. The vanguard of anti-apartheid educational thinking was socialist and anti-capitalist as was the vanguard of the liberation movement as a whole. For instance, the People's Education movement of the 1980s described itself as an attempt 'to make explicit the links between education and political, economic and cultural reproduction'<sup>i</sup>. This was a reference to the then popular left educational stance which argued (following Althusser and Bowles and Gintis) that far from offering equal opportunities for all, education in capitalist countries in effect serves to 'reproduce' the capitalist class system. In 1985 the Soweto Parents' Crisis Committee defined People's Education as:

Education that eliminates capitalist norms of competition, individualism and stunted intellectual development and one that encourages collective input and active participation by all as well as stimulating critical thinking and analysis<sup>ii</sup>

The idea of ‘eliminating’ competition might be a difficult one for educators, and it can be held responsible for the aberrant demand that educational institutions (if they) ‘pass one’ (should) ‘pass all’. However People’s Education also supported group, rather than individual, participation and acknowledged the need for critical thinking. Critical pedagogy suggested the veil be lifted from students’ ‘false consciousness’ allowing them to appreciate the nature of their oppression and to liberate themselves from it.

In fact the ‘People’s Education’ movement was never in a position to develop its theoretical stance nor to implement its policies since it was forced to operate under cover and in situations of low key civil war during the ‘state of emergency’ established in 1985 and extended in 1986. And once the reality of democracy was within sight, from February 1990, less militant educational groups sought to lay the foundations for post-apartheid education policy. Important amongst these was the National Education Policy Investigation (NEPI) established by the National Education Crisis Committee (NECC) under the auspices of the ANC in 1991. NEPI’s guiding educational principles were non-racism, non-sexism and democracy. Its deliberations were lengthy and widely consultative but it had no power to implement its recommendations. This, added to its highly academic bias, lessened its practical impact. ‘NEPI ... issued ambitious and idealistic statements of ‘what should be’ rather than concrete analyses of ‘what would actually happen’ given CODESA and the politics of reconciliation’<sup>iii</sup>.

## ***2. The transition***

In reality the powerful influence of a newly globalised society and the pervasive influence of the previous regime were both critical in influencing the nature of New South African educational policy as in the case of economic and political policy. International aid agencies, prominent amongst which was USAID, paid for education experts to visit South Africa and for South African educators to travel overseas. Through the Research Triangle Institute (RTI) USAID also provided sophisticated computer technologies, in particular the APEX model which influenced economic policy planning for the provision of education ‘well beyond the life of these contracts’. ‘The selling points were rationality, discipline and control’<sup>iv</sup>. USAID played a prominent role in promoting education policy with a strong bias towards science and technology.

South African Business interests through the Urban Foundation and the National Business Initiative (NBI) also played an active role, comparable to their economic ‘scenario planning’ roles. They were even able increasingly to find common ground with the trades unions particularly over ideas of a holistic approach to education and training. The idea of a National Qualifications Framework (NQF) was originally developed from a similar system in New Zealand and introduced to South Africa by Brian Phillips of the mining house GENCOR<sup>v</sup>. The Joint Education Trust (JET) formed in 1992-3 allowed business interests to work through Unions and political parties in the determining of education funding initiatives<sup>vi</sup>. ‘JET’s major targets were to improve science and

mathematics education, vocational education and training, the improvement of teacher effectiveness, and the enhancement of educational efficiencies'<sup>vii</sup>.

The underpinning objectives throughout are clearly the enhancement of scientific skills geared to vocational goals through instrumental means – an entirely pragmatic and rational response to the needs of an emerging economy. Political goals of assimilation into western ideas and ideals would be served at the same time. The parallels are clear with economic policy formation, the marginalisation of more radical approaches and the increasing influence of the mainstream through a reliance upon international and business interests in the years immediately preceding 1994.

The RDP's vision for education is, as might be expected, comparable with its economic vision and reflects the same tensions. It reads as follows:

We must develop an integrated system of education and training that provides equal opportunities to all irrespective of race, colour, sex, class, language, age, religion, geographical location, political or other opinion. It must address the development of knowledge and skills that can be used to produce high-quality goods and services in such a way as to enable us to develop our cultures, our society and our economy'<sup>viii</sup>.

This indicates divergence in thinking between those who saw education as a tool for social redress and those who saw it as a tool for economic growth. But already the bias is towards education for the economy. It seems however that the feeling amongst educators themselves was imbued with that more idealistic, democratic and transformative spirit

which had characterised recent initiatives such as NEPI. Professor Ruth Jonathan, Director of the Graduate School in Social Sciences at Edinburgh University in Scotland, when she visited South Africa in 1994 found that

This was a time when ... ideals which had drawn many into education [in Europe] thirty years earlier – those of intellectual and cultural upliftment for all, together with a consequent fairer sharing of the social cake through equitably distributed schooling opportunities – were in full bloom [in South Africa] and enjoying a spectacular moment in the sun<sup>ix</sup>

The reality of politics and international pressure intruded on this idealism however and both policy-makers and educators hoped that social transformation and economic competitiveness might be achieved *together*. Jonathan suggests that this is in line with thinking in western countries where ‘schooling and skills training is [currently] vaunted both as the means by which the nation’s economy is to attract inward investment and become internationally competitive – and also the royal road to equity and redress’<sup>x</sup>. On her return to South Africa in 2000, Jonathan found herself

... in a place which in some respects seems worryingly familiar ... politically and economically – and even therefore in respect of education. [A place where] society loses confidence ... in the power of education to redistribute social opportunity [and views] public education as an arena in which individuals should be provided with opportunities to compete for unequal life-chances<sup>xi</sup>

She argues that this hope has been maintained in some form in Britain for more than a century. But in South Africa, and in the particularly harsh climate of current economic orthodoxy, the contradictions could not be concealed for so long. There is a noticeable



trajectory in the South African policy documents between 1994 and 2000 that suggests the increasing difficulty of maintaining this ambivalence. Policy first sees economic growth and social redress as compatible, and even mutually supportive, goals (RDP 1994, and the White Paper on Education and Training, 1995) then sees them as parallel objectives, able to be held ‘in tension’ as ‘two sets of challenges simultaneously’ (White Papers on Higher Education, 1997), and finally deals with them separately. Core education policy by 2000 is largely constructed as a function of economic ‘reality’ – while ‘values in education’ are relegated to different policy committees and special forums. (Task Team on ‘Values, Democracy and Education’, 2000; Department of Education workshops on ‘moral rejuvenation’, 2000; ‘Values in Education’ Conference, Cape Town 2001). The narrowing down of educational provision to a function of the economy as well as the narrowing down of education’s vision to a role in support of the economy, was accompanied by various practical difficulties in implementation – which it will be the task of this chapter to consider.

*Practical constraints.* In taking over the structures of the former regime the new government inevitably became absorbed into them<sup>xii</sup>. The so-called ‘sunset clauses’ which guaranteed the continued tenure of jobs by civil servants from the previous administration were necessary for the Government of National Unity’s reconciliation role, but could clearly be obstructive of radical re-thinking in education as in other spheres. This, linked to economic constraints and to the inexperience of new members of provincial governments given the task of implementation, would prove a severe barrier to the implementation of progressive education policy.

The formulation of appropriate social policy involves ‘the human sciences in action’. The social sciences can only base theory upon how people *tend to* behave in different circumstances. Given that circumstances are always unstable, that subjects will react differently from one another, and that individual responses will be affected by the policy intervention itself (as well as by a myriad other unknown variables) any theories in social science must be seen as ineluctably provisional and never universal. But this is not to say that they are not, at their best, highly informative. Human consciousness ensures *both* that we are never entirely predictable – *and* that we are not entirely *unpredictable*. And without a defensible theory or theories of action, no policy can be justified. The puzzle is why policy seems so ineffective in alleviating the human condition at present.

The answer would seem to require some consideration of the current proclivity for seeing policy as something separable, even opposite from, action. But how can policy as ‘a plan of action’ exist in isolation from its implementation? One explanation would suggest that an abandonment of responsibility to the necessity of the market allows for indulgence in policy theory without reference to its implementation since this can only be addressed once the market delivers. If we believe that ‘economic fundamentals must be in place’ before any social policies can be embarked upon, it becomes unnecessary and indeed impossible to address social issues first, or in concert with, economic reform. Alternatively Jonathan Jansen sees policy as largely rhetorical and symbolic – a political ploy which does not need to see beyond the policy stage itself<sup>xiii</sup>. While both of these explanations carry weight, there would seem to have to be some reason that *permits*

citizens both to give over their powers of critical thought to the market, and to accept a symbol for its substance. I believe that it is not so much that ‘economics has colonised the social sciences’ as Ben Fine has it<sup>xiv</sup>, but rather that this mindset of willing abandonment of conscious thought to outside forces and expert knowledge (however unconvincing) is so universally pervasive. I believe that the abandonment of thinking to ‘market imperatives’ should therefore be seen as the most significant *manifestation* of a mindset in tune with the discipline of ‘Washington Consensus’ economics rather than its cause. From this standpoint some of the puzzles which still confront the increasingly universal problem of ‘non-delivery’ may become less puzzling.

### ***3. The Policy Documents***

The initial White paper on Education and Training (February 1995) entitled ‘Education and Training in a Democratic South Africa – First Steps to Develop a New System’ states that ‘the complete reorganisation of the national education system’ has involved ‘the dismantling of the old education bureaucracy through the establishment of new national and provincial education departments, and the acceptance of legislative competence and executive authority by provincial governments’<sup>xv</sup>. Thus ‘the responsibility for planning, budgeting and executing provincial education development, except for university and technikon sectors, rests with provincial governments’<sup>xvi</sup>. In this way the nine new provinces took over the greater part of the responsibility of providing education from the Central Government in the name of more ‘democratic’ decentralisation, which meant that the burden of dealing with difficult budgeting decisions fell upon either unenthusiastic old guard, or chronically inexperienced and untrained new administrators. Education

policy therefore faced ‘a signal lack of bureaucratic capacity to engage and implement national policy’<sup>xvii</sup>.

Systems of national education operate at two levels: educational infrastructure and educational content – of provision and of curriculum. I shall consider provision first.

### *3.1 Provision*

It will be useful to keep in mind Padayachee and Adelzadeh’s summary of the economic approach adopted by the RDP White Paper. This ‘committed the government at national, provincial and local levels to reduce expenditures, finance the RDP primarily from restructuring the budgets, maintain or reduce the level of direct taxes, consolidate business confidence, enhance the environment for private sector expansion, and liberalise the economy’<sup>xviii</sup>. This approach was necessarily carried over into educational provision.

*Educational provision within a framework of fiscal discipline.* Orthodox understandings of economic possibilities combined with provincial ineptitude put a severe strain on provision. The figure of over twenty percent of the budget earmarked for education was higher than in the majority of countries, as was this figure stated as a percentage of GDP (over seven percent)<sup>xix</sup>. There was therefore no likelihood of an increased general allocation, while leeway for innovation in policy around provision was remarkably small given that over ninety percent of the budget went annually to personnel expenditure.

The issue of budgetary constraints on policy is dealt with at some length in the policy documents, but in no instance is an understanding of economics suggested, other than

orthodox approaches compatible with a Washington Consensus vision. The first education white paper, the 1995 White Paper on Education and Training states that ‘while there is massive scope for restructuring the budget and improving efficiency and productivity in the system ... these measures will not reduce absolute budget requirements in the short term’<sup>xx</sup>. It is clear that restructuring and efficiency are expected to achieve the required improved ‘productivity’ in the long term however. The two other potential sources of funds envisaged in this document are ‘internal savings and reallocations’ and ‘the re-allocation from other funds to education’<sup>xxi</sup>. Overall ‘the Ministry of Education recognizes that the most secure source of additional public funds for education will accrue from real economic growth and increased revenues’<sup>xxii</sup>.

In the event (and unlike other governments that have followed this ‘disciplined’ fiscal stance) the South African government has not generally reduced its allocations to social projects<sup>xxiii</sup>. And, in the absence of ‘real economic growth and increased revenues’ the Government in fact disburses conditional grants and special project funding over specific periods on top of normal allocations. The most recent budget (2001) for instance set aside quite generous extra education funding for financial management and quality enhancement; HIV/ AIDS; adult basic education; rural school building; and a particularly generous amount for early childhood development<sup>xxiv</sup>. Most recently a scheme of ‘learnerships’ to be funded from the new Training Levy of one percent on company profits, has been instituted and is being administered jointly by the Department of Education and the Department of Labour. Other sources of funding available for educational purposes are social responsibility grants from business and commerce, funds

arising from public/private partnerships, and funding channeled (often from overseas donors) through non-government organisations (NGOs) but since 1994 more frequently through the National Treasury. But commentators agree that the problem that has plagued all of these initiatives (barring the 'learnership' initiative which is still in the start-up phase) is the difficulty of translating policy, however funded, into real change on the ground.

Given the picture painted above, the limitation of funds would not seem to be so severe as to impede *any* success in implementation. The goodwill on the ground amongst educators and their capacity for, and interest in, change are also indicated<sup>1</sup>. The problems have lain primarily I suggest in the instrumental understanding of the nature of change, as dictated by a range of rational orthodoxies uninformed by consideration of contingent realities. Private-public partnerships are understood (theoretically) to bring the efficiencies of a competitive market approach to inefficient and inexperienced public sector initiatives – but this is to ignore the additional fact that the private sector will not want to get involved *at all* in such partnerships unless there is money to be made. In the case of South African transformative educational projects this was likely to be of significance. Local government is understood to be 'better' (more democratic, more in touch) than central government, but this will not be the case if your pool of good personnel has been taken by central government and if local administration is

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<sup>1</sup> Enthusiastic and well considered responses from educators across the country were received in 2000 by the Review Committee of 'Curriculum 2005' replicating the kind of response achieved by NEPI in 1993. The results of B Ed students of Philosophy of Education taught by myself in both 1994 and 2000 indicated a high level of commitment, insight and ability. For instance of the 42 practicing teachers of Maths and Science in 2000 who took the Foundations in Education B Ed examination, 11 achieved first-class passes. The course was driven by 'Mode 2' approaches of independent research and critical thinking.

inexperienced, obstructive, or both. And providing (sometimes quite generous) additional allocations in the belief that these will allow for the expected efficiencies in the system to take effect when the systems themselves are faulty – are all examples of ‘universal, abstract instrumentalism’<sup>xxv</sup> which avoids conscious thought. The consequences are particularly disastrous in a situation such as South Africa’s, where each of the factors to be addressed is extraordinarily complex, bears little resemblance to other ‘models’ to be found in other parts of the world, and where the magnitude of the social problems to be addressed is particularly great. The following section will illustrate the effects of this phenomenon upon specific educational projects.

*The scope of educational initiatives.* A holistic approach to education and training was to be facilitated by the new National Qualifications Framework (NQF). The provision of Higher Education, traditionally seen as independent from government oversight, although receiving central funding, was to come more closely within the ambit of government through its inclusion in the NQF. Primary and secondary education, fragmented and displaying huge disparities in provision between traditionally black and white schools clearly required a massive overhaul, beginning with attempts to address these disparities. In addition to these core concerns there was to be government support for Adult Basic Education and Training (ABET) and for Early Childhood Education (ECD). The recognition of prior learning (RPL) was an additional new focus; while the gap between school and tertiary education was to be addressed by various initiatives for Further Education and Training (FTE), and support was to be given for academic development (AD) programmes within tertiary institutions. In each of these areas, in the last seven

years since the achievement of democracy, implementation has been either slow or non-existent and in the majority of cases the situation has deteriorated.

Addressing the disparities in primary and secondary education was clearly a monumental task only to be tackled over several decades, however as a start a ‘one-off’ initiative for the redeployment of teachers was initiated in April 1995. This was driven in the first instance by the need to release money from the education budget for non-personnel needs and at the same time to address the uneven distribution of teachers between better-off and worse-off schools. The government also wanted to improve the student/ teacher ratio and the quality of education for the traditionally disadvantaged – without jeopardising reconciliation policies. This was inevitably going to be a sensitive and difficult task. A policy was conceived which seemed on the surface fairly reasonable. Apart from natural attrition of posts which would not be filled in ‘over-provided’ schools, teachers in these schools would be offered salary packages generous enough to persuade them to take early retirement. It was clearly important if this were to work effectively that they would not be able to re-apply and re-enter the system. This would free up both money and posts. Other measures of re-deployment in or beyond provincial borders and in the last resort retrenchment would clearly meet with huge resistance, and might be impossible to resolve satisfactorily. Teachers leaving would (perhaps) be near-retirement and might be either a current barrier to innovation and transformation, or (just as possibly, and especially if their re-employment could not be legally blocked) experienced teachers with good opportunities for further or different employment. In the event ‘there was no effective management plan at either national or provincial levels to monitor and control



which teachers, what numbers of teachers, from what kinds of schools took the package<sup>xxvi</sup>. The legality of demanding that they be refused any subsequent offers of teaching employment was not investigated, nor the availability of appropriately trained teachers prepared to be re-deployed in rural or disadvantaged areas. Finally the systems of administering the proposed changes, and the capacity of the civil servants who would be required to carry out the redeployment strategy once it had been formulated, were not considered. In the absence of such contextualised common sense investigations, the state lost more than one billion rands, reduced the quality of teaching, and caused the demoralisation of those teachers who remained in the system<sup>xxvii</sup>. While this is perhaps most indicative of ineptitude stemming from inexperience, an epistemology starting from contingent reality would at the least have suggested due consideration of context, resources and outcomes before launching any such ambitious scheme.

In the case of Early Childhood Educare, the 1995 White Paper stated:

State funds have been allocated to mount the startup phase and attract other funders. This process needs to be driven through a process of local government, community, business, worker and development agency interests in order to ... develop a funding strategy for a national ECD programme<sup>xxviii</sup>

In the absence of expertise amongst local government or community or any foreseeable profits for business the strategy driving this process would have to have been carefully thought through. But this document is so confident of the feasibility of this initiative, funded in this way, that it envisages every child having the benefit of an additional year

of pre-school education and factors this into its calculations of compulsory education up to the old Standard Seven level – formerly the ninth year of learning – but, because of this, now to be the tenth. In the event, not only have no funds become available for this programme, but the government subsequently (2000) *raised* the school attendance age to seven years, a policy which goes against all educational and social reasoning in the South African context. Preparation of disadvantaged learners before entering formal schooling could be seen as particularly important, while the care of young children in safe and nurturing conditions has clearly significant social and gender implications. This is not to say that ECD projects have been abandoned. The 2001 national budget's specific project funding included an Early Childhood Development Pilot Project to receive R30 million in 2000/ 2001, increasing to R65 million in 2002/3 and R100 million in 2003/4.

The experience of ABET initiatives has been comparable:

'A professional directorate for ABET is being established in the new Department of Education ...

In the meantime the Ministry has established a national ABET task team, including provincial representatives to carry forward the extensive preparatory work'<sup>xxix</sup>. 'In general ABET programmes can make ...cost-effective use of available educational facilities'<sup>xxx</sup>

ABET funding received R25 million for a specific project in the 2001 budget. But John Aitchison, long time leader in the field of adult education in KwaZulu Natal, says 'it would be fair to say that in spite of impressive policy developments and a rapid institutionalisation of ABET, that actual provision has fallen far short of what was envisioned'<sup>xxxi</sup>. He suggests further that the state system of provincial support for ABET

is ‘faltering’ and while industry probably still provides the best quality of ABET training ‘little is known about what is [currently being] done, and there are disquieting signs that in an under-performing economy with high unemployment ABET may be seen as an unnecessary luxury’<sup>xxxii</sup>

Recognition of Prior Learning (RPL) had strong endorsement from the new government from the beginning, but has also been difficult to implement, given problems involving ‘the present environment of cost-cutting and rationalisation in higher education [which] is not conducive to initiatives that require an investment in student support, curriculum change, staff development and administrative structures, while delivering uncertain returns in the form of increased student registrations and institutional status’<sup>xxxiii</sup>.

The degree of disillusionment with such initiatives is illustrated again in Further Education and Training (FTE). A 2001 National Skills Development Conference will see the launch of a National Skills Development Strategy (NSDS). ‘This ... activity in an education and training sector that is in crisis will hopefully prove to be more than the usual substantial policy development and little movement on the ground’<sup>xxxiv</sup>.

Of relevance to the specifics of non-delivery or lack of implementation is Bobby Soobrayan’s significant analysis of educational expenditure which indicates that ‘any further expenditure in education and other social sectors will fund systemic inefficiencies rather than release performance into the system’<sup>xxxv</sup>. It is further argued that ‘if these inefficiencies were addressed they *would* release funds for redistribution’ for instance by

‘strengthening organisational systems, improving the capacity of local managers and educators and creating access to learning resources’<sup>xxxvi</sup>.

Overall the picture as far as the provision of schooling is concerned, is one of government allowing the logic of the market and of existing systems to operate, involving the decline of the many of the least advantaged institutions and the disillusionment of many involved in education, despite the overall maintenance of funding levels, increases for specific projects, some redistribution to poorer provinces and even modest increases for regional budgets.

Thus the potential to turn things around seems to be tantalizingly close. One of the problems would seem to be the apparently easy option of ‘deregulation’. Deregulation involves a drift if not a stampede to the centre. Where aspects of education additional to the core initiatives, are left to Non Government Organisations deprived of much of their funding since 1994, and to private-public partnerships where there is no clear advantage for private intervention, these will atrophy. Where government schools in affluent areas are allowed to charge increasingly heavy fees in order to employ extra teachers and provide extra facilities these will attract the best teachers, provide the best schooling, and be available only to richer population groups. The drift goes further since these teachers are being wooed by the United Kingdom whose schooling is itself in crisis, arguably for reasons related to similar deregulatory policies which cause a deterioration in government service at all levels.

The situation with universities and tertiary institutions in general, is similar. The aim of initial legislation was to provide 'earmarked funding' for historically disadvantaged institutions (HDIs), to provide for massification, and give support for academic support programmes and alternative access initiatives. The logic of the market has however increasingly seen the government standing on the sidelines:

Using market logic rather than more overt forms of state intervention, the government apparatus has been able to achieve its over-riding macro-economic goals without subjecting itself to the political charge of interference within autonomous institutions. The logic of GEAR dictates that government expenditure would be reduced. The black universities would not be able to survive without substantial injections of state funding, especially into bursary schemes ... What the state loses, of course, is its equity goals with respect to higher education<sup>xxxvii</sup>.

With the deterioration of the poorest black schools, few of their students will qualify for tertiary education, with unemployment reaching 40%, fewer still will be able afford the fees, but those who can will 'vote with their feet' and go to the more affluent institutions. The declining enrolments and spiralling debts will ensure that many HDIs will have to close where they do not merge with others campuses. Rural areas will be bereft of higher education institutions. The plight of teacher training is indicative of these trends. The need for additional teachers within the KZN region alone, particularly in the light of the AIDS pandemic, is estimated at twelve percent of the current workforce. Those student teachers currently in the system, and therefore all that can be produced in time, are 0.5 percent<sup>xxxviii</sup>. Few black school leavers will be able to afford the fees of the newly combined Edgewood College and Natal University, as an example, and those who can will tend to choose to become Chartered Accountants instead. Like all generalisations

about social phenomena this picture can and will be contested. Additional factors influence specific situations in all cases. The fact remains, however, that deregulation creates its own (inhuman) structures and makes the kinds of outcomes sketched here more likely.

*Conclusion.* It might therefore be concluded that implementation of education policy conceived through an economically conservative perspective, itself the result of a rationalist, universalist epistemology, has been an almost unmitigated failure as far as the political goals of social transformation are concerned. Such implementation strategies as are attempted are flimsy and often impractical as illustrated by the teacher redeployment strategy and by the ‘cascade model’ improvised for the rapid and inadequate initiation of teachers by other teachers into the major curriculum initiative Outcome Based Education (OBE) (see below). But this brings us beyond a consideration of the provision of education to its content. We must now turn to considering the fate of the curriculum since the onset of formal democracy in South Africa.

### *3.2 The curriculum.*

Jonathan Jansen believes that ‘The school curriculum remains the most tangible and volatile symbolic arena within which the state projects and defends official values’<sup>xxxix</sup>. Within South Africa schooling had been a ‘site of struggle’ since 1976 and the new regime once in power assured the electorate that the changes would represent not only ‘a new chapter, but a whole new volume’<sup>xl</sup>. But this has proved to be very difficult to achieve in practice.

The power of government to implement curriculum change is limited. Where revisions in the higher education syllabus were directly linked to government funding, the response was necessarily swift and sure, but also tended to be focussed upon conforming to the new structure rather than implementing innovative teaching and assessment methods. That is, the effects were on the 'infrastructure' rather than on qualitative aspects of curriculum change. In the school curriculum, on the other hand, no sanctions accompanied an apathetic response by teachers 'on the ground' and hence little change was likely. The first initiative in this respect (1994-5) was superficial and limited in scope. The unacceptable 'pro-apartheid' elements were to be excised from the old apartheid school syllabuses but nothing substantial emerged from an intensive three-month review. The problem lay again in implementation. Intensive in-service training would be needed to involve teachers in developing appropriate methods of teaching and assessment to bring about any genuine transformation, even had the recommended syllabus changes been substantial, which they were not<sup>xli</sup>

In fact attempts to make the curriculum more relevant to the global economy, in order that South Africa could become more economically competitive, were initiated a dozen years *before* the beginning of democracy only to be emphasized with renewed force by the new regime, while classroom methods have hardly altered significantly in the majority of South African schools since the 1980s.

*Education for economic ends, seen in historical perspective.* In the final days of the apartheid regime the idea of a single Education Department with a specifically economic

focus (first mooted in the 1982 de Lange Report) was again revived. The 'Education Renewal Strategy' was produced by the former government's Department of National Education (DNE). It states that 'the broad curriculum will contribute towards creating educational opportunities for every inhabitant of the country' - and will 'provide education ... directed at ... economic development and personpower needs'<sup>xlii</sup>. It asks 'how does the draft model contribute to making education more relevant?' and answers that 'new subjects such as technology, economic education ... have been introduced' and 'an effort has been made to give recognition ... especially to vocationally oriented education'<sup>xliii</sup>. Economic education would be given from Grade 1 and Economics would form part of 'Social Science' (along with elements of history and geography). All of the elements of relevance, vocational and economic education and interdisciplinary 'learning areas' were also to become part of post-apartheid education policy. The ERS was followed by a more sophisticated proposal 'A Curriculum Model for South Africa' in which the idea of 'competencies' was first addressed. Here 'vocational training linked to employment in a changing labour market was couched in a discourse of relevance, progression and opportunity'<sup>xliv</sup>.

In fact in moving towards political settlement the old regime found itself increasingly in agreement with the new approaches of the incoming regime and cooperation grew between Department of National Education and progressive academics representing the new<sup>xlv</sup>. The former regime's National Training Board (NTB) also began to work with COSATU in the years leading up to 1994 and it was in fact the NTB's *National Training Strategy Initiative* which suggested an 'integrated system of education and training',



foreshadowing the NQF<sup>xlvi</sup>. Thereafter each of the post-1994 education policy documents assumes that joining the global economy should be a primary objective of South African curriculum policy and that education and training should be treated in an integrated way.

Global competition clearly demands high levels of expertise in maths, science and technology and overseas funding agencies focused on these areas. But this was particularly problematic in South Africa given that these subjects had been deliberately withheld from black scholars in the early days of apartheid. Verwoerd had notoriously stated that black schooling was not to prepare pupils for work beyond 'certain forms of labour' and that it was not necessary to teach a black child mathematics. South Africa was still placed bottom in an international survey of school achievement in maths and science in 1997.

With very little money available for schooling beyond the payment of salaries, the difficulty of altering syllabuses and providing appropriate materials and equipment, let alone training and re-training teachers, there is little hope of changing this situation in the short to medium term. Therefore despite the USAID interventions in favour of maths science and technical subjects noted above, students have tended to apply for commercial subjects and not for physics, engineering or technology for which they are ill equipped. The extraordinary growth of Commerce Faculties and the increasing prominence of overseas institutions offering commercial qualifications are notable features of tertiary education in the New South Africa. Therefore while the focus of deliberate policy has been on science and technology, the logic of the market has dictated commerce.

But the emphasis of the early policy documents was equally upon transformation of society and the promotion of arts, culture and language of the diverse population groups making up the population (for example, the 1995 White Paper<sup>xlvii</sup>). The ‘values and principles of education policy’ recognise education and training as ‘basic human rights’. It states that the state has an obligation to ‘render appropriate care and educational services for parents’. It aims to provide ‘lifelong education and training of good quality. There must be a special emphasis on ‘redress ... equity ... quality ... the rehabilitation of schools and colleges [with] democratic governance’<sup>xlviii</sup> and education must ‘increasingly open access to education and training opportunity of good quality to all children, youth and adults’<sup>xlix</sup>. It should be the goal of education and training policy to ‘enable a democratic, free, equal, just and peaceful society to take root and prosper in our land’. This requires ‘the active encouragement of mutual respect for our people’s diverse religious, cultural and language traditions’. Education in the arts ‘should provide the opportunity to learn, participate and excel in dance, music, theatre, art and crafts’. Education should ‘counter the legacy of violence’ and encourage ‘independent and critical thought’<sup>l</sup>. All of these were political rather than economic imperatives, required by the diverse needs and interests of the ANC’s wide constituency. This section ends with a warning however: ‘The education and training system has not been given an open cheque book by the government’. Development must be ‘sustainable’ and ‘planned for across a full range of needs’<sup>li</sup>.

This policy does not only provide evidence of a belief that both economic growth and equity might be achieved together and of the diverse authorship of the documents

representing various elements of the reconciliation initiative but increasingly between a civil society still concerned with transformation, and a government constrained by a fiscal discipline agenda. This is particularly apparent in the 1997 White Papers on Higher Education.

The two versions of the 1997 White Paper on Higher Education are noticeably different in emphasis. The Draft appeared in April and the final version 'A Programme for the Transformation of Higher Education' was gazetted in July. The April version emphasises the role of education in enabling South Africa to compete in the global marketplace<sup>lii</sup>, achieve 'international standards of academic quality' and be sensitive to 'the needs of employers and funders'<sup>liii</sup>. Higher Education (HE) should institute 'quality assurance'; and avoid the danger that students may emerge as 'devalued products' of the system<sup>liv</sup>. Overall the need is understood for HE to 'operate on business principles in a stable financial environment'<sup>lv</sup>. Science and technology are to become 'two growth areas' which must be 'sensitive to market signals' whilst the social sciences are also seen as important but primarily as adjuncts of 'career-oriented training' and for 'participation in the knowledge society'<sup>lvi</sup>. In all of this there would seem to be a clear conformity with the principals of the Growth, Employment and Redistribution (GEAR) economic policy instituted in the previous year. This is not to say that social issues of justice and transformation are absent. Rather they are presented as the other of 'two sets of challenges simultaneously'. The need to accommodate a larger and more diverse student population' and to have 'sensitivity to the African context' is recognised and at the same time as the need to produce 'highly trained people for the global context'<sup>lvii</sup>.

In the final version of this document the emphasis shifts to one very much more concerned with redress of past inequalities and the transformation of society. The preamble in this version does not mention the economy, and transformation is to be understood as ‘non-negotiable’<sup>lviii</sup>. New sections appear suggesting a curriculum focussed on language policy<sup>lix</sup>, research<sup>lx</sup>, capacity building<sup>lxi</sup> and transformation<sup>lxii</sup>. Jansen suggests that the reason for this change in emphasis is due to the influence of the Parliamentary Portfolio Committee chaired by Blade Nzimande whose views were in conformity with his membership of the SACP and were never compatible with an orthodox economic emphasis<sup>lxiii</sup>. Consideration of comments made by Nzimande himself confirm this suggestion. ‘One of the most exciting aspects of our work was the Public Hearings which we convened when new policies were being developed. These hearings not only engaged the broad public on matters of education policy but it also prevented parliament from simply becoming a rubber-stamp of government policies’<sup>lxiv</sup>. Despite assumptions that there were tensions between the then Minister of Education, Professor Bengu, and himself, Nzimande insists that the working relationship between them was a good one.

This would seem to represent a significant instance of policy being influenced by a powerful individual representing the interests of civil society from a position within an advisory government structure, possibly with the blessing of the minister concerned. But the reality was that Professor Bengu was not personally powerful within the cabinet<sup>lxv</sup> and that those who were, advocated policies which permitted ‘rational’ economic flows to determine the direction of educational policy along with the rest. This apparently

important validation of an alternative stance for social and political transformation could not therefore have a significant effect upon reality.

The restrictions here are complex and intertwined, but all serve to reinforce Castells's dehumanised 'flows'. A student with a talent for music or drama, art or languages would increasingly find that the difficulties involved in pursuing this (probably always risky) career, are mounting. A university faculty must be able to defend the commercial viability in the market place of its new or existing 'programmes' and there must be a reasonable expectation of substantial full time enrolments (FTEs). This has resulted in the 'natural' attrition of language, arts and music departments. And since the prospective student must not only find a vanishing department in which to learn – but must look forward to a society which can only fund commercially viable art and culture, the prospects are increasingly poor. The primary or high school will then increasingly have difficulty when seeking for staff in the learning area of 'art and culture' and fewer prospective students will then emerge from the schooling system with their interests and talents in these areas stimulated. The prospect of achieving a primary or high school teaching post is unlikely to create a viable demand for students thus reinvigorating the university departments in these areas. Even the integrity of art itself is at risk if we consider the recent well-intentioned initiative to bring rural African art directly to a global market place through the Internet. The initiators of this scheme provide the artists not only with guidance about this novel means of displaying their work but accompanying illustrations of the kinds of art objects that currently sell!

*Curriculum 2005*. Despite these realities on the ground, an apparently important initiative in curriculum policy was announced in 1997 as ‘Curriculum 2005’ – (2005 being the projected completion date for implementation). This curriculum was based upon ideas already popular in many countries overseas known as ‘Outcomes Based Education’ (OBE). A huge controversy erupted almost immediately over the value and viability of OBE in the South African context.

The underlying assumptions of knowledge in this curriculum intervention are remarkably contradictory. In a nutshell, the recommended teaching methodology requires the conscious thought of learners – but the assessment methods preclude it. The sixty-six ‘specific outcomes’ laid down in Curriculum 2005, together with the thirty-five range statements, prescribe ‘outcomes’ and this accords fairly closely with an ‘information society’ where knowledge is made available rather than consciously sought. Only the conscious consideration of ‘experts’ was sought here. These will have taken into account the economic viability of the outcomes they sought, but this was not their only mandate. On the other hand, the ‘critical cross field outcomes’ (‘outcomes’ to be achieved across all of the ‘learning areas’) are not really ‘outcomes’ at all, rather they are suggested teaching methodologies. They suggest employing the critical consciousness of the learners themselves in the *production* of outcomes. Intriguingly here we come up against that old dilemma of critical thought in its original Marxist formulation: just how can a predetermined ‘outcome’ be reached through the unfettered critical consciousness of learners? This problem was recognised from the start by Professor Jonathan Jansen, the principal stirrer of controversy concerning OBE. The answer to this apparently rhetorical

question is of course ‘it can be predetermined only if the truth is out there awaiting discovery’. If this is the case your professors are in possession of it, or the educators employed to establish the sixty six ‘specific outcomes’ have provided the various truths required. It is interesting that OBE is originally the product of the era of Reagan and Thatcher – the need being then for innovative, competitive thinkers *for a market driven economy*.

Encouraging thought in the acquisition of knowledge is essential for assuring mastery of any subject, and entails almost inevitably, as an additional ‘outcome’, not only the ability but the desire to take it further. But is this not exactly what you need for productive innovation for the market economy? Both ‘yes’ and ‘no’, depending upon how much further, and in what direction, you want to take knowledge. Extraordinarily ambivalent readings are possible about the kinds of skills and competencies that the ‘critical outcomes’ established for the South African OBE initiative support. They would appear to be equally useful for encouraging the kind of thought needed to secure competitive advantage in the market place – or to encourage critical thinking in any field (see p98 - p99 below). But they are more likely to be applied purely for commercial advantage if knowledge is predetermined either by experts or by ‘market imperatives’. And as the sites of knowledge production move away from the traditionally academic and towards the purely commercial the possibility of awareness beyond prescribed solutions becomes apparently (but not necessarily) less likely. South Africa’s ‘critical outcomes for the National Qualifications Framework (NQF)’ are in fact closely in accord with Michael

Gibbons's 'new production of knowledge' for the Information Age and their potential significance is discussed further in Chapter 3.

*Conclusion.* The major criticism of OBE or Curriculum 2005 at the time and since has been that within the South African setting it is unimplementable. The complexity of the teaching methods and the obscurity of the terminology in which they were couched made massive new initiatives in teacher training and re-training essential. In reality a hastily conceived 'cascade model' was adopted (reminiscent of some of the teaching strategies employed in nineteenth century Britain for the poor). A few teachers would take a very short course in the methods and then take this knowledge back to their colleagues. The new materials required were unavailable, not yet written, of poor quality, or to be conceived and developed by teachers themselves. But South African teachers' 'content knowledge' of their disciplines is severely restricted due to a legacy of teacher training in South Africa which focuses upon teaching method above mastery of the discipline itself! The additional fact that no monetary or other sanctions accompanied non-compliance with the new syllabus in schools allowed a very apathetic response to its initial implementation in marked contrast to the frantic activity sparked off in tertiary institutions. In the latter case, new and existing programmes had to comply with NQF directives on pain of suspension of government subsidies.

Concern about the viability of Curriculum 2005 was however productive of government initiatives to reassess the original policy through consultation with educators with a wealth of experience of the specifics of South African education. A



Review Committee headed by Professor Linda Chisholm (formerly Director of the University of the Witwatersrand's Education Policy Unit) after extensive consultation with teachers in the country submitted a report which won widespread approval from both educators and the concerned public. The Review Committee approved the retention of the 'critical cross-field outcomes' but recommended that the sixty six 'specific outcomes' together with 'assessment criteria', 'range statements', 'performance indicators', 'phase organisers' and 'programme organisers' 'are unnecessary and should be dropped'<sup>lxvi</sup>. The Committee therefore opted for the critical rather than the instrumental assumptions underlying OBE's contradictory agenda – and with this allowed for an opening up to contextualised and contingent knowledge. The Report was however also commended for its emphasis on a 'back to basics' approach to, particularly, primary school teaching, for its emphasis upon Maths and English, and for the recognition that teachers as well as learners require support with appropriate content knowledge. The report is also remarkable in that for the first time in post-apartheid education (or any other time in South African educational history for that matter) that 'education (or even a curriculum) cannot change society or, on its own, produce national development'<sup>lxvii</sup>. The epistemology underlying this report is critical, contextual and rejects instrumentalism. Although the Report was not accepted without amendment the new (2000) Minister of Education, Professor Asmal whose initiative it had been, subsequently retained Professor Chisholm as his special advisor to oversee the further implementation of curriculum change. Some of these were announced in August 2001, and most have been found promising to educators<sup>2</sup>.

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<sup>2</sup> Religious fundamentalists have been opposed to the study of comparative religion which the curriculum

#### ***4. A note on 'Values in Education'***

The failure of the transformative social goals of education policy, at least up until this point, has been accompanied by an increasing focus on 'values' as a separate educational issue. Not only was there a Government task team commissioned to report on 'values, democracy and education' in 2000 but workshops have been held under the auspices of the National Department of Education, on 'moral rejuvenation', the National Centre for Curriculum, Research and Development is looking for research to be conducted on 'values', and a major conference on 'Values in Education' was held in Cape Town early in 2001. But as Nazir Carrim and Margaret Tshoane discuss in a significant recent article there must be concern about whether it is 'the role of the state to provide for or intervene in the development of morality among South African citizens'<sup>lxviii</sup>. They argue that this approach may in effect 'significantly undermine the development and consolidation of a culture based on human rights'<sup>lxix</sup> since the discourse of morality 'controls human behaviour and puts into place dogmatism and epistemological closure'<sup>lxx</sup>. They are concerned that educationally 'out goes learner-centredness and ... most importantly, critical thinking'. There is a danger, they believe, that the *Report on Values, Education and Democracy*, although it re-articulates many of the values in the Constitution and the Bill of Rights, may thereby 'displace' them<sup>lxxi</sup>. And since these are legally binding documents any displacement into a discourse of 'values' can effectively lead to their 'dilution'<sup>lxxii</sup>. This would seem to indicate, once again, a potential undermining of responsibility and human consciousness to the detriment of democracy, which is the theme of this thesis.

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advocates (a position clearly in tune with both democracy and critical thought).

### ***5. Conclusion***

It would therefore appear that a chaotic situation of demoralisation in schools, inequality, division and mismanagement leading up to, and following, the transition to democracy was not addressed in any effective manner in the decade from 1990 to 2000. This was despite countervailing positives of considerable overseas funding and advice, a concerned public, a large government allocation for education, and proven skills amongst educators and learners. The common negative factor appears to have been an instrumental approach underpinned by analytic, universalist reasoning particularly economic reasoning. However this situation is meeting countervailing understandings that may be increasingly in a position to challenge them for good or ill – and in this case it would seem, more specifically for good. The report of the Review Committee on Curriculum 2005 summarises its message as follows: ‘the values of a society striving towards social justice, equity and development through the development of creative, critical and problem-solving individuals lie at the heart of this curriculum’<sup>lxxiii</sup>. This may read as fairly typical policy rhetoric except that the understanding of knowledge that underpins the report is a new one. It is one which conforms with Kimberley Porteus’s alternative hope that in South Africa ‘we are standing at a crossroads whereby either we will rely on global logic [TINA – There Is No Alternative] or become increasingly intent on reinterpreting the integrity of global logic in the context of the local and the personal’. THEMBA! (hope) – There Must Be an Alternative<sup>lxxiv</sup>.

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- <sup>ii</sup> Ibid p12
- <sup>iii</sup> Jansen, J 2000 'Education beyond Apartheid: Intersections of Politics and Policy in the South African Transition 1990 – 2000' Report prepared for the Centre for Development and Enterprise, University of Durban-Westville p9
- <sup>iv</sup> Ibid p12
- <sup>v</sup> Ibid p6
- <sup>vi</sup> Ibid p13
- <sup>vii</sup> Ibid.
- <sup>viii</sup> *The Reconstruction and Development Programme*, 1994. Published for the African National Congress (Johannesburg: Umanyano Publications) p60
- <sup>ix</sup> Jonathan R, 2000 'The Role of Schooling in Social Transformation'. Kenton Conference keynote address, Port Elizabeth
- <sup>x</sup> Ibid p2
- <sup>xi</sup> Ibid p3
- <sup>xii</sup> Marais, H 1998 *South Africa: Limits to Change*. First Edition (Cape Town: Zed Books, University of Cape Town Press) p4
- <sup>xiii</sup> Jansen p3
- <sup>xiv</sup> Fine, B 1998 'A Question of Economics: Is it Colonising the Human Sciences?' (Unpublished memo)
- <sup>xv</sup> White Paper on Education and Training, 15 March 1995. Government Gazette Notice No. 196 of 1995. Cape Town. p2.
- <sup>xvi</sup> Ibid.
- <sup>xvii</sup> Jansen p10
- <sup>xviii</sup> Adelzadeh A and Padayachee V 1994 'The RDP White Paper: Reconstruction of a Development Vision' *Transformation* 25 p4-5
- <sup>xix</sup> Ibid p23
- <sup>xx</sup> 1995 White Paper p85
- <sup>xxi</sup> Ibid p86
- <sup>xxii</sup> Ibid
- <sup>xxiii</sup> Skinner C and Valodia I 2001 'Globalisation and Women's Work in South Africa: National and Local Approaches to Economic Transformation'. *Agenda* No. 48. p79-80
- <sup>xxiv</sup> Wits EPU *Quarterly Review of Education and Training in South Africa* Vol 8 no. 1 p14
- <sup>xxv</sup> Castells M 1996 *The Rise of the Network Society* (Oxford: Blackwell)
- <sup>xxvi</sup> Jansen p29
- <sup>xxvii</sup> Ibid p30
- <sup>xxviii</sup> 1995 White Paper p36
- <sup>xxix</sup> Ibid p30
- <sup>xxx</sup> Ibid p31
- <sup>xxxi</sup> EPU Review Vol 8 No1 p23
- <sup>xxxii</sup> Ibid p22
- <sup>xxxiii</sup> Ibid p28
- <sup>xxxiv</sup> Ibid p29
- <sup>xxxv</sup> Ibid p14
- <sup>xxxvi</sup> Ibid p15
- <sup>xxxvii</sup> Jansen p43
- <sup>xxxviii</sup> Figures given by Deputy Vice-Chancellor of the University of Natal Professor David Maugham-Brown, 2001
- <sup>xxxix</sup> Jansen p3
- <sup>xl</sup> 1995 White Paper p13
- <sup>xli</sup> Jansen p17
- <sup>xlii</sup> 'A Curriculum Model for Education in South Africa' 1993 (Educational Renewal Strategy (ERS)). Committee of Heads of Education Departments p1.
- <sup>xliii</sup> Ibid p2

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- xliv Jansen p10
  - xlvi ibid
  - xlvi ibid p6
  - xlvi 1995 White Paper p17
  - xlvi ibid p16
  - xlvi ibid p15
  - i ibid p17
  - li ibid p18
  - lii Draft White Paper on Higher Education. Government Gazette Notice No. 712 of 1997 p11
  - liii ibid p12
  - liv ibid p21
  - lv ibid p36
  - lvi ibid p16
  - lvii ibid p11
  - lviii Education White Paper 3 August 1997. 'A Programme for the Transformation of Higher Education' Notice 1196 of 1997 (Department of Education, Pretoria) p3
  - lix ibid p29
  - lx ibid p31
  - lxi ibid p33
  - lxii ibid p35
  - lxiii Personal comment 1997
  - lxiv Jansen, 2000 p58
  - lxv Jansen, personal comment 1997
  - lxvi 'A South African Curriculum for the Twenty-First Century'. Report of the Review Committee on Curriculum 2005, presented to the Minister of Education, Professor Kader Asmal, 31 May 2000 (Pretoria) p12
  - lxvii ibid p16
  - lxviii *Wits EPU Quarterly Review of Education and Training in South Africa* Vol 7 no. 4 p3
  - lxix ibid p5
  - lxx ibid
  - lxxi ibid p9
  - lxxii ibid
  - lxxiii Review Committee p12
  - lxxiv *Wits EPU Quarterly Review* Vol 7 no. 3 p38

## CHAPTER 3

### Society in a Neo-Liberal Dispensation

*This chapter opens the discussion beyond South Africa in order to consider the institution of neo-liberalism as a global phenomenon, and its apparent effects upon an older Liberal Democratic tradition. It argues that education represents an exception to the generally dehumanising nature of these effects.*

#### **1. Introduction**

The term itself ('neo-liberal') was originally coined by a journalist, Charles Peters, Editor of the *Washington Monthly* in order to indicate the shifts that had clearly taken place since the mid 1970s in Liberal thinking<sup>1</sup>. A range of contingent factors appears to have contributed to this shift. The problems increasingly facing welfare programmes in the wake of the stalling of post-war economic growth, suggested that neo-Keynsian 'demand-side' economics was ineffective and that more aggressive, competitive, market driven systems were preferable. This in turn legitimised the deregulation of global financial markets allowing for the influence of global finance to increase at the expense of the 'real economy' and also at the expense of governments – not excluding the United States, the only remaining super-power. Accelerating technological innovation provided the essential back-up for this 'New Economy' and at the same time encouraged capital intensive industrial techniques leading to 'restructuring' and the 'downsizing' of workforces in traditional industries. This, along with an increasingly competitive global labour market, left the former balance of power between capital and labour permanently

skewed<sup>1</sup>. Finally, the collapse of 'actually existing socialism' in 1989 ultimately discredited the only apparent alternative to this new politico-economic approach.

The political shift therefore apparently entailed a move from centre left (liberal democratic) to centre right (neo-liberal) which accelerated the closing of the gap between Democrats and Republicans in the USA and which created a situation of overwhelming support for Tony Blair's 'New Labour' in Britain. It created overall 'a hybrid of uncertain character, which may be more a label attached to a package of politically expedient positions than any important revision of liberal thought'<sup>ii</sup>. The rightward shift drew responses ranging from Francis Fukuyama's welcoming of a period 'after socialism' signaling 'the end of history'<sup>iii</sup> to Immanuel Wallerstein's condemnation of a period 'after liberalism' 'that combines a fake adulation of the market with legislation against the poor and the strangers ... being peddled today by reinvigorated reactionaries'<sup>iv</sup>. These are implicitly the old political responses but circumstances have materially altered the balance of power between them. The right has cornered 'necessity' and 'inevitability' for itself, leaving the left uncomfortably uncertain about how to combat this new and more intractable opponent<sup>2</sup>.

A moment's reflection will reveal that these shifts have in effect entailed radically altering the traditional structures of the liberal democracies of the western world without

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<sup>1</sup> Although Manuel Castells authoritative analysis in *The Rise of the Network Society* claims that there are as many people in employment in this 'post-industrial' era as before, a breakdown of their age, gender, location and bargaining power will reveal a very new picture.

<sup>2</sup> In countering this it might be worth listening to William Pitt the Younger, Prime Minister of Britain speaking in Parliament at the height of the Enlightenment era (18 November 1783): 'Necessity is the plea for every infringement of human freedom. It is the argument of tyrants; it is the creed of slaves'. The

any accompanying reformulation of thought beyond expediency. The power of the nation state, the regulatory order of international financial agreements, the bargaining power of working people in the regulation of their conditions of employment, are all destabilised. This has met with understandably positive, but unthinking, acceptance by those who stand to gain materially (at any rate in the short term) and by a surprising degree of passivity by those who stand to lose and this may include, in the longer term, all of us.

The new Bush administration (and Berlusconi's new government in Italy) may appear to represent a recent swing towards a more traditionally conservative approach, favouring the narrower interests of Big Business.<sup>3</sup> However the controversial nature of the American victory and the apathy of the American voters, as of others across the western world, suggest a more complex political climate than a clear victory for the right would indicate. Supporters of 'New Labour' in Britain, for instance, see no incongruity in their leader advocating 'welfare to work' policies, nor in his identifying himself closely with Berlusconi and Bush, while their motivation for supporting his party can still be stated as having 'always voted Labour'. This situation overall may indicate the marginalisation of politics and the understanding that modern states are best seen as simply administered by professional administrators in a politically neutral milieu. The very conception of political 'neutrality' is of course only possible if the guiding principles of current policy are understood as acceptable, discoverable and indeed as already discovered.

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current Liberal Democrats might try this kind of response to Blair's economic arguments – for instance the necessity of granting independence to Reserve Banks – in the UK's case to the Bank of England!

<sup>3</sup> Sharon's large support in Israel would also seem to be relevant here – although the Middle Eastern crisis to which it is a response sets it apart in other ways.



The rapid structural changes having been pragmatic and reactive, rather than deeply considered or theory-based, has arguably had the effect of leaving people still supportive (in principle) of many of the values of an older Liberal political platform. Individual human dignity and freedom, rationality, a 'liberal' education, the rule of law, the marketplace of ideas, pluralism, free trade, and last but not least, democracy itself, would I believe normally still be claimed as their political ideals and objectives by the dominant neo-liberal parties, as they would by the electorates. Wherever there is a marked divergence from these in practice, I shall suggest, the logic of underlying current forces is taking policy in directions where the people affected – policy-makers and ordinary citizens alike – are often uncomfortable and unwilling to go<sup>4</sup>. That this can happen with increasing frequency would in turn seem to imply the absence of critical reflection on the part of currently pragmatic and accepting, westernised populations. The last few years have however seen a rise in active dissent within, but much more noticeably beyond, this society, and the mood has been changing towards a more volatile, critical and confrontational one – culminating in the attack on the symbolic pillars of this society on 11 September 2001. How the de-stablisng of older liberal structures may restrict our ability to counter, or even to comprehend, this situation is the subject of this chapter.

## ***2. Power without agency: The dynamics of global economic power.***

Amongst the most detailed and influential descriptions of global neo-liberal society as seen from within, is Manuel Castells' trilogy *The Information Age*<sup>vi</sup>. This together with

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<sup>4</sup> A number of films have been made by American filmmakers indicating this discomfort – but generally without suggesting any way out. *American Beauty* is perhaps the best, although the mystical ending suggests the very negation of critical reflection.

Michael Gibbons *et al*'s<sup>5</sup> *The New Production of Knowledge*<sup>vii</sup> (which discusses research and development for the New Economy) are valuable tools for gauging western society's self-understanding. Neither author seeks to challenge the fundamental assumptions of the society he describes, although both are fully aware of its problems. Noticeably both titles indicate the significance attributed to 'information' or 'knowledge' – the idea of the 'Knowledge Society' being apparently interchangeable in current understanding with 'the Information Age'. On reflection it is clear, however, that to have 'knowledge' is more than to have 'information'. 'Knowledge' seems to imply agency – only sentient beings 'know'. Philosophically 'knowing' is the ontological end-point of epistemology – it requires mental processing, while 'information' has no such human connotations (it involves 'facts told, heard or discovered' or 'facts fed into a computer'<sup>viii</sup>) and 'information' may be transmitted as efficiently, indeed very much more efficiently, electronically. So in the 'Network Society' it is certainly 'information' that is intended and not 'knowledge'. 'Knowledge' sounds better, of course, just as 'freedom' sounds better, and intends more, than 'deregulation' its own particular de-personalised current equivalent. 'Deregulation' divests 'freedom' of the need for conscious thought, just as 'information' divests 'knowledge' of the same. And only where a society is 'deregulated' but considers itself by that token to be free, and where 'information' is accepted as knowledge, can the resulting *deregulated information itself* become power, and not the people possessing it. It is this power of the 'flows', the 'networks', the 'rational' systems, that define global western society as described by Castells:

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<sup>5</sup> *The New Production of Knowledge* is authored by M Gibbons, C Limoges, H Nowotny, S Schwartzman, P Scott and M Trow. I refer to 'Gibbons' from this point on, rather than 'Gibbons et al', as he acted as co-ordinator of the research that resulted in the book, and for ease of reference.

‘[n]etworks constitute the new social morphology of our societies, and the diffusion of *networking logic* substantially modifies the operation and outcomes in processes of production, experience, power and culture ... *this networking logic induces a social determination of a higher level than that of the specific social interests expressed through the networks*: the power of flows takes precedence over the flows of power’<sup>ix</sup> (emphasis added).

The source of power driving and molding this society – the information itself – is market-driven. ‘What makes the market superior’ Gibbons explains ‘is precisely that it organises economic activity around *information*’<sup>x</sup> (emphasis in the original). Gibbons explains how information has come to assume this central role. ‘Increasingly’ he says ‘there is less and less return on the traditional resources: land, labour and (money) capital. The main producers of wealth have become information and knowledge’<sup>xi</sup>. And as with the present so ‘the future shape of knowledge production has to be seen in the context of the changing nature of the global economy’<sup>xii</sup>. This economic determination of knowledge is thus seen as irreversible despite the authors’ concern that ‘the current productivity crisis raises the question whether technologies of mass production are not reaching their inherent limits and, if so, what will replace them’<sup>xiii</sup>.

Gibbons, quoting Drucker<sup>xiv</sup>, admits that we do not understand how this new networked power really operates. ‘How knowledge behaves as an economic resource we do not yet fully understand’<sup>xv</sup>. Therefore he believes that above all ‘we need an economic theory that puts knowledge into the centre of the wealth-producing process’.

Such a theory alone can explain the present economy. It alone can explain economic growth. It alone can explain innovation. It alone can explain how the Japanese economy works and, above all, why it works. It alone can explain why newcomers, especially in high-tech fields, can, almost overnight, sweep the market and drive out all competitors as the Japanese did in consumer electronics and in the US automobile market.

So far there are no signs of an Adam Smith or a David Ricardo of knowledge. But the first studies of the economic behaviour of knowledge have begun to appear<sup>xvi</sup>.

These ‘first studies’ indicate that knowledge does not work at all like traditional economic resources. It has to ‘assume imperfect competition from the start’ and ‘neither consumption nor investment appear to be in control’. It is not possible to find a common denominator for different kinds of knowledge and it is not possible to ‘quantify knowledge’<sup>6 xvi</sup>. This book was first published in 1994 and reprinted (but apparently not re-thought) in 1995, 1996, 1997 and 1999. With hindsight each of the phenomena considered becomes painfully clear. The Japanese economy boomed in the 1980s on cheap dedicated labour able to undercut western prices, but its dubious support for the banking system could only be maintained in periods of high and sustained growth. The passage refers to earlier high technology phenomena – but had it been written in the late 1990s Silicon Valley and the new ‘dot coms’ would have appeared as *the* economic growth providers. But computers can make profits and create growth only while everybody is anxious to buy them and new methods of marketing things are dependent on the market itself, so that neither aspect of technology can be a permanent support for the

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<sup>6</sup> This thinking is still of the type prevalent in the late Middle Ages that was well reasoned, but blind to untenable underlying assumptions and therefore not truly ‘critical’. The danger of falling into the ‘heresy’

economy. And since one cannot eat computers nor explode them (that is, you can neither sustain nor destroy people with them) there is an inherent limit to this growth. The use of high tech to back up the global economy is ultimately dependent upon that economy. The search for a theory that 'alone' can explain the knowledge economy thus begins to seem strange and mystical. All the puzzling problems about its inability to fit in with orthodox understandings of economics will reveal in the event only that it will make the rich richer and the poor poorer (as both Gibbons and Castells acknowledge). This is because the knowledge that it indicates will point to the needs and whereabouts of potential buyers – it will be indifferent as to whether these are Mafiosi, arms dealers or housewives buying for their families. It is clear of course which of these it will indicate the more enthusiastically, and which, in a deregulated market, will be the more readily excluded.

Characteristic of de-personalised power and the thing that makes it acceptable to an (unthinking) populace, is its association with 'freedom'. For the flows to be 'free', markets must be deregulated as far as possible in order that (human) interference will be prevented from inhibiting 'market indicators' from operating. In small, local, or even national, communities where firms, individuals and families are all reasonably homogeneous this is a useful and convincing theory. However it is largely irrelevant now, and in the case of the global economy it is meaningful only within the logic of gambling.

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of socialism represented by any direct government intervention in the economy presumably keeps the authors within the bounds of economic orthodoxy as the starting point of their understanding.

When comparing global capital flows to the ‘real economy’ of ‘jobs, taxes, salaries and public services’ Castells says that he is ‘tempted to call this the “unreal economy” because ‘the fundamental reality ...is [now] in the financial sphere’<sup>xviii</sup>. It is these intangible flows of financial information therefore that become the real global political power. The involvement of human agents is largely as speculators<sup>7</sup> and their choices are not based upon any measurable reality. They are only pawns in the game, and only the sum of their inputs makes the difference, directing and re-directing the billions of dollars that constitute the flows. In reality about 95% of international financial transactions are purely speculative and ‘hundreds of billions of ‘hot money’ can desert a market or a country in a day’<sup>xix</sup> causing havoc in the lives of ordinary people. This is political action at its most nebulous (and might also be seen as structural Marxism brought to life – the economy and not the human actors determining ‘in the last instance’, except that this is merely speculation and not the economy determining in any real sense). This power has no country, no time, no material base and operates largely beyond the control of the financiers who operate within it – an idea captured some years ago by David Korten<sup>xx</sup>. This then is the hub of political power which at the next level, of real goods and services, will be directed by more specific market information able to indicate what goods must be made, what services rendered, where and to whom. Here (as Steven J Gould sees it) there is definitely ‘too much death and destruction’ for *laissez-faire* to be allowed to operate in an untrammelled way<sup>xxi</sup>, and here social democracy’s most fruitful tool for redressing social imbalance – taxation – is also eliminated. If a substantial capital gains tax were to be imposed upon global financial speculation, a large proportion of the

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<sup>7</sup> It is a commonplace to hear financial commentators admit jokingly that of course the market is driven by ‘fear and greed’. ‘Always has been, always will be!’. This was said on CNN in relation to the response of

world's social problems might be addressed. In a deregulated market this is of course impossible.

Within their national economies governments behave quite differently. They are involved in a constant round of regulation and protection of the interests of the economy – there is no question of trade being genuinely free in ‘real’ goods and services either in international or national trade. And yet the general framework of understanding remains orthodox economics and ‘market indicators’. Thus at the national level the full action of human consciousness is constrained, just as in the case of global finance it is absent. That real national economies have been stagnant since the 1970s (a fact that will normally be readily agreed to even by strong defenders of the capitalist system as it now operates, for instance Gibbons) has meant that the full concentration of human ingenuity has had to be expended on trying to deal with surplus capital. We have seen how the hope that high tech would fulfill this role has recently been shattered. Harry Shutt describes the problems that have resulted:

The decisive factor in preventing a devaluation of capital such as to reflect its growing superfluity has been the continuing deployment of the machinery of state and of taxpayers' money to manipulate capital markets and maintain asset values. The methods used ... range from state orchestration of stock-market buying to sustain share prices (perhaps not confined to Japan) to tax incentives for investing in securities and thinly disguised subsidisation of bank profits (through discounted sales of public debt) so as to maintain market liquidity. Yet above all these in importance is the overarching commitment of the state, in its capacity of lender of

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markets to the slide since Sept 11.

last resort, to provide an effective guarantee against the insolvency of the financial markets as a whole.

It is perhaps not necessary to point out that the reason why state power and resources continue to be used to maintain an artificially high market valuation of capital – even in the face of a steadily worsening fiscal crisis – is the political dominance of the vested interest associated with capital, which has enabled it to mobilise both public resources and the mass media in support of its interests.

Shutt fails to acknowledge however that (as the G8 powers pointed out to anti-globalisation demonstrators recently) western governments are the elected representatives of their respective countries. It has to remain true in formal democracies that people get the governments they deserve. It must also be pointed out, in defense of their acceptance of the policies themselves, that there are very few viable economic alternatives being suggested to governments.

A particularly troubling aspect of the polarisation that this system is universally acknowledged to encourage, is the high rewards it provides for criminality and the severity of its punishment of poverty. The victims of Castells's 'black holes of human misery' which lie outside of the networks, will find ways back through the burgeoning criminal underworld rather than through the 'informal economies' which have no such access to power and wealth<sup>xxii</sup>. The regulation of the drug trade – the hub of criminality – would bring it back within the purview of the state; its criminalisation is only another form of deregulation, an abandonment of responsibility and of the necessity for conscious thought. The criminalisation of any desirable product in an unregulated market, be it



drugs or endangered species, hugely increases the price and therefore the profitability of the trade. Law enforcement will be powerless against these flows and will inevitably be seduced to become part of them. 'Tax havens' are another creation of nation states, who must take responsibility for the 'money laundering' that they allow, on top of the lost taxes that they induce legitimate governments to forego. The deregulation of financial markets ensures the anonymity not only of 'ordinary' criminals but also, for instance, of those who may have had prior knowledge of the September 11 bombings and played the markets accordingly.

Castells questions whether 'our societies will be able to eliminate the criminal networks' or 'whether criminal networks will not end up controlling a substantial share of our economy, of our institutions and of our everyday life'<sup>xxiii</sup>. And he predicts glumly that '[t]he price of increased protection will be to live within a system of electronic locks, alarm systems, and on-line police patrols. It will also mean to grow up in fear. It is probably not different from the experience of most children in history. It is also a measure of the relativity of human progress'<sup>xxiv</sup>. Prophetically he also warns that in this current situation 'there is an explosion of fundamentalist movements that take up the Qu'ran, the Bible, or any holy text, to interpret it and use it as a banner of their despair and a weapon of their rage'<sup>xxv</sup>.

In summary Castells suggests that 'the new social order, the network society, increasingly appears to most people as a meta-social disorder. Namely, as an automated, random sequence of events, derived from the uncontrollable logic of the markets, technology,

geopolitical order, or biological determination<sup>xxvi</sup>. But it never occurs to him that the logic of these systems is not immutable, and that the much more adaptable logic available to conscious minds is in a position to challenge it. Indeed human beings have been responsible in each case for either creating these apparently unstoppable juggernauts, or else for allowing them to operate unhindered. An acknowledgement of this might set in motion an entirely different train of events. Failing this however his bleak conclusions would seem to be convincing. Power without agency is necessarily power without meaning or ethics, and thus without any hope that it may entail a 'quality of mercy'. It must treat every individual equally as a soulless profit maximiser. We know of course that people aren't like this<sup>8</sup> – we are the same frail, mixed bunch that we always were – but our faith in, and reverence for, a power that operates beyond thought to demonstrably encourage greed, criminality, poverty and polarization must increase our vulnerability and tendency to succumb to the ills that Castells describes. Our faith in this system surely exceeds the credulity of our ancestors. It must exceed the credulity of the Xhosas who believed that killing all their cattle would rid their people of the white invaders. And certainly it must exceed the credulity of medieval believers in barnacle geese that materialise spontaneously from the ether, or a 'philosopher's stone' capable of changing base metals into gold!

If this is the nature of the neo-liberal power that presently controls us it has brought us a long way from the faith in reason, fairness and the rule of law of more traditional Liberalism – and yet it would seem to have evolved from it. The following discussion

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<sup>8</sup> The economist and educator, Samuel Bowles, for instance, has conducted wide-ranging international research in recent years into the readiness of people to respond to just, as opposed to purely economic,

examines this transmogrifying force within specific aspects of more traditional Liberal thought.

### ***3. Liberalism reconstituted as Neo-liberalism***

#### *3.1 Rationality.*

There is a close association between autonomy and rationality and between both of them and Liberalism. Only the fully rational autonomous individual is understood to be in a position to form the basic unit of a liberal democratic society. The rationalism of Descartes provided appropriate theoretical grounds from the early seventeenth century for this stance. The belief in universal reason, equally accessible to all, seemed to promise the uniformity of understanding between disparate groups desired at a time when warring religious factions had divided Europe for a hundred years<sup>xxvii</sup>. Beyond this idea of the cohesive power of reason itself (an idea still significant in the work of Jurgen Habermas) there is the idea that normative positions can be arrived at *through* reason in order to settle matters of ethics and of politics. This is characteristic of the thinking of both Immanuel Kant and John Stuart Mill, and continues in John Rawls' idea of 'distributive justice'. (Habermas sees his philosophy as falling within the same broad family of ideas as Rawls<sup>xxviii</sup>). But to separate reason as 'instrument' from reason *tout court* may be an illegitimate philosophical move as Aronson suggests<sup>xxix</sup>. Stephen Toulmin sees the lack of a humanist understanding to soften and broaden this notion of instrumental reason as a crucial turn, taken in the seventeenth century, which ensured that the Enlightenment was intrinsically anti-humanist from the start. This anti-humanism has become more explicit

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logic.

with the conjoining of instrumental reason and the instrumental logic of neo-classical economics in neo-liberalism since the 1970s.

Rationality within current analytic philosophy is narrowly focussed and extremely technical and instrumental. In *The Nature of Rationality* Robert Nozick decries the inaccessibility of this discipline to ordinary people and this book tries to bridge that gap – but ethics and the real world remain largely excluded from the complex analytical calculations with which the book deals. As with seventeenth-century Cartesians Nozick argues forcefully for the value of reason as ‘one of the major ways through which humanity is able to correct and rise above personal and group bias’<sup>xxx</sup>. Its powers now, as then, are understood to be virtually unlimited. Nozick believes that ‘rationality provides us with the (potential) power to investigate and discover anything and everything’<sup>xxxi</sup>. But the problem arises when the results of this rarefied, decontextualised reason are filtered back into the world as the ‘sleek theory of rational action – decision theory’ used to ‘provide the framework of rational strategic interaction, game theory, the formal theory of social choice and welfare economics, the theory of microeconomic phenomena and elaborate theories of the political realm’<sup>xxxii</sup>. Nozick’s rather eclectic throwing together of the kinds of instrumental reasoning that he endorses with the unsuspecting aspects of human social policy that in his experience they are expected to serve, is somewhat alarming. Many of us were not aware that welfare, micro-economics and politics itself (we always thought we lived in a democracy!) could be subjected to rational analysis in this way. And those of us who are social scientists would probably want to question

whether separating reason out from the real world, in order the better to apply it there again, is in fact feasible at all in the human sciences.

A discussion of the ‘Prisoners’ Dilemma’ is instructive here as it provides an exception to the decontextualisation of theory that Nozick and his fellow rationalists generally adhere to so strictly. At the same time it exposes very clearly the problems inherent in the application of rational theory to society. The dilemma concerns a puzzle as to whether confessing to a crime is the rational thing to do for a pair of prisoners who are not in communication with each other but who know that particular lengths of prison sentence depend on their joint decisions to confess or not. The outsider’s reaction might be to ask ‘well, were the prisoners guilty? – which one was guilty? – did the law provide an appropriate sentence? what was their crime after all?’ – and finally ‘shouldn’t the one who *did* it be the one to have owned up?’. But the weight of intellectual opprobrium hangs heavily over such a response, stopping it in its tracks. One would not dare to suggest anything so clearly naive. The scenario is only constructed the better to examine the logic involved. It concerns itself (ostensibly) exclusively with rationality as logic, but actually of course with logic as self-interest – and as profit-maximisation, exclusive of ethics or legality. What the ‘Prisoners’ dilemma’ in effect proves is that any attempt to consider what would be *purely rational* necessarily reduces itself to this minimalist point<sup>9</sup>. And this makes one very uneasy to think that philosophers, statisticians and economists who use this kind of thinking are, as Nozick suggests, called upon by policy

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<sup>9</sup> This brings to mind the conclusion of Wittgenstein’s *Tractatus*. ‘We feel that even when all *possible* scientific questions have been answered, the problems of life remain completely untouched’ (73) and ‘[a]nyone who understands me eventually recognises [my propositions] as nonsensical’ (74). (Surely this

makers to advise them. Nozick admits that decision theories have proven of little use in practical applications.

An elaborate theory of rational decision has been developed *by economists and statisticians, and put to widespread use in theoretical and policy studies*. This is a powerful, mathematically precise, and tractable theory. *Although its adequacy as a description of actual behavior has been widely questioned, it stands as the dominant view of the conditions that a rational decision should satisfy: it is the dominant normative view*' (emphasis added)<sup>xxxiii</sup>.

At the opposite end of the Liberal spectrum John Rawls's conception of 'justice as reason' is based upon individual conscious rationality and morality and not on rationality as a putatively discoverable 'code' of universal applicability. Rawls's *Political Liberalism*, published in 1993, seeks an 'overlapping consensus' for pluralist societies allowing for a political solution to the problem of accommodating 'incompatible yet reasonable comprehensive doctrines'<sup>xxxiv</sup> found in contemporary societies. But there is an unresolved difficulty here. Rawls says:

We are only to appeal to presently accepted general beliefs and forms of reasoning found in *common sense*, and the *methods and conclusions of science when these are not controversial* ...

This means that in discussing constitutional essentials and matters of public justice we are not to appeal to comprehensive religious and philosophical doctrines – to what we as individuals or members of associations see as the whole truth – *nor to elaborate economic theories of general equilibrium, say, if these are in dispute*'. As far as possible, the knowledge and ways of reasoning that ground our affirming the principles of justice and their application to

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leads very smoothly on to the *Philosophical Investigations* – which do not really constitute a 'turn' so much as logical development in Wittgenstein's thought?)

constitutional essentials and basic justice are to rest on *the plain truths now widely accepted, or available to citizens generally*. (Emphases added)<sup>xxxv</sup>.

Now this seems to me to be a remarkable passage. Rawls suggests the need for suspicion about the viability of certain currently significant ('hegemonic'?) ideas but does not suggest a philosophical route to uncover them. (Perhaps to a liberal mind to suspect the workings of ideology is too closely associated with 'those masters of suspicion' the critical theorists). And yet Rawls comes within an ace of 'ideology critique' himself here – even draws the ace out of the pack if you will, but then doesn't play it. He recognises the potential problems of accepting current economic theory and 'conclusions of science' as 'common sense' in our era<sup>10</sup> but has no way of uncovering the power structures that may exist in their support. My attempt throughout the dissertation will be to push liberalism in this critical direction in order to serve its own ends and not Marxist ones – to excise the undemocratic determinist element from capitalist thought, not to undermine any democratic, critically conscious aspects of capitalism. I would wish therefore to re-appropriate critical thought from Marxist thinking that is inherently utopian, and certainly falls into the trap that Rawls warns us against of setting up particular 'whole truths' in place of those that everyone can accept in a democracy. Liberalism must reflect upon its own foundations of knowledge.

### 3.2 *The rule of law.*

The slippage between 'freedom' and 'deregulation' in neo-liberal thought eliminates one of the Enlightenment's most fruitful devices for controlling both power and anarchy – the

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<sup>10</sup> This problem with 'common sense' is exactly Antonio Gramsci's point of course.

rule of law. ‘Law’ involves the setting of rules. It is conscious, considered, social regulation, and its negation denies society its power (its *conscious* freedom) to create, to construct, to reform and to develop appropriate norms and standards for itself in the manner suggested by Rawls. Various versions of the rule of law are as old as human societies themselves. Tribal kings and chiefs had to abide by custom and tradition and those who exercised arbitrary authority are not the heroes but the villains of ancient legend. The rejection of this kind of traditional authority in favour of more democratic dispensations in the period of the Enlightenment – sometimes seen as ‘the Age of Reason’ – transferred personal sovereignty to the rule of law itself and provided for its embodiment within democratic constitutions<sup>11</sup>. Probably the most respected and enduring example of this was the American Constitution first promulgated in 1789 – the same year that saw the start of the French Revolution – a very much less salutary example of the possible outcomes of reason. The two events were of course not unconnected. French forces had fought against England in the American War of Liberation (which ended in 1783) and they had found the ideas of liberty they met with then applicable to their own society. The French Revolution was however to throw up the Reign of Terror under Robespierre (‘the sea-green incorruptible’!) whose government celebrated Reason as an alternative state religion, along with the re-naming of the months of the year to make them more rational, and a passion for decimalisation that included the (brief) creation of a ten-day week<sup>12</sup>. The excesses of the French Revolution worried many advocates of

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<sup>11</sup> In fact the rule of law can be traced in Britain back to the first signing of Magna Carta by King John in 1215. Although certainly not concerned with the establishment of democracy (Magna Carta largely served the interests of the Barons) the improved legal system established by King John’s father, Henry II, was able to provide the framework through which Magna Carta was implemented, and arbitrary sovereign power henceforth curbed.

<sup>12</sup> This celebration of reason as a ‘good in itself’ is clearly closer to Nozick than to Rawls, who is concerned with the beneficial *outcomes* of reason in the creation of just systems.



liberty, probably the most celebrated being a founding father of Liberalism, Edmund Burke, who had been critically evaluating these events from across the English Channel. He revised his ideas on liberty quickly when it appeared that freedom could in practice lead to chaos, and became the father of liberal conservatism.

Neo-liberalism's shift towards accepting the frameworks set by market forces however involves the abandonment of consciously established legal and political frameworks (rational or otherwise) in favour of a *putatively* rational system and the regulations that accompany it, regulate it and allow it to operate. In a globalising world the agreements reached under general trade rules, and the conditions imposed by international financial bodies, increasingly supersede the sovereignty of nations and thus the integrity of constitutions. Multinational companies are clearly also increasingly able to evade specific national regulations and can choose to operate in areas of the world where legal restrictions on their activities are less onerous than those in their country of origin. Bodies such as the International Monetary Fund and the World Bank would understand their power to dispense or withhold aid as a tool for promoting democracy in states currently enduring arbitrary rule. But it is perhaps unreasonable to expect bodies whose *raison d'être* is financial to assume a political role more appropriately falling upon the United Nations. However the refusal of the USA to pay its dues to the United Nations, its decisions to opt out of the international ban on land mines, the initiative to establish an international court of criminal justice, and the Kyoto agreement on the environment, suggests not only an acceptance of commercialism as the only viable instrument of policy, but also a growing political isolationism on the part the world's only remaining

superpower. The establishment of an alliance against 'international terrorism' scarcely changes this<sup>13</sup>.

### *3.3 Individual freedom and human dignity.*

The idea of the significance of the individual in Liberal thought can be traced back to the humanism of the Renaissance, and (more directly) to the Reformation's stance on individual conscience, and each person's right to direct access to God through prayer. Answers to the central dilemma of liberalism – how to treat the tension between individual freedom and social cohesion – have lain, from Rousseau to Rawls, within various conceptions of a 'social contract'. The idea presupposes that social cohesion is unnatural (and this goes back to Hobbes). Individual freedom is the desired goal – society is necessarily the constraint. Left and right wings of the liberal spectrum can therefore be distinguished by how far they are prepared to accommodate the needs of society and by implication how far they are prepared to compromise individual rights and freedoms. Ideally of course liberals would hope that the 'dangerous classes' can be eliminated and that everyone can have 'a stake in the country' worth defending - thus reducing the inherent tensions to manageable proportions. This might be seen as an implicit assumption of the liberal democratic parties who supported social welfare programmes in the middle decades of the twentieth century. But whether the introduction of social welfare – which has links to socialism and entails 'big government' and manipulation of the economy – can be seen as theoretically compatible with liberalism is

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<sup>13</sup> In order to construct this fragile alliance the USA was finally prepared to repay its backlog of dues to the United Nations

debatable. Kwame Anthony Appiah, Professor of African American Studies at Harvard, believes that it is.

It is natural to see ...concern for basic welfare as simply a new addition to the liberal register, not as something growing out of the basic liberal vision. But I think this is wrong. Basic welfare provision flows from the same fundamental concern with dignity. In a world where land has all been parceled out (so that no one can simply acquire land to work by moving into uncharted territory); a world where money is essential for adequate nutrition and proper shelter; where a job (or so much money you don't need one) is increasingly a condition for minimal social respect; guaranteeing that everybody has access to a place to live, food to eat, and a form of work, is simply making sure that everyone has access to the possibility of a dignified existence. It is increasingly clear, I think, that a guarantee of access to health care should be underwritten by the state as well. And because everyone is equally entitled to dignity, whatever minimum conditions the state must guarantee, it must guarantee to everyone<sup>xxxvi</sup>..

Implicit in Appiah's idea is in fact a more fundamental 'human rights' argument not only compatible with but *requiring* welfare provision for the individual in any situation where human dignity would be compromised by its absence. Appiah's position is consistent with the preamble to the South African constitution, but the contradictions of this stance in a country constrained by economic policies requiring strict fiscal discipline and inflation targeting are acute. For instance, the appeal by the impoverished community of Wallacedene to the Constitutional Court in 1998 on the grounds that their basic conditions of life were not being met was successful, but three years later these conditions had not improved. The open admission of the South African Minister of

Police that many laws are un-implementable on account of lack of personnel or the infrastructure needed to enforce them is a tacit acceptance of the same economic logic.

There is a small, but possibly significant point that may illustrate the different liberal positions on what ‘individualism’ currently entails. Rawls in his arguments in favour of ‘holding citizens responsible for their ends’<sup>xxxvii</sup> holds that an adult citizen, knowing or being in a position to know, the dangers of smoking, and dying from tobacco poisoning would not be able to require the state to treat him if the money at its disposal were insufficient. Appiah’s stand for human dignity would, I believe, require that treatment be provided. But the current practice is different from either. It is that compensation should be awarded, the amount being calculated in accordance with the economic viability of the victim and the ability of the tobacco companies (or the fund set up by them for these contingencies) to pay. The different assumptions here are interesting. Rawls’ understanding is that the individual is primarily rational and autonomous (but note his implicit inclusion of the logic of the economy); Appiah’s understanding is that the individual has intrinsic dignity and worth (prior to any considerations of reason or of wealth); and the neo-liberal understanding that the individual is essentially an economic entity – with implicitly diminished autonomy and rationality. It is notable here again that Rawls’s idea that the least advantaged should be the most considered is the exact reversal of the logic of economics - and that, now faced with an intractable neo-liberal present, he fails to confront this directly<sup>14</sup>.

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<sup>14</sup> Rawls’s conversations with the progressive economist Amartya Sen in *Political Liberalism* (p 183 – 186) are set within the framework of specific problems that Sen has with Rawls’s conception of ‘primary goods’. They do not treat of the underlying incompatibility that I argue exists between Rawls’s conception of

### *3.4 Free Trade.*

Free market thinking is as integral to liberalism as is freedom to pursue ones own (socially responsible) interests. Free trade policies were instrumental in securing Britain's hegemony in world trade in the nineteenth century – then, as now, they tend to have marked benefits for economically dominant nations. The linking of free markets to free people seemed possible then from a British perspective, it (perhaps) seems possible now from an American perspective, but it becomes less and less tenable from a global perspective. The neo-liberal response to the dilemma is implicitly to translate the hope of achieving a 'stake in the country' for every individual into 'a stake in the global economy' for every nation, and it is this which global organisations like the World Bank and the International Monetary Fund ostensibly seek to achieve for poorer countries. Here the individual dignity required to make meaningful the idea of freedom for everybody is rather to be achieved by indirect means through 'trickle down' effects (discounted by all but the most determined or optimistic capitalist these days), through linking aid to evidence of democratic reforms in government, and through ideas of 'short term pain' (caused by the accompanying fiscal austerity measures) for 'long term gain' (still to be proven). Contradictions between the logic of the market, which lies in the 'survival of the fittest', and the logic of human rights and dignity, which requires consideration for the least advantaged (to come back to Rawls and Appiah) remain unresolved. The logic of the market entails a relentless search for new outlets for trade in a stagnant global economy, and it is this above all that will ensure strong pressure for any

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justice as reason and the current acceptance of economics as system – that is between 'political liberalism' and 'economic liberalism'.

country however small and marginal to open its doors to international trade. The immediate outflow of human and financial capital that this entails has never been shown to be recoverable. It is a situation that South Africans understand and feel acutely.

### *3.5 Private Property*

The right to own and defend private property has been fundamental to the idea of liberalism from the beginning. From the beginning the ‘dangerous classes’ were excluded from liberal democratic understanding both in England and in France, and the famous slogan of the French Revolution ‘liberty, equality, fraternity’ is more correctly rendered ‘liberty, equality, fraternity - and property’. Liberalism is the archetypal bourgeois ideology, and the French Revolution was understood by Marx as the classic ‘bourgeois revolution’. The individual freedom liberalism envisages has traditionally been limited to those ‘with a stake in the country’. With the coming of universal suffrage this idea lost much of its currency but it remains residually. (The private security system that will replace the most minimal of state functions in Nozick’s *Anarchy, State and Utopia*<sup>xxxviii</sup> is there primarily to defend private property).

The current neo-liberal context of global economic competition and the significance of information within it, throws a new emphasis upon ‘intellectual’ property rights. Patents become crucial pieces of property along with entirely new, and potentially significant, types of ownership including sources of DNA. There is clearly a danger here of excluding knowledge, and restricting the economic and social benefits it can provide – the development of ‘terminator genes’ in agricultural products would be a case in point.

On the other hand the potential for sharing and disseminating information through technological interventions like the Internet has never been greater.

The significant twist that capitalist economics gave to property ownership from the earliest days involved ‘giving primacy to essentially impersonal property rights, derived from monetary transactions, over the personal, customary obligations of the feudal world’<sup>xxxix</sup>. ‘This new doctrine, [was] particularly associated with the tenets of the Calvinist religion and of the philosopher John Locke, the arch-prophet of private property rights’<sup>xl</sup> and another founder of the Liberal tradition. The institution of ‘limited liability’ companies that restricted the losses of individual investors was important for the growth of large enterprises but this entailed divorcing ownership from control of a company – something that Adam Smith had considered unacceptable<sup>xli</sup>

Doubts as to the propriety of giving shareholders, through their executive boards, the untrammelled right to deploy corporate assets, in their own interests, were to raise increasing concern in the late twentieth century as companies grew ever larger and more global in their scope – and thus moved beyond the power of any governments (or even the vast majority of shareholders) to control them<sup>xlii</sup>.

This situation has developed to the point where a company may be reluctant to plough money back into improving its real assets, through the acquisition of new plant or buildings for instance, because of the (short term) dip in profits that this could entail. The managers cannot allow the earnings-per-share ratio to look unfavourable as compared with rival companies in a climate that must be ever wary of vulnerability to hostile take-

over bids. If we do not pause to consider this further, the technical jargon will allow our thinking to slide over the human and ethical implications of this situation and accept it as a simple economic reality about which not much can be done. The motivation for takeovers is normally firstly to find an outlet for surplus capital to invest, then to inhibit competition or to strip a rival of its assets, and sometimes to find a means of tax-avoidance. The greater 'efficiency' resulting has most frequently proven illusory, as the financial press is generally willing to concede. Managers and workers may find themselves without a job, while the customers of the company taken over may also have to suffer various adverse consequences<sup>15</sup>. Thus what this situation really means is that the managers of a company who want to improve its real long-term profitability may feel inhibited from taking the appropriate decisions for fear that their shareholders (the real owners of the company) will be prepared to accept an offer made by a rival company to absorb their own, in order to make a quick monetary gain. This example of the owners of an enterprise being prepared to undermine the real interests of their own asset (not to mention their own community) for short-term profit must represent the nadir of John Locke's defense of private property.

And this goes further if we consider the artificiality of the increased value of the share property created. The emphasis on speculative rather than productive capital allows for a situation that increasingly bears little relation to the real value of the company as a profit-

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<sup>15</sup> Undergraduate Finance Accountancy students in South Africa will learn the technicalities of how to present the appropriate 'consolidated' financial statements – but normally nothing of the political, ethical, economic or human context



making organisation<sup>16</sup>. The reluctance of the USA to agree to a single global norm for the presentation of financial statements (there can be a more than three hundred percentage discrepancy between the same set of figures as presented by four officially-recognised and accepted USA accounting standards<sup>xliii</sup>) allows this divorce from reality to persist and encourages the speculative bubble to inflate ever further – whether deliberately or unconsciously it is hard to know.

The right to own private property and to pass it on to others after death represents a fundamental point of contention between the left and the right of the democratic spectrum. The continuum runs from Nozick's libertarian Utopia in which private property is paradoxically the last thing that finally remains as a public good – to expropriation of all private property in the interests of the working class preceding the final withering away of the state in a Marxist communist Utopia. But the word 'Utopia' means 'nowhere' and in reality the *government* in a liberal democracy is 'the only organized mechanism that makes possible that level of shared disinterest known as the public good'. It is 'the most powerful force possessed by the individual citizen'<sup>xliv</sup>. As Saul argues '[h]ow could individuals possibly replace the government? In a democracy they are the government'<sup>xlv</sup>. The task of adjudicating between the opposing rights and properties of their populations will never be resolvable entirely. It remains the ongoing task of democratic governments to find the best and fairest solution in the circumstances, in line with an agreed constitution, the rule of law it establishes, and the specific policies of the parties elected into power.

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<sup>16</sup> A recent (2000) book by Robert Shiller, Professor of Economics at Yale, entitled *Irrational Exuberance* (Princeton University Press) presents a significant warning concerning this situation from within a capitalist

### 3.6 *Pluralism.*

Stephen Toulmin attributes the origins of pluralism to the reluctant but inevitable acceptance of religious toleration that accompanied the conclusion of the Reformation<sup>xlvi</sup>. Pluralism obviously is concerned with the rights of divergent *group* interests rather than the accommodation of divergent individual interests. Traditional liberal emphasis is also on gradual and piecemeal change (reformism and gradualism) as a device preventing the upheavals that might otherwise result from the clash of competing interests. The problems inherent in these ideas of balancing divergent interests have always met with scepticism from the left in that they implicitly ignore issues of power. And a liberal-pluralism that sees no hidden agendas and that assumes transparency in any society that is formally democratic would appear to be naive. Where market ideologies increasingly dictate the framework within which reform takes place this constrains the nature of reform even further. In place of more organic and socially concerned interest groups the American system, and increasingly also contemporary European democracies, are at the mercy of commercial lobbying groups, the richer the more powerful – and it is these which influence which party shall win, which president shall rule.

Rawls's task in *Political Liberalism* is, as explained above, to consider how it is 'possible for there to exist over time a just and stable society of free and equal citizens who remain profoundly divided by reasonable religious, philosophical and moral doctrines'<sup>xlvii</sup>. His answer requires both that the political be considered apart from any claim to an overarching idea of 'the good' - but also that people are still assumed to be rational and

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perspective.

capable of moral judgement. The fiction of an initial ‘original position’ or ‘social contract’ is also still implicit, but, as has been incrementally demonstrated here, no contract can be assumed within a market-driven system and each of the premises on which Rawls’s builds (reason, morality, responsibility) is systematically undermined in a neo-liberal world order. His assumption of Liberal objectives would however still seem to represent the best and most desirable options currently available. They are the way forward that most democratic political parties could endorse and that most electorates could accept. But their (economic) undermining may well drive electorates in undemocratic directions as happened in the 1920s and 1930s<sup>17</sup>

It would seem that here we are encountering contradictions which were implicit within liberalism itself from the beginning (Kant’s intrinsic morality versus Hume’s empiricism) and that a version of empiricism necessarily predominates in a situation of given economic ‘imperatives’. The economic system of course does not really operate unaided – but the parameters of its thinking restrict government interventions to the directions that an unfettered market *would* take – that is towards support for the already powerful over the already weak.

### 3.7 Education.

Education was important to the Enlightenment project from the start. The fully rational, educated (male) individual was considered to be pivotal in bringing it to fruition. ‘Kant saw education as a way of liberating ‘man’ from the tutelage and dependence to which

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<sup>17</sup> Consider the victory of Le Pen in the first round of the French presidential election – an anti-Maastricht vote.

ignorance condemned him<sup>xlviii</sup>. Education for the masses was (again) something quite different, valued as encouraging ‘well-regulated liberty’ – thus a hedge against anarchy and revolution, and by the latter half of the nineteenth century a necessary accompaniment to emergent democracy. The 1867 Reform Bill gave a substantial section of British lower middle class men the vote. ‘We must educate our masters’ was the slightly superior and ironic comment of the government minister who subsequently introduced the first National Education Bill into the House of Commons in 1870. Minimal levels of education were also needed for workers in the heavy industries that characterised this high point of Britain’s Industrial Revolution when Britain ruled the waves, and a growing proportion of the world – but could see that Germany was catching up fast.

Over the succeeding century a ‘liberal education’ for the middle and upper classes came to entail not only the classics but the full range of the ‘liberal arts’. In Edinburgh University there was no Faculty of Commerce, and Political Economy was still an ‘Arts’ subject when I studied it there in 1959 (as Engineering had been in Cambridge when my Father was an undergraduate in the 1920s!). This disciplinary knowledge tended to be self-referential, validated by a system of peer review and often, but by no means always, divorced from the immediate concerns of society and protected by notions of ‘academic freedom’. Higher education being a public good, and a ‘good in itself’ could expect to receive government support without having to justify itself to any other section of society. This traditional disciplinary based knowledge has been dubbed ‘Mode 1’ by

Michael Gibbons and his co-authors of *The New Production of Knowledge* to distinguish it from the 'Mode 2' knowledge required by the 'Knowledge Society'.

'By contrast with traditional knowledge, which we will call Mode 1, generated within a disciplinary, *primarily cognitive*, context, Mode 2 knowledge is created in broader, transdisciplinary social and economic contexts'<sup>xlix</sup> (emphasis added). This represents what the authors see as an entirely new type of knowledge generation, one that does not necessarily displace disciplinary knowledge, but which is at the cutting edge and 'occurs most frequently in those areas which currently define the frontier and among those who are regarded as leaders in their various fields'<sup>l</sup>. Mode 2 can be associated specifically with our present economy and with the latest technology. 'Mode 2 is critically dependent upon the emerging computer and telecommunication technologies and will favour those who can afford them'<sup>li</sup>. 'The emergence of Mode 2, we believe, is profound and calls into question the adequacy of familiar knowledge producing institutions, whether universities, government research establishments, or corporate laboratories'<sup>lii18</sup>.

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<sup>18</sup> The novelty of 'Mode 2' knowledge production can be challenged. For instance Frank Whittle who invented the British version of the jet engine, was an officer in the Air Force, and was seconded by the Air Ministry to Cambridge in the 1930s. He was supported by the commercial firm Armstrong Siddeley and by a firm of investment bankers whose senior partner, L L Whyte was 'a scientist, philosopher and banker – a most unusual combination' (Whittle F 1957 *Jet* London, Pan Books. p46). Whittle attended the British Industries Fair in 1936 to seek industry support for developing a prototype of his engine, to be told that he was 'asking for a combustion intensity at least twenty times greater than had ever been achieved. I was therefore feeling rather discouraged by the time I visited the stand of a small Scottish firm, Laidlaw Drew and Company. When I explained our needs to Mr A B S Laidlaw (my Father) things looked more hopeful' (ibid 50). Whittle always battled for money in the early days – but later in the project was awarded £100 000 by the British government and a group of Cambridge's top engineering scholars were specially assigned to assist him. This would seem to represent an early example of 'mode 2' knowledge production at its best.

It is important to note here that Mode 2 research is understood here to stem *not from thought itself* but in response to specific ‘social and economic contexts’. The authors argue that this makes it ‘more socially accountable’. It is required to ask questions such as ‘will the solution if found be competitive in the market?’ ‘Will it be cost effective?’ ‘Will it be socially acceptable?’<sup>liii</sup>. But this explanation would seem to indicate a conflation between the economic and social motivation driving this knowledge production without any acknowledgement that the two may well be mutually exclusive. Where the market determines, neither ‘blue sky’ research nor the needs of the poor can in reality expect to get funding, so that any research for ‘economic purposes’ must entail that its use for social ones may be downplayed or neglected<sup>19</sup>. To the extent that its initiation is market-driven and not generated ‘cognitively’, in the way that Mode 1 is perceived to be, this tendency will be greatly reinforced. But the situation is more complex than it appears and Gibbons finds that:

Contrary to what one might expect, working in the context of application increases the sensitivity of scientists and technologists to the broader implications of what they are doing. Operating in Mode 2 makes all participants more reflexive. This is because the issue on which research is based *cannot be answered in scientific and technical terms alone* [emphasis added]. The research towards the resolution of these types of problem has to incorporate options for the implementation of the solutions and these are bound to touch the values and preferences of different individuals and groups that have been seen as traditionally outside of the scientific and technological system. They can now become active agents in the definition and solution of problems as well as in the evaluation of performance. This is expressed partly in terms of the need for greater social accountability, but it also means that the individuals themselves cannot

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<sup>19</sup> Good industrial and commercial research is of course always very much needed. The point is only that

function effectively without reflecting – trying to operate from the standpoint of – all the actors involved. The deepening of understanding that this brings, in turn has an effect on what is considered worthwhile doing, and, hence, on the structure of the research itself. Reflection of the values implied in human aspirations and projects has been a traditional concern of the humanities. As reflexivity within the research process spreads, the humanities too are experiencing an increase in demand for the sorts of knowledge they have to offer<sup>liv</sup>.

An interesting tension therefore arises. Even where the call for research is in response to market ‘needs’ divorced from ‘cognition’ – these research methods turn out to be socially involved and cannot, it seems, divorce the scientists and their collaborators from social and ethical awareness. In Mode 2 as described by Gibbons therefore the driving force that initiates research will seek profit before people, but the research methods themselves will be collaborative and humane.

This ambivalence and the problems it potentially creates become acute in the case of the teaching methods suggested and induced in our society. Gibbons’s discussion illustrates this clearly. On the one hand universities are forced, because of funding crises, to narrow their concerns to what is economically viable, to specialise and ‘to abandon most moral and cultural claims transcending the accumulation of intellectual and professional expertise’<sup>lv</sup>. Divisions between teaching and research functions grow. ‘Teaching and research may [even] occur in different places and be funded from separate sources’<sup>lvi</sup>. Lack of funds and massification (at least in richer western countries) make individual and small-group teaching methods difficult and computer-assisted learning seems necessarily to provide the answer. ‘It becomes increasingly difficult to sustain a coherent

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research for these ends will not necessarily, nor sufficiently, serve society.

undergraduate curriculum weakening even further the traditional concern of the universities to provide trained minds<sup>lvii</sup>.

The differing responses of economists and educators to the crisis in education is instructive. Economists will tend to analyse the whole education system (including the school system) in economic terms of simple outcomes and incentives<sup>lviii</sup> as a problem that can be both comprehended, and potentially solved, by linear analytic thinking. Orthodox economists in the teaching of their subject tend to see themselves as *training* their students rather than encouraging them towards radically innovative thought. For instance Don Ross as Professor of Economics at the University of Cape Town says ‘I am teaching my students not a set of facts but a complex and ... highly formalized *logic*, in which they must become *fluent*<sup>lix</sup>. His ‘most successful students [will] see any problem of human or animal behaviour in economic terms ‘at a glance’ – that is without needing time for extensive deliberation’<sup>lx</sup>. Ross would seem here to be intent on inculcating Castells’s ‘logic of the flows’ that control us beyond any social concerns. But educators suggest that the best way to teach in order to induce the innovative, transdisciplinary skills *required* for Mode 2 learning and research is just the reverse. Interactive, small-group learning in which students consider new issues in context and from their own perspective, facilitated by a teacher who is him or herself a researcher, and an expert in the field. No training in a particular ‘logic’ will provide the highly adaptive skills needed to meet the challenges of the modern workplace or the scientific ‘mode 2’ cognitive skills required in the boardrooms of industry and the consulting rooms of the professions.



#### ***4. Conclusion – An Educational Re-appropriation of Mode 2 Knowledge Production.***

Amongst all the ideals and beliefs of Liberal thought that have been modified, undermined or distorted in their meeting with the unconscious flows of (market) power the one that would seem to stand against the common stream is therefore Education. This is in no way an indication of its immunity from the flows or from the kinds of distortions they typically induce. The power of the market has clearly limited access, distorted provision, altered and reduced syllabuses, and narrowed and remolded the objectives and content of research in the various ways already noted. But all of these are peripheral to the nature of education itself. Whereas the ‘rule of law’ has, along with a debased ‘freedom’, found itself reduced to ‘deregulation’ and where society and culture become so confused with economics that ‘socioeconomic’ can become one word, education *as a concept* has not been similarly downgraded. Rather it seems to have found a new lease of life. Rejuvenated as the encouragement of conscious thought and human initiative in the ‘New Production of Knowledge’ this education demands that the restrictions of disciplinary knowledge be lifted, that students and researchers seek out knowledge together, collaborate in research initiatives, and institute dialogue across disciplines. They are encouraged to make use of the latest technology, draw on their own experience without reference to formal qualifications, and cooperate beyond national and cultural boundaries. Where old institutions of learning can help they will draw upon this expertise – where new or different ones are better these will be used instead. Where the things research teams do, hurt sensitivities and block progress on this account, researchers will bring in other researchers who know about those particular sensitivities and can find more appropriate ways forward. And if the need for what they are finding

out ceases to be important they will no longer go in search of it. But none of this sounds in the least like a linear, predetermined system and it is as far removed as possible from Castell's 'abstract, universal instrumentalism'. How come then that it is the learning, teaching and discovery method most in favour for the Knowledge Society?

The answer would seem to lie in the increasing realisation that a market economy can not operate in the long run without conscious thought. The cutting edge of competitive advantage will not be able to seek itself out through speculative flows alone. At some point human ingenuity has to kick in. And the highly original, highly desirable, cutting edge, quality goods and services the economy needs demand something better than a sleepy system of disciplinary knowledge to stimulate their discovery and bring them to fruition. Of course this has always been the case, particularly in periods of national emergency, as the story of the design and development of the Jet engine in the 1930s illustrates very clearly. The development of nuclear power would be another example. The greatest resource of the human animal, weak and frail of body and very mediocre in the realm of the natural senses, must reside ultimately in a highly tuned ability to use brain-power and to adopt cooperative strategies in order to get itself out of tight corners<sup>20</sup>. Collectively it will seek out and implement strategies that allow its preferred way of life to continue. In the twentieth century survival of a liberal democratic western way of life

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<sup>20</sup> The most recent research into the evolution of the human species indicates that the Neanderthal group – short, stocky, hairy and light-skinned – was physically well adapted to the colder European climate from which it emerged. But the intelligence of these hominids was very limited as indicated by the fact that their simple tool-making skills never developed over thousands of years. This line subsequently died out or perhaps persists through some marginal interbreeding with our direct ancestors who, the evidence now seems to suggest conclusively, came out of Africa and took over. Although this latter group was less well adapted physically to the harsher climes of Europe being long-limbed, smooth-skinned and dark-complexioned, they developed a whole range of tools of advancing complexity suggesting that superior use

induced support for the design of better ways to defeat totalitarian enemies and, later, of better ways to produce consumer goods.

Now the neo-liberal system on which the western world operates appears to require the discovery of new means to absorb surplus capital in order that economic growth can continue. The assumption is that the system itself is unchallengeable and sound and that its operation is within our control if only we could find the key. But the means of stimulating growth do not seem to work any longer – and the numbers of people able to participate in the system seems to have a natural tendency to diminish. The increased ‘efficiency’ that gives the competitive edge to a single firm entailing downsizing its workforce and eliminating its competitors, must in the larger picture, reduce the ability of the population as a whole to work and thus to buy. Increasingly only those things needed (or rather wanted) by the rich will be efficient and rational to produce – but there is a limit to what even the super-rich will ultimately buy. Thus the *need* would appear to be other than is currently understood, and not just the *means of meeting* that need. The nature of the problem itself clearly needs reassessment. So far only a need for more innovative thinkers *for* the current system is understood – hence the development of Mode 2 research and its corollary – Mode 2 teaching and learning. But this situation will be found to have thrown up, firstly, a bizarre search for outlets for capital, but in the longer term, something more interesting.

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of mental capacity gave them the critical advantage. (BBC World Service Documentary screened October 27<sup>th</sup> 2001). The significance of mental superiority to a species’ survival is discussed further in Chapter 4.

Gibbons argues that the search is currently very often for more innovative ways of putting things together rather than for original discovery itself ‘whether these be molecules, semiconductor chips, new alloys, software codes, movie scripts, pension portfolios or holiday packages’<sup>lx</sup>. These are all innocent enough but they clearly address ‘wants’ rather than ‘needs’ as is the case wherever the market determines. And it will also be found that ‘wants’ when they become *the needs of the economy* are not simply other than, but often opposed to, the needs of human beings. They include at present the (less innocent) design of drugs both to induce altered states of consciousness in the population at large, and to allow athletes to outperform nature at the risk of death and ignominy to themselves. They call up the output of more and more violent and explicit films and voyeuristic media phenomena like ‘Big Brother’<sup>21</sup> and worse equivalents elsewhere, in the relentless search for viewership numbers and advertising profits. But even a modicum of thought must increasingly question these outcomes.

Gibbons’s depiction of Mode 2 is, as we have seen, that it is the creature of the flows – defined from the outset as in contrast in this respect to the ‘cognition’ that initiates Mode 1. But if education is ultimately the enhancement and development of thought itself – it is entirely ‘other’ than the impersonal forces of the market. But the humanising elements within its *methodology* will not ultimately prevail against the inhuman forces that initiate it, unless these initiating forces can be checked. Mode 2 will, if left unchecked, drift towards producing Big Brother, and only if educationally and democratically monitored

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<sup>21</sup> Harry Shutt points to the maturing of established consumer product markets causing pressure on governments to relax restraints leading, for instance, to the abolition of legal restrictions on pornography in the USA in 1973 and to ‘more explicit depictions of violence ... including such critically acclaimed films as *The Godfather* (1972) (37)

will it be geared towards producing George Orwell (at its best) – but at the least (and quite acceptably) Winston Smith! This would seem to be the inherent conundrum that educators need to see resolved before they accept Mode 2 knowledge production wholeheartedly. Also Mode 1, as the solid (cognitive) foundation of education in the disciplines, is for educators in no way to be disregarded or superceded as market supporters of Mode 2 often suggest. Mode 1 is the ‘normal science’ without which educators cannot operate and education cannot be ‘other than’ these disciplinary foundations.

Educationally it is perhaps better therefore to see Mode 2 as the disciplines galvanised into action in periods of emergency through a more dynamic educational methodology than Mode 1 normally induces. In fact one of Mode 2’s most urgent current tasks would seem to be the conscious questioning of the inhuman flows that currently drive it – an *educational* task! This idea of Mode 2 as ‘pure education’, driving its mild and disciplined Liberal arts equivalent to greater heights, will however meet with severe contradictions. It will find firstly that the market forces that drive it at present cannot produce the kinds and numbers of people required, and nor can they contain the ideas they conjure up within the narrow confines of their own market understanding. Ruth Jonathan points out the nature of the first of these contradictions in the context of South Africa:

Inherited inequalities in schooling provision, structural socio-economic inequalities of a degree unparalleled in most other countries, consequent inequalities in the type of ‘cultural capital’ aligned with the higher education experience – all of these impact on personal aspiration,

resources and achievement, making a formally equal competition for democratically open access a hollow prize for the mass of the population. Addressing this situation is not only a moral requirement in the equal treatment of all citizens: it is also an economic imperative for the polity, for what are lost opportunities for individuals represent a large-scale waste of talent and resources for society<sup>bii</sup>.

The second major contradiction between the market and Mode 2 education is illustrated in South African education policy's response to the need to compete in the global economy. This produced a series of educational directives to be applied across the board. These 'Critical Cross-field Outcomes for the National Qualifications Framework (NQF)' require that all students in the education system can 'identify and solve problems using critical and creative thinking' – but this must allow for an active interest in solving the problems of society as easily as it will allow for greater competence in solving commercial problems. 'Working effectively with others' will equally lend support to a vibrant civil society and to 'flat management structures'. 'Communication skills' are as significant for an effective dialectic between student and teacher as they are in management training. An 'understanding the world as a set of related systems' can promote an awareness of systems thinking in ecological terms, as easily as it can allow an understanding of its relevance to corporate structures. To 'collect, analyse, organise and critically evaluate information' in short 'research skills' can be used to produce new knowledge in any field, and not simply to keep ahead of competitors. Finally the 'recognition of prior learning' accepted in principle in all recent government policy (although not included in the official list of 'critical outcomes') can imply recognition of

indigenous understandings as easily as the value of prior experience in workplace situations.

It would seem therefore that an inflated and stagnant global economy calling up these educational skills for its salvation, will have to accept in the long run an *educational* and not an *economic* solution – or else it will have to force this genie back into the bottle. Despite Gibbons's analysis of the central importance of Mode 2 by the early 1990s, most educators would, I believe, agree that nothing very like this approach to knowledge production is visible a decade later in the education actually practised in tertiary institutions. The genie is firmly 'stoppered' for the time being. The educational system cannot produce the range and numbers of innovative thinkers it aspires to, nor has it been given the space to rethink the assumptions within which it is still expected to operate, including those assumptions that prevent sufficient innovative thinkers from being produced in the first place. The problem appears to be circular and the circle, it seems, will need to be broken at the point of disciplinary knowledge itself. It is the role of educators to facilitate this break.

Gibbons explains 'transdisciplinarity' as a central aspect of Mode 2 knowledge production. If experts are to talk across disciplines to other experts in order to solve genuine problems, they will need to know the foundations upon which each other's expertise is based and (Gibbons would suggest) they will need to be able to transcend their own foundations. He explains that 'although elements of existing knowledge must have entered into it, genuine creativity is involved and the theoretical consensus once

attained cannot easily be reduced to disciplinary parts<sup>lxiii</sup>. It must be admitted however that Gibbons and his colleagues are not forthcoming with any very clear examples of these entirely new transdisciplinary theories. And while Mode 2 proponents would lead us to believe that disciplinary expertise is no longer central to the most innovative thinking, this research has found – *pace* Gibbons – that those few who ‘dare to know’, who are prepared to push the theoretical boundaries into genuinely new dimensions, are in practice leading academics and practitioners from within the (Mode 1) disciplines themselves. These, as we shall find, are all agreed that disciplinary knowledge cannot be purely self-referential – that is they favour inter-disciplinary Mode 2 methods but for cognitive rather than economic reasons. They are at present only a handful of voices. It is therefore perhaps not so much that new sets of concepts are needed to transcend the disciplines – but rather that the disciplines must be prepared to re-examine their current concepts by Mode 2 methods. This, in order to be in a position to adapt them, to defend them to outsiders, or to re-formulate them if need be on a more appropriate and rational basis. This would establish the starting-point of practical agreement necessary to enable that co-operation across disciplines required.

There are various significant barriers that would seem to stand in the way of this kind of inter-disciplinary co-operation happening at present however. The increasing complexity and technicality of contemporary disciplinary knowledge appears to exclude outsiders ever more effectively. Specialisms within specialisms will, for instance, prevent a micro-economist from feeling competent to broach a topic within macro-economics. Holistic knowledge and interdisciplinary understanding, feedback systems and broad contextual



sensitivity (Mode 2 approaches) would on this account seem to be becoming less and less able to influence knowledge rather than being on the point of a break-through. How can knowledge be understood holistically when even the parts, let alone the whole, of a *single discipline* are currently understood to be beyond the comprehension of more than one individual? However the problem is not nearly as intransigent as it would at first appear. A discipline's methodology – its assumptions of thought – are never as inaccessible to outsiders as is the superstructure of detailed knowledge that builds on that foundation. 'Why did you choose this method?' and 'on what assumptions are you working?' are legitimate questions that can be posed by any intelligent outsider and should be answerable by any disciplinary expert. Since choice of method must logically precede the application of method, this choice can never be based on its own esoteric technicalities, which may indeed be hard for an outsider to grasp, but which will only develop later as a result of the foundations chosen.

The current problem is partly that disciplines have very much less reason to think about their methodology *unless* outsiders require them to explain and defend it. Only the most brilliant and daring of thinkers will be found to take this radical step 'against the grain'. Too often, and in critical disciplines, as we shall see, theory has, because of this, become sedimented and simply accepted as 'the truth'. The isolation of disciplines from one another allows not only that (while they must remain its *final* arbiters) the experts in particular fields have increasingly become their discipline's *only* arbiters.

As Linda Chisholm says, educators cannot hope to change society. However as

‘facilitators’ of knowledge production they can and should act as the catalysts that demand from the disciplines that they examine their own foundations of thought in ways that will permit co-operation. Mode 2 approaches to education would in fact seek to make this challenge an everyday practice – a kind of benign ‘permanent revolution’ able to intervene to prevent the kinds of political revolutions that result from sedimented knowledge remaining unchallenged and developing into entrenched ideology. The cynicism that currently attaches to the predictions of economists, for instance, is likely to ensure that this kind of knowledge will finally face the firing squad if not more benignly and timeously adapted.

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<sup>i</sup> *The Fontana Dictionary of Modern Thought* 1988. Second Edition (London: Fontana Press)

<sup>ii</sup> *ibid.*

<sup>iii</sup> Fukuyama, F *The End of History and the Last Man* (London: Hamish Hamilton)

<sup>iv</sup> Wallerstein, I 1995 *After Liberalism* (New York: The New Press) Introduction.

<sup>v</sup> Televised interviews during the 2001 British Election campaign

<sup>vi</sup> Castells, M 1996 *The Rise of the Network Society* (Oxford: Blackwell)

<sup>vii</sup> Gibbons, M et al 1994 *The New Production of Knowledge* (Stockholm: Sage Publications)

<sup>viii</sup> *The Oxford Reference Dictionary* 1986 (Oxford: Clarendon Press)

<sup>ix</sup> Castells 1996 p500

<sup>x</sup> Gibbons M et al 1999 *The New Production of Knowledge* (Stockholm: Sage) p57

<sup>xi</sup> *ibid*

<sup>xii</sup> *ibid* p48

<sup>xiii</sup> *ibid*

<sup>xiv</sup> *ibid* p57. The reference in Gibbons’s text to ‘Drucker (1993)’ as the source of this insertion is not further elaborated.

<sup>xv</sup> *ibid* p57

<sup>xvi</sup> *ibid*

<sup>xvii</sup> *ibid* p57-8

<sup>xviii</sup> *ibid.* p503

<sup>xix</sup> Giddens A 1998 *The Third Way* (Oxford: Polity Press) p149

<sup>xx</sup> Korten D ‘International Assistance: A Problem Posing as a Solution’. *People Centred Development* Workshop Reader January 1992, Durban p3

<sup>xxi</sup> Gould S 1990 ‘The Individual in Darwin’s World’ The Second Edinburgh Medal Address p23

<sup>xxii</sup> Research into the links between poverty and crime is currently being conducted at the University of Natal’s Centre for Social and Development Studies (CSDS)

<sup>xxiii</sup> Castells, M 1998 *End of Millennium* (Oxford: Blackwell) p386

<sup>xxiv</sup> *ibid* p388

<sup>xxv</sup> *ibid* p386

<sup>xxvi</sup> Castells *The Rise of the Network Society* p508

<sup>xxvii</sup> Toulmin S *Cosmopolis* 1990 (Chicago: The University of Chicago Press) p55

<sup>xxviii</sup> Rawls J *Political Liberalism* 1993 (New York: Columbia University Press) p434

<sup>xxix</sup> Aronson R 2002. Response to a question, University of Natal forum 18 April.

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- xxx Nozick R *The Nature of Rationality* 1993 (Princeton: Princeton University Press) pxiii
- xxxi *ibid* pi
- xxxii *ibid* pxiii
- xxxiii *ibid* p41
- xxxiv Rawls 1993 *Political Liberalism* (New York: Columbia University Press) pxviii
- xxxv Rawls 1993 p224-5
- xxxvi Appiah K A 1997 'Liberalism and the Plurality of Identity' in *Knowledge, Identity and Curriculum Transformation in Africa* (Ed. Cloete et al) (Cape Town: Maskew Miller Longman) p84-5
- xxxvii Rawls p186
- xxxviii Nozick R 1974 *Anarchy, State and Utopia* (Oxford: Blackwell)
- xxxix Shutt H *The Trouble with Capitalism: An Enquiry into the Causes of Global Economic Failure* (London: Zed Books) p6
- xl *ibid* p6-7
- xli *ibid* p8
- xlii *ibid*
- xliii Boshoff A and Carstens A. Paper presented at the Southern African Academic Accountants' KZN Regional Conference. June 2001.
- xliv Saul J R *The Unconscious Civilisation* 1997 (London: Penguin Books) p76
- xlvi *ibid* p77
- xlvi Toulmin p199-200
- xlvi Rawls p4
- xlvi Donald J 1992 *Sentimental Education* (London: Verso) p4
- xlvi Gibbons p1
- l *ibid*
- li *ibid* p10
- lii *ibid*
- liii *ibid* p8
- liv *ibid* p7
- lv *ibid* p72
- lvi *ibid* p79
- lvii *ibid* p78
- lviii For example, Feßderke J W 1999 'From Uneducating to Educating South Africa: Some Thoughts on New Policy Imperatives in Education in South Africa' Paper presented at Kenton Education Conference, Salt Rock, KZN
- lix Ross D 2000 'Learning, Cognition and Ideology' The Richard Turner Memorial Lecture, University of Natal. P18
- lx *ibid*
- lxi Gibbons p62
- lxii Jonathan R 2001 'Democratisation, modernisation and equity: confronting the apartheid legacy in South African higher education' Paper presented at the Globalisation and Higher Education Conference, Cape Town. P2
- lxiii *ibid* p5

## CHAPTER 4

### A Mode 2 Critique of Contemporary Biology and Economics

*This chapter suggests that the common acceptance of the determinist logic of neo-Darwinism by contemporary biology and contemporary economics limits the conception of human consciousness available to western society at both the individual and the collective level. It also suggests that an alternative understanding of the significance of consciousness within evolution (and of education understood in evolutionary terms) is available in the neglected work of the South African scholar Eugene Marais.*

#### **1. Introduction**

This chapter and the following one take up the ‘Mode 2’ educational challenge on its own terms as a problem-solving, transdisciplinary tool. The assumptions of currently significant disciplines: ‘Washington consensus’ economics (as the driving force of power and politics) contemporary genetics (as the driving force of current self-understandings that are compatible with economics) and analytic and post-analytic philosophy (as supporter of the determinist assumptions of both), are explored and set in historical perspective. They are charged with an apparent incapacity to solve pressing current social problems – problems that they would indeed appear to have helped to create in the first place and to sustain as ideologies. From this educational opening only economists, biologists and philosophers themselves can of course take their own disciplines forward – but from a challenged and broadened basis of assumptions, and one able to draw upon such additional expertise as may seem appropriate.

The origins of the present ‘sedimentation’ of knowledge in these significant disciplines requires some initial consideration.

*Context.* The twentieth century was an age when science was the undisputed master discipline. During its first quarter the cosmic theory of relativity and the subatomic theory of quantum mechanics (involving Werner Heisenberg’s, ‘uncertainty principle’) ‘signaled an end to Laplace’s dream of a theory of science, a model of the universe that could be completely deterministic’<sup>1</sup>. But despite this fundamentally altered conception of reality being thrust upon it, it was the older, nineteenth century, linear, determinist, idea of ‘scientific method’ that continued to dominate. This ‘conceptual inertia’ was true not only of the lay public but amongst philosophers, social scientists and natural scientists themselves. Philosophy in its positivist incarnation pursued determinist ends relentlessly, and in its more modest linguistic pretensions analytic philosophy has adopted the same means. Social scientists, including most notably economists, tended, as we shall see, to see the nineteenth century scientific model as the ideal of knowledge that would give their disciplines legitimacy. Most oddly perhaps, the life sciences (biology and its successor subject genetics) as we shall also see, pursued analytic methods and determinist goals with particular vigour, to their great discomfiture in the unfolding of the human genome project. If the twentieth century was in historical terms a violent and irrational one, it was certainly an age of rationalism.

The basis for this rationalist conviction in its present form would appear to involve, in the first place, a simple confusion stemming from a certain ambiguity within the concept itself. Consciousness, as a rational faculty, allows us to intuit cause and effect. This involves both the ability to draw logical conclusions from given data, and the ability to make inferences from incomplete data. But the inference of regularities in nature and society that are *not found in our experience of nature or society* cannot be held to be 'rational'. And yet it is exactly this that we are given to understand constitutes a 'rational system'. 'Rationality' therefore encompasses both the *means of inference* as the mental process of inferring in a logical way and, by extension, has come to mean *the application of that inference as a general law*. (This in practice conflates the logical possibility of *deduction* with the very much less logical possibility of *induction*). The problem is perhaps compounded by a special case. Within mathematics and Newtonian physics, reason or rationality as the means of inference *can* be extended to apply to an indefinite number of concrete situations. Western thought since the seventeenth century has been so excited by the apparently universal applicability of this knowledge to specific applications (mostly industrial) that this might be seen as at least partially responsible for the irrational extension of this idea to other irregular or unknowable systems. No other primate would calculate that logically there *might or ought to be* food in a particular location and that therefore it would be appropriate to stay in that location permanently, inviting starvation. But such rational systems form the very fabric of neo-liberal orthodoxy as we shall discover.

Both Liberal theory and pragmatism are implicated in this confusion by failing to address it head on. The everyday use of ‘logical’ or ‘rational’ to intend ‘reasonable’ or ‘sensible’ is legitimised, for instance, in John Rawls’s idea of ‘justice as fairness’ and ‘rationality as reasonableness’. And pragmatism’s focus upon ‘coping with the world’ to the exclusion of formal theory, makes use of a similar fuzziness, thereby entrenching it. This imprecision clouds the variance it encompasses. We would need to adopt Joseph Margolis’s ‘robust’ version of relativism<sup>ii</sup> (of which more later) in order to encompass in a clear conceptual light, the bivalent and multivalent truth claims that logically encompass the variable truths of Pythagoras’s theorem, weather forecasting, and the reasons for the falling value of the rand. Only an acceptance of the ultimate relativity of truth to context would eliminate society’s ongoing search for regularities and the accompanying need to assume them – even in the teeth of the evidence – that presently bedevils theory, bringing us very close to the dilemmas faced by medieval scholasticism.

The respect for authority and the consequent need to reconcile discordant authorities can be seen as one of the main impulses behind medieval philosophy. But perhaps the main driving force was the perennial conflict between faith and reason ... Reason always presented an actual or potential threat to faith, yet at the same time reason had to be used to explain and defend faith<sup>iii</sup>.

A better description of the situation in current economics would be hard to come by. Scholasticism was eventually to be challenged by Francis Bacon for its refusal to look at the real world, and was dismissed by empiricists generally for its assumptions of unattainable transcendent truth. Our current faith is therefore the more extraordinary for its *simultaneous adherence to both empiricism and rationalism*. Indeed Richard Rorty (probably today’s most public philosopher and an increasing influence in the

philosophical world) is able to incorporate within a single body of thought, not only this dualism but also an adherence to *both sides of the argument between free will and determinism* that led to such violent clashes during the Reformation. And, as we shall see in the concluding chapter, his philosophy provides very strong grounding for the institutions and customs of the present – a fault he attributes to all previous philosophies

Two events of importance for global society, and both significant for this study, occurred in the second half of the twentieth century. In 1953 James Watson and Francis Crick isolated the double helix of the DNA molecule in Cambridge, materially increasing our knowledge of genetics and holding out the possibility of further significant developments in the fields of health and the life sciences. And in 1989 East European communism crumbled, leaving a general, if diffused, belief in the values of democracy and freedom apparently unchallenged in the now predominantly ‘western’ world<sup>1</sup>. In addition progress was rapid in communication technologies: the Internet promised to bring almost the whole range of human knowledge to anybody anywhere who chose to tap in to it. And, arising from work in the field of nuclear fusion, the prospect for virtually limitless and harmless energy looked hopeful, at least before current stocks of fossil fuels ran out. But in the event, linear approaches to the life sciences and to economics have, I shall argue, undermined or frustrated not only their own, but many of these other, possibilities. Those who stood to gain materially have proved adept at exploiting the situation in their own interests, and the judicious use of reason has been noticeable by its absence.

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<sup>1</sup> ‘In 1974 scarcely 30 per cent of the existing states could qualify as democracies; today these comprise more than 60 percent’ (C Offe ‘Democracy and Trust’ *Theoria* 96 December 2000)



*Popular Darwinism.* The links between the ‘survival of the fittest’ doctrine in economics and in biology involved the two principal theorists responsible for their initiation from the outset. Darwin is known to have been familiar with the theories of Adam Smith and to have been influenced by them<sup>iv</sup>. The particular significance of these theories for this thesis rests however in the determinist nature of both theories and their consequent mutual bypassing of the significance of human agency. Classical economic theory sees society as ideally operating in accordance with an ‘invisible hand’ of ‘market indicators’, while biological determinism sees the *individual* as ultimately determined by evolution and more specifically, since the discovery of DNA, by genetic codes. Thus significant aspects of a new Darwinism have come to dominate our self-understanding at both the macro and the micro levels as ‘biology ...becomes our dominant science and Darwinism our master narrative’<sup>v</sup>.

If science in the form of the known facts of DNA and of neurology is able to determine in great detail our individual capacities – and economics (although this seems a lot less plausible) is able to do the same for the global economy, then the idea of independent agency would appear to have a very much weakened basis on which to stand. This would suggest that the ‘critical consciousness’ and independent problem-solving capacity of Mode 2 is really something of a sham. More important now we imagine would be the search for the codes that will allow us to control life and society more scientifically and rationally than we have been able to up to this point. But several scientists, and these at

the apex of the scientific community itself, are sounding a warning that this search is almost certainly misguided.

## **2. *Biological determinism***

### *2.1 Popular Darwinism*

Steven Jay Gould, Harvard Professor of Geology and former President of the American Association for the Advancement of Science, is one who dispels many of the misunderstandings of current popular belief in Darwin's theories – particularly concerning progression and inevitability. Gould tells us that towards the end of his life, Darwin himself wrote to a colleague that 'after long reflection I can not avoid the conclusion that no inherent tendency to progressive development exists'<sup>vi</sup>. Gould also doubts that the increasing complexity of organisms is a *necessary* tendency. Although complex organisms have progressed from simpler forms – evolution occurs! – the vast majority of organisms have remained as single cells: 'the most common organism on earth remains a simple prokaryotic cell, a bacterial level of organisation'<sup>vii</sup>. Evolution is therefore not predetermined and certainly is not directed towards human kind. It is best defined as 'differential reproductive success of some organisms over others'<sup>viii</sup>.

Richard Lewontin, leading geneticist and Research Professor at Harvard, explains further that, like other theorists, Darwin experimented with ideas as he went along so that 'successive editions of *The Origin [of Species]* contain important changes'. Darwin 'seriously flirted at one point with [the idea of] inheritance of acquired characteristics' but this would have been 'a notion logically fatal to his entire enterprise'<sup>ix</sup>. You can

either have random spontaneous mutation that happens to confer some benefit upon an organism allowing that individual to survive better in its environment and, having survived, to reproduce longer and more prolifically. Or else you can suggest that an organism will be affected by numerous external factors (in addition to those it has inherited) and that these will not only materially affect its nature and abilities during its lifespan but that they may also be transmitted to its progeny. But this second idea involves aspects that are not genetically determined and you have in it a different and incompatible theory. Darwin decided to stick with the former. Consensus therefore came to reign ‘that variation among organisms arises from causes that are internal to the organisms and whose nature is independent of the demands of the external world’<sup>x</sup>. And ‘this alienation of internal from external forces is the origin of modern analytic biology’<sup>xi2</sup>. Most importantly for our purposes, this is a mechanistic theory that assumes that inherited characteristics (be these inferior or superior) are immutable. It allows us to see ourselves as the objects of a discoverable science. The theory can tell us nothing about human consciousness, but it has a tendency to make its adherents assume a diminished role for consciousness.

There are therefore two separate issues that concern us here – one has to do with contextualisation and the other with consciousness. A determinist view of the nature of life denies the significance of context *and* it suggests that consciousness itself can be conflated with physiology – and, we should keep in mind, if we are eventually discoverable then we cannot be ultimately responsible. The alternative view insists on the

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<sup>2</sup> The most comprehensive biological theory of inter-dependence and feedback systems is the Gaia Theory. Perhaps significantly this has had to remain entirely privately funded, since its implications appear to have

crucial interdependency of life forms with one another and with their environment, but it also allows for the acquiring and developing of individual competencies as a result of this interdependency. Philosophically this view has therefore to conceive an immaterial and holistic ontology that is compatible with inter-relationship, and its epistemology must also be compatible with this. It will entail that we know 'relationally' rather than analytically, and this is what both Albert Einstein and Jacques Derrida (incongruous as the two may seem) would also tell us. To add an equally improbable third to this group of non-material thinkers – Chomsky reminds us that Isaac Newton in isolating the force of gravity in effect validated the ghost rather than the machine!<sup>3</sup> And then if we are looking for more endorsement of this kind of philosophy from science itself, we only have to consider that the discoveries of quantum physics demand a holistic rather than an analytic ontology. One could add 'fuzzy maths' and chaos theory for an endorsement of the significance of unpredictability, feedback and interdependency. In the discussion that follows we must therefore keep both context (involving interdependence) and consciousness (involving the intuition of interdependence) in mind and it will be difficult to isolate the one entirely from the other.

## *2.2 The Human Genome Project as denial of context and denial of consciousness.*

The fascination with ourselves as objects of science, rather than as moral and rational agents, was given an unfortunate boost with the isolation of the DNA molecule in 1953.

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no direct benefits for biotechnology or other industrial or commercial purposes.

<sup>3</sup> 'A Matter of Mind over Body' *Mail and Guardian* interview with Noam Chomsky August 11 – 17 2000. This interview touches upon Chomsky's own concerns over determinist interpretations of consciousness and their negative influence upon education within the academy. The article indicates that Chomsky and his supporting 'MIT mentalists' are very much in the minority. Chomsky's own theories do not entirely escape determinism however, as Margolis points out in an unpublished paper 'Materialism by Less than Adequate Means'.

Brilliant as this discovery was, its significance was quickly misinterpreted. The unvarnished story, and the elaborated one of popular and journalistic imagination, are explained by Richard Lewontin in the following way. '[DNA] bears information that is read by the cell machinery in the productive process ...[It] is not self-reproducing, it makes nothing and organisms are not determined by it'<sup>xii</sup>. It is quite inert and has nothing to do with consciousness, as the capacity to reason. But 'subtly, DNA as information bearer is transmogrified successively into DNA as blueprint, as plan, as master plan, as master molecule'<sup>xiii</sup>. That is, DNA has come to be widely understood as what controls us and determines our abilities, our characters and our weaknesses. The illegitimate move here is in understanding a biological mechanism of hereditary coding as undifferentiated from the (as yet unexplored and therefore scientifically unquantifiable) human *capacity* for thought, experience and response. While genetics tells us a lot about those characteristics that we *do* inherit, it cannot claim to have any bearing on the ones that we do not, including our spontaneous thoughts. This involves a classic case of the marginalisation of agency, and the unfortunate effect of understanding mechanism as mind can be that superior genes (the successor of superior 'blood') are reinstated, reinforcing 'biological determinism as an explanation of all social and individual variation.'<sup>xiv</sup>.

The brilliance of recent scientific discoveries involving the mechanics of genetics and of neurology are in no way to be discredited of course. And in fact some of the groundbreaking work in neurology, as a spin-off from its principal findings, argues *against* determinism and *for* an independent consciousness – even in rats – although

exactly *how* they think remains obscure. A (1999) experiment, for instance, allowed rats to operate a mechanism giving them access to water by means of their thinking power alone. The complexity of their thought processes required that thirty-seven electrodes be wired to their brains, and

The nerve cells started firing off electrical signals well before an animal began to move. The delay involved was more than just the time it took for the signal to travel from the animal's brain to its paw. That implied that [we] had found some sign that the rat was thinking about the task before performing it<sup>xv</sup>.

And some of them thought more slowly than others – a fact that will endear them to teachers of mixed-ability classes!

The confusion here clearly lies in giving credit to genes and neurons, rather than to mice and men. And if we were to argue the other way around we would find that mice and men only have one percent difference in their gene counts, and a lot of people proud of their superior genes, might have some problem with that! In reality, 'a living organism at any moment in its life is the unique consequence of a developmental history that results from the interaction of and determination by [both] internal and external forces'<sup>xvi</sup>. This fuller understanding was to be vindicated, but not at all triumphantly, when the findings of the human genome project turned out to be such a damp squib in February 2001.

Richard Strohman, of the Department of Molecular and Cell Biology at UC Berkley and formerly Director of the Health and Medical Services Programme responded to the

findings of the Human Genome Project in a paper entitled ‘Human Genome Project in Crisis: Where is the Program for Life?’<sup>xvii</sup>. He was not so concerned at the finding that the human gene-count (30,000 of which only 300 are peculiar to humans and not also to be found in mice) was very much less than most people had expected, or by the finding that very few single genes cause diseases in a direct linear way – only about two percent. Both of these were broadly understood already by specialists like himself working in this field. Indeed it was already known that where you *can* link a disease to one particular gene there is nothing much you can do about it – precisely because ‘when one irreplaceable gene goes down and there is no back up ... it is impossible to fix. The cell had no answer and neither, so far, does medical, gene-base science’<sup>xviii</sup>. And yet it was this possibility of simple linear causality that had driven the project from the start and that had all the big pharmaceutical companies so interested in it.

Strohman’s principal concern was however that the scientific community has subsequently failed to acknowledge that the paradigm of genetic determinism with which they continue to work has proved itself to be fundamentally flawed. He suggests that ‘to produce a complete failure of an original theory, or of a scientific revolution is rare, but [in this instance] it has happened.’<sup>xix</sup>. Steven J Gould concurs: ‘The collapse of the one gene for one protein, and one direction for causal flow from basic codes to elaborate totality, marks the failure of (genetic) reductionism for the complex system we call cell biology’<sup>xx</sup>. Craig Venter, President of the US Corporate team working on the project admitted that the findings ‘tell me genes can’t possibly explain all of what makes us what we are’. And yet he and other team leaders went on to promise that ‘they would develop

new technologies to describe *complex diseases and behaviors in terms of causal genes*<sup>4xxi</sup> (emphasis added). The problem here links back interestingly to economics. It is seen by Strohman as in large measure that ‘the corporate world of biotechnology has investments of billions of dollars in the pipeline so that the withdrawal of the determinist position is extremely difficult’<sup>xxii</sup>.

This could be seen as a vivid example of the influence of Castell’s and Gibbons ‘flows’ of market power determining knowledge production in Mode 2 research projects with unfortunate unintended consequences. It strongly suggests that blind forces cannot be relied upon to be socially or cognitively sensitive. And where the academy becomes embroiled in this it finds itself in a particularly invidious position. Educators would insist in these circumstances that students are given the chance to examine *both* the current thinking *and* the new alternatives that challenge it.

A related and potentially tragic side-effect of human genome research was that it took the money and the focus away from an earlier international ‘supercollider’ project<sup>xxiii</sup> whose potential spin-off was the unlocking of the secrets of a limitless and harmless source of energy from nuclear fusion. Lewontin points out that this switch might be read as an indication of our fascination with ourselves as objects of science outweighing our interest in the inert nature of subatomic particles. It is all the more ironic then that we mistook an inert substance for the source of life, when our quality of life might have been so much

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<sup>4</sup> It is interesting that earlier in the human genome project its top scientists were on record as being fully aware of the limitations of their project. Both Lee Silverton of Princeton and John Sulston of the Stanger Centre in Cambridge pointed out that the ‘bigger mysteries’ concerning consciousness would not be addressed by this project. (‘Inside Science’ *Mail and Guardian* May 7 – 13 1999).



enhanced by following the other track. Whether ‘Big Oil’ had anything to do with Congress’s decision to switch the funding for these projects might warrant investigation – but it would hardly solve our problem.

Strohman believes therefore that

We have a failed or at least an incomplete scientific paradigm called genetic determinism. At the same time we have an alternative paradigm called epigenetic-dynamics, which is extremely interesting but also incomplete. But over the last fifty years we have allowed our research portfolio to become unbalanced, heavily favoring genetics and ignoring dynamics. So it will be difficult to change direction if for no other reason than that it will take a long time to train the next generation of *scientists who understand both the genetic-biological side of the problem and also understand the dynamics part which will come from a nexus of biology with physics, chemistry, engineering, and computational sciences*. And any change away from the genetic determinist view will also be resisted by corporate socio-economic forces that will need to push current HGP goals through the pipeline and bring to market whatever might emerge: a resistance that grows stronger as a result of corporate biotech-university alliances<sup>xxiv</sup> (emphasis added)

Strohman therefore urges the importance of an inter-disciplinary approach and concludes that ‘we need a new philosophy, or metaphor, or model for life. We thought the program was in the genes and now we see that it is in the cell as a whole and that the cell, through signalling pathways, is connected to larger wholes and to the external world’<sup>xxv</sup>.

This helps to provide an understanding of the significance of a contextualised and multi-disciplinary approach – but what of consciousness, of thought itself?

### 3. *Eugene Marais and the theory of 'causal memory'/ consciousness.*

Perhaps the most interesting work that links evolutionary theory directly to human consciousness as mental *capacity* and not as biological mechanism, was done at the beginning of the twentieth century by the South African natural scientist, Eugene Marais. Marais was an isolated and tragic figure – an Afrikaner who never forgave the British for the harm they inflicted upon his people during the Boer War. He was eventually to commit suicide – partly it is believed on account of his scientific findings for '*The Soul of the White Ant*' being plagiarized by Maurice Maeterlinck. But it is Marais's other great contribution to knowledge *The Soul of the Ape* that concerns this thesis.

In the same year that Albert Einstein published the Special Theory of Relativity (1905) and while Freud was working with his neurotic female patients in Vienna, Marais was living in the Waterberg, in what is now the Northern Province of South Africa, and studying at close quarters the lives of a troop of chacma baboons. Marais was the first scientist to 'conduct a prolonged study of one of man's primate relatives in a state of nature'<sup>xxvi</sup>. He emerged with what he described as 'an entirely new explanation of the so-called subconscious mind and its survival in man'. In this he was not only challenging Freud's ideas – as he later recognised himself ('I think that I can prove that Freud's entire conception is based on a fabric of fallacy')<sup>xxvii</sup> – but also those of scientists yet unborn, particularly believers in the human genome as the 'code of codes'.

Marais explains that every bodily modification is selected in evolutionary terms to react favourably under certain definite sets of natural conditions but this entails that the organism is limited, as far as the modification is concerned, to the set of natural conditions which selected it. When these change the species may become extinct, as has often happened. And 'no bodily specialization ever so surely confines an animal to a limited environment as the attendant instinct'<sup>xxviii</sup>. That is, an immovable mind-set is more fatal to survival than any inappropriate bodily adaptation. Marais gives several instances of this, but the one referred to by Darwin in the *Journal of Researches* will suffice. The Galapagos lizard is amphibious. Its principal predators (before the arrival of man) were all in water and an instinct therefore developed for it to react to any danger by making for land. When people arrived in its habitat it instinctively continued to attempt escape by going inland every time. Therefore, Marais suggests, 'would it not be conducive to preservation if ... a species could either suddenly change its habitat or meet any new natural conditions thrust upon it by means of immediate adaptation?'<sup>xxix</sup>. In short would not the development of conscious independent reasoning power put an animal in a position to take appropriate action on the instant or to modify its behaviour in direct response to circumstances – good or bad? He suggests that this was just what did happen, and that it was to prove the most valuable evolutionary adaptation ever developed. 'It is not conceivable that it could have been attained in any other way than through *a modification of the brain and its functions*. In other words the attributes selected had necessarily to be psychic'<sup>xxx</sup>. 'No generalizing perfection of hand or foot, nor the attainment of the upright position, nor the transformation of any function in any single organ could render a species immune from the danger inherent in suddenly

changing natural conditions'. Only *an ability to intuit cause and effect* and to react accordingly could do this<sup>5</sup>.

Marais (again like Dewey) is clear that it was not only human kind that gained this ability to be 'sapient'. In varying lesser degree all the other primates, and to a still more limited degree various other species as well, have developed this capacity. Marais observed that the development of this individual 'causal memory' is in inverse proportion to what he called 'phyletic memory' – or the psychic instinct also possessed by a species. He found that

'below the order of primates an animal can seldom acquire an individual causal memory of sufficient force to inhibit the action of an hereditary one. Where an instinct is replaced or modified in nature it is done ... by the evolution of a fresh hereditary memory through natural selection. It is only when we reach the order of primates that we find as a general process *non-hereditary* causal memories immediately replacing and modifying the action of hereditary memories'<sup>xxxi</sup>. <sup>6</sup>(Emphasis added)

Marais took his investigations into these parallel forms of consciousness further by experimenting with hypnosis upon some of his own people. Their extraordinarily

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<sup>5</sup> Interestingly, only a few years after Marais was writing *The Soul of the Ape* (believed to have been written about 1922) the philosopher John Dewey came to almost exactly the same conclusions about the evolution of mind. He believed that a 'problematic' situation based upon an initial biological "disturbance" comes into existence from "existential" causes, themselves precognitive. 'The mind in this situation becomes aware of itself' (Dewey, as discussed in Margolis, 2002). [I would suggest that the mind first becomes aware of cause and effect and only later of itself – and this probably only in humans, finding its most developed expression in philosophy]

<sup>6</sup> I believe that Marais's choice of the term 'memory' to describe both of the aspects of consciousness that he identifies can be misleading. Since the 'causal' stream is instantaneous and contextualised in distinction to the instinctual 'phyletic' stream, I choose rather to keep 'phyletic *memory*' but substitute 'causal *consciousness*' for Marais's 'causal memory'

enhanced sense of touch, sight, location and hearing under hypnosis suggested to him that the ‘phyletic memory’ in human beings is very largely suppressed by our highly advanced causal consciousness – but that it none the less exists. This, he suggests, is the true nature of our ‘subconscious’ mind. A moment’s reflection will probably confirm this as a more plausible explanation than Freud’s.

In order to understand where current interpretations of consciousness differ from this it is important to pause a little in order to consider the distinction between the two types of ‘memory’ identified by Marais.

Phyletic memories as the name implies are hereditary; causal memories [consciousness] are not.

The ability to accumulate individual causal memories is of course transmitted, but the work done, the accumulated memories themselves, are never inherited by progeny from parents<sup>xxxii</sup>.

This finding also has important implications for education, implications reaching well beyond our own species. ‘Education as the first industry of any [advanced] species, should the industry fail the species will become extinct ... Man may have the immense advantage of the oral or written word. But the process is the same.’<sup>xxxiii</sup>. Once the ability to think independently is available each generation needs to be given the tools and the practice to use this ability effectively by the preceding generation, precisely because instinct is no longer available in crucial life-preserving circumstances. The thinking animal is not on an ‘automatic pilot’ like the weaver bird is in the building of its nest. The primate’s back-up in phyletic memory is suppressed, but this disadvantage is greatly

outweighed by the flexibility of response available in each succeeding generation<sup>7</sup>. Marais does not venture an explanation as to exactly *how* valuable information on survival is transmitted to an animal's offspring, but he was able to demonstrate convincingly the vulnerability to environmental hazards of those chacma baboons who had not had the benefit of this 'education' from other troop members.

I would also suggest, that a further inherited capacity much neglected currently and equally mishandled by Freud, must be the capacity to feel a sense of guilt or conscience (Kant's 'moral law within'). This 'ethical memory' (or 'ethical consciousness') would have provided an additional finely-tuned tool of considerable value for communities of early humans struggling to survive in inhospitable conditions. As with the faculty of reason, a *capacity* to feel guilt and act morally would be inherited but it would only be useful if under the direct control of the individual members of the group, for use in response to immediate circumstances.

The strength of Marais's theory is, I suggest, that it is able to explain the parallel but *separate* nature of 'causal consciousness' from the 'phyletic memory'. It is in the conflation of the two that contemporary thinkers have apparently been led astray by Darwin and Freud with recent reinforcement from the 'science' of genetic determinism. Richard Rorty, provides us with a good example of this kind of thinking. 'Freudian moral

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<sup>7</sup> To those who see evolution as determining our abilities including our thought processes the notion of education becomes one of reinforcing already discovered knowledge and not of liberating consciousness. Richard Rorty for instance feels that schooling up to eighteen years should involve 'socialisation' into society's norms and 'if a teacher thinks that society is founded on a lie he should find another profession'. That is, teaching should be for dependence and not for independence, a position endorsed by current economic thinkers such as Don Ross and J W Fedderke in South Africa. (Rosenow, E 'Rorty's Conception of Education' *Journal of Philosophy of Education* 32.2)

psychology [overcomes] ... the romantic attempt to exalt ... a mythical faculty called 'will' over an equally mythical one called 'reason'<sup>xxxiv</sup>. He would therefore have us see **'[reason and intention] morality and prudence – not as products of distinct faculties but as alternative modes of adaptation'**<sup>xxxv</sup> (emphasis added). Here he (along with Freud) sees reason and ethics as adaptations, as, in their operation, instinctive and not under our conscious control, in exact contradiction to Marais's position<sup>8</sup>. Marais's alternative position is that we *should* see **reason and intention, morality and prudence – as products of distinct faculties and not as alternative modes of adaptation**. Therefore the Freudian/ Darwinian/ Rortyan approach justifies the current search for a rational code (psychologically, genetically or neurologically determined) that distracts us from the urgent need to have faith in our inherited *capacity* to deal with pressing practical and moral problems *on the instant and in context*. It is interesting to find that the very latest anthropological discoveries vindicate Marais's position in that the superior independent thinking power of our direct ancestors is strongly indicated as being the adaptation that gave them the edge over their more cognitively challenged Neanderthal cousins (as noted earlier).

This then would appear to be the fundamental nature of much current confusion over 'cognition'. The effect of twisting an evolved capacity for critical and ethical response to immediate circumstance (a remarkable adaptation that puts us in control of our world) into a mechanism which *controls us* and makes us mere spectators of the passing scene, clearly derives from an inappropriate philosophical understanding that all truth is

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<sup>8</sup> As a contemporary commentator says 'it is difficult to point to any of Freud's allegedly 'important discoveries' which has not escaped serious challenge ... Freud's view of human nature may in the end turn

predetermined. It also deprives us of our sensitivities in strange ways. For instance, it was reported recently that the anthropological studies of the renowned South African scientist Philip Tobias have led him to envisage the current polarisation between the rich and the poor as potentially causing their division into two different species – as has apparently happened in other cases<sup>xxxvi</sup>. The feelings of Tobias about this hypothesis were not recorded, but the report is totally devoid of any reaction such as ‘but surely we would never let it happen!’ Current wisdom would have us believe that ‘one cannot use science to refute an ethical stance, though one can use science to show that a particular ethical stance may be silly or impractical’<sup>xxxvii</sup>. The idea that the effort to help our fellow creatures (admirable or quaint as it may be) is in the event useless — if not thoroughly misguided, as in line with Hayek’s understanding about attempts to help the economically marginalised against the logic of the market. This is the classic argument about the impracticality of Marxism’s well-intentioned but ultimately misguided ethics. But it ignores that each doctrine is as ineffective as the other. Central planning cannot legislate ethically but neither can the ‘logic’ of the free market be allowed to supersede ethical considerations – only the thinking, ethically sensitive, individual in the immediate contingent circumstance can intuit the most appropriate course of action.

And this brings us back to economics.

#### ***4. Economic Determinism***

*Introduction.* The links between biological and economic ideas may not be immediately apparent unless one considers that faith in linear, reductionist systems able to explain

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out to be [no more than] an interesting and important mistake’ (Fontana Dictionary of Modern Thinkers).



human behaviour are a necessary assumption if a social science like economics is to promote itself as a natural science. The idea that human characteristics are determined or determinable is an important underlying assumption of neo-classical economics. This sets it aside quite markedly from other social sciences in the current age. Despite times (particularly in the 1950s, 1960s and early 1970s) when quantification was everything – the ‘case study’ and ‘ethnographic’ studies of the local and the particular have been increasingly seen as necessary for illuminating the nature of social reality in all of the human sciences *except* economics. ‘The prevalence of scientism in economics ... is in marked contrast to the epistemological humility and confusion of the other social disciplines’<sup>xxxviii</sup> as Ormerod pointed out some years ago in an article in the *Times Higher Educational Supplement*. As we shall discover, there were powerful ideological and political forces operating in the case of economics to keep it on this narrower, more deterministic path, and away from the more reasonable and modest one taken by its sister disciplines.

Common sense suggests that economics must be contextualised and open to feed-back situations and that it must be just as unpredictable and just as vulnerable to outside forces of innumerable kinds as any other human activity. It seems unlikely that the decisions that people make about their spending and saving and investing patterns, let alone their working lives, are pre-determined or determinable rather than inextricably linked to contingent circumstance and history. It is even more implausible that it will be possible to aggregate economic behaviour in order to derive facts from this aggregation, and then assume these to be applicable to *future* situations. Of course economists are fully aware

of contingent circumstances and their various models are designed to take these into account as far as possible. But the core understanding is, as we shall see, based upon determinist theory that ignores many of the kinds of predictability to which human beings *can* be subjected. It ignores, for instance, sensitivity to justice and community and an ability to take contingent circumstances intelligently into account – and opts rather for fear, greed and profit maximisation as the staple human predictors. Recent international research by Samuel Bowles confirms that altruism and justice are at least as significant as profit maximisation in human economic behaviour.

As a non-economist the assumptions and not the body of expertise built upon these assumptions are all that I am in a position to assess here. But, as with genetics, it is the assumptions and not the logical deductions derived from these, that I believe to be at the heart of the current problem<sup>9</sup>. And as citizens of a democratic state I believe that we all have a right to require that these be explained and defended since our welfare is so materially involved in the economic policies governments take on our behalf. This problem for democracy is compounded where neo-classical economics has come to be accepted by governments themselves, if not as the ‘truth’ at least as the only apparently workable current economic option. This has led to the paradoxical situation where governments accept a theory that specifically diminishes their own powers. ‘Small government’, ‘fiscal discipline’ and ‘tax cuts’ all sound so sensible to our ears that they are seldom seen from the democratic angle as a weakening of citizen power and diminishing of essential services of all kinds. This situation has even more serious

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<sup>9</sup> In the same way as the assumptions and not their logical deductions from them led astray the astronomers and philosophers of Medieval Europe.

implications for democracy in that it in effect entails that economics and politics switch roles – economists hold the power and governments are co-opted (not too unwillingly, it must be admitted) to do their bidding<sup>10</sup>. In this situation, as we have seen in the South African case, policy becomes the preserve of economics and the other social sciences have to forfeit their independent policy options however much their own ideas may be at odds with the prevailing economic ones. Unfortunately, should economic theory itself prove untenable and unequal to its extended political task the effects will, on this account, be more widespread than when biological determinism proved illusory with the conclusion of the Human Genome Project<sup>11</sup>.

#### *4.1 Classical economic theory in historical context.*

Rather than Charles Darwin being the inspiration for modern economics it was in fact the other way round – modern economics inspired Charles Darwin. Adam Smith's theory of natural selection in the *Wealth of Nations* (published in 1776) influenced Darwin in the development of his theory of natural selection and 'the survival of the fittest' expressed in *The Origin of Species* (published in 1859)<sup>xxxix</sup>. However, as Gould argues, it was perhaps Smith's original application of the theory that was the less appropriate:

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<sup>10</sup> This is explored in the context of Tony Blair's government by G Monbiot in his recent book (2000) *Captive State* (London: Pan Macmillan)

<sup>11</sup> Whether the dangers of economic collapse threatened by this situation at its worst will be seen in the long term as having been as threatening to human kind as the alteration of life systems made possible through inappropriate biological understanding is however an imponderable, but sobering, question. (The close links between biotechnology and current economic power are also explored in Monbiot's *Captive State*)

[F]rom my point of view it is a great irony of Adam Smith's system that it does not work in economics, and it cannot. We are moral agents, we cannot bear the incidental loss involved in letting laissez-faire work in an untrammelled way. There is too much death and destruction<sup>xl</sup>.

But in defence of the early economists, notably Adam Smith himself and David Ricardo, they did not see economics as divorced from the wider social and political world and both were concerned with the ethical implications of economic theory and policy. It is only now that 'in sharp contrast [to these early masters] modern economics views the economy as something which can be analysed in isolation ... The institutional setting, the historical experience, and the overall framework of behaviour are ruthlessly excluded'<sup>xli</sup>. The origins of this development have to be sought in nineteenth century attempts to systematise the discipline within calculable 'scientific' theory.

The mathematicisation of economics started with Leon Walrus in Lausanne and (independently) with William Stanley Jevons at Manchester University. Both men had been trained as physicists<sup>xlii</sup>. Their work

formalised a part of Adam Smith's work, and demonstrated more rigorously that under certain conditions the free-market system would lead to an allocation of a given set of resources which was in a very particular and restricted sense optimal from the point of view of every individual and company in the economy<sup>xliii</sup>

This eliminated Smith's original contextualisation of economics in real situations – and converted it into a clockwork conception of predictable behaviour. The work of later economists, notably Alfred Marshall, took this system of thought further particularly in

the direction of individual ‘marginal utility’. The idea was that each purchase would lead to diminishing satisfaction so that the price would be fixed at that marginal point exactly where the satisfaction balanced with a price, beyond which the buyer would not be prepared to buy. This does appear to be reasonable, although it is highly theoretical and clearly assumes an idealised situation. But the parallel idea that sellers experience ‘diminishing marginal returns to scale’ is much less plausible. ‘It was assumed to be logical that the additional amount that could be produced for any given increase in the inputs would diminish as the scale of production increased’<sup>xliv</sup>. There is absolutely no logical reason why this should be so, and it was spectacularly disproved soon after its conception by the obvious success of large enterprises particularly in America in the early years of the twentieth century – indicating the opposite reality of *economies of scale*. The theory of ‘marginal utility’ in fact assumes an infinite number of small firms, and it assumes a populace with perfect knowledge of the economy. For it to work in practice there would have to be no advantages or special power accruing to powerful firms, and the market for labour would work as all other markets, clearing at an ideal equilibrium of supply and demand – that is unemployment would not exist, or the tendency would always be for it to be eliminated.

John Maynard Keynes, who became famous in the early 1920s for his prophetic predictions concerning *The Economic Consequences of the Peace* argued that the characteristics assumed by this classic economic theory ‘happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience’<sup>xlv</sup>. Keynes himself was

often accused of inconsistency because of his refusal (as both a leading Liberal and a leading economist) to accept either orthodox Liberal politics or orthodox economic theory. As contexts shifted and new needs arose he deemed that new solutions were appropriate in each case. In both politics and economics he believed that ‘the supreme enemy was the use of power for unworthy or irrelevant or trivial motives, to frustrate an opportunity for improving the lot of man’<sup>xlvi</sup>. His economic theory was involved very largely with solving the (again painfully familiar) problem of unemployment and his suspicion of economic internationalisation (‘globalisation’) is apparent in the following extract from an article he wrote for the *New Statesman* in 1933.

I sympathise ... with those who would minimise rather than with those who would maximise, economic entanglement between nations. Ideas, knowledge, art, hospitality, travel – these are things which should of their nature be international. But let goods be homespun whenever it is reasonable and conveniently possible; and above all let finance be primarily national<sup>xlvii</sup>.

The influence of Keynes’s ideas in the early part of the twentieth century was significant, but ultimately it was not decisive. In the 1930s, the time of the Great Depression, Keynes hoped that his more realistic economic understandings would help to underpin liberal democratic institutions at a time when these were under severe threat. He was particularly concerned about the obvious failure of classical theory to account for the high levels of unemployment apparent everywhere at the time (except, it should be noted, in Stalin’s Russia). His suggestions for major government interventions in the form of controlled inflation, direct employment of people by government, and building of infrastructure – also bank guarantees of the money invested by small investors (not

guarantees of bank lendings as happens now) was heeded by President FD Roosevelt and his 'New Deal' bore many of the marks of Keynes's thinking. As a central planning exercise in the interests of stimulating a free democratic economy it was demonstrably successful.

Keynes theorisation during the 1930s of the economic policies he had advocated in the 1920s, fundamentally challenged orthodox monetary theories, but he had to conclude that the reviewers, including Freidrich von Hayek, who had recently come to London 'had not in the least understood what he had tried to say'. This frustration led him on occasion to compromise his ideas allowing them to be modified by more orthodox approaches in order to see them implemented – and this had the effect of limiting and neutralising their potential benefits up to, and including, our own day. An example of this was his willingness to compromise over the argument between himself and another Cambridge economist, A C Pigou, concerning 'effective demand'. It is worth considering this carefully if only because it has a direct bearing upon post-apartheid unemployment in South Africa.

Keynes argued that in periods of unemployment potential demand exceeds actual demand but, for the individual firm unilaterally to produce more will obviously be ineffective – people will not have the money to buy and the surplus production will remain unsold. Only if everyone simultaneously were to agree to increase output would a virtuous circle be created and the extra demand satisfied through the additional jobs and salaries involved. But this is clearly impossible to achieve in reality, unless the intervention of

government can start the process by instituting new investment and providing direct employment, for instance in the building of infrastructure. A certain amount of inflation is likely to result as a side effect, but this disadvantage is greatly outweighed by the benefits accruing to society as a whole. Pigou, on the other hand, suggested that in a period of depression and unemployment the assets held by an individual will rise in value and this will encourage that individual to spend the surplus value – thus creating spontaneous extra demand *in the long run* without the need for any government intervention. Not only does Pigou's analysis have no basis in empirical proof, but there is considerable counter-evidence to indicate a low marginal propensity to consume amongst the rich, that is, those with the appreciable assets on which he bases his theory<sup>xlviii</sup>. It also ignores the plight of debtors whose assets are at the same time reducing in value, which restricts their propensity to consume in (probably greater) proportion than the savers are encouraged to spend<sup>12</sup>. However Keynes appears to have been willing to concede Pigou's position at least as an alternative possibility despite his initial acerbic comment in relation any economic theory's indefinite time-span '*In the long run we are all dead*' – that is, in desperate situations you need to act.

There is an interesting codicil to this story. Decades later Pigou was identified as one of the Cambridge men who were in secret communication with communist Russia during the 1930s. The idea that he may, with Machiavellian cunning, have urged his free market theories to prevent the compromise of a mixed economy taking root and flourishing in the

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<sup>12</sup> It should be noted in passing that the extreme significance placed on a low inflation rate by orthodox economists (cf Tito Mboweni) has a clear ideological agenda in that investors stand to lose the most if money is paid back in even marginally devalued currency – whereas borrowers may suffer severely if values fall while inflation remains low



west, seems almost too clever. But if that were the case, his ideas could be seen as retaining a baleful influence as far into the future as the succeeding century and as far from their origin as the implementation of GEAR in South Africa in 1996.

Keynes died in 1946. His biographer puts down his final collapse partly to the stresses and disappointments involved in the initial setting up of the World Bank and International Monetary Fund for which he had been largely responsible. His vision for these was that their policies should be controlled by treasury officials from the governments of the various countries represented and not by bureaucrats (or politicians). He felt that this would encourage genuine internationalism in a conjoining of national with international economic vision such as he had experienced as working well during the Second World War. He also feared too great a dominance of the United States over the new bodies. The period following his death saw not only these fears justified, but the development of his theories into a doctrine of expansive fiscal policy and government intervention by later thinkers 'not all of whose ideas Keynes himself would have agreed with'<sup>xlix</sup>.

The period of the 1950s and 1960s saw unprecedented sustained growth as a result of the greatly increased demand for goods, especially consumer goods, in the post-war period – enhanced further by American money coming into Europe from the 'Marshall Plan', and the development of entirely new industries such as mass tourism. This period of expansion could not last indefinitely – demand was bound to slacken and growth to reach saturation point eventually – as it did by the late 1960s. Unfortunately the interventionist

(*neo-Keynsian*) economic policies followed by west European governments after the war allowed for the artificial boosting of demand in this situation by strategies such as giving support for increased lending by banks<sup>13</sup>. This is obviously quite different from Keynes's conception of direct support through government creation of jobs or investment in projects. The ideology that informs it is also narrower – involving support for business and financial institutions before consideration of the wider public good. Increased borrowing from banks ensures only that the ensuing recession will be the deeper since purchasing power is going to be further restricted by the need to repay the loans<sup>1</sup>.

This situation was exacerbated after the rapid rise in the oil price initiated by the OPEC countries in 1973, when these policies of fiscal expansion came to look increasingly ineffective – and ‘neo-Keynesianism’ was thereby discredited<sup>14</sup>. The reaction was for western governments to turn increasingly to the *laissez-faire* policies associated particularly with thinkers like Friedrich von Hayek<sup>15</sup>. The final collapse of the command economies of the Soviet empire entrenched this reaction<sup>li</sup> and the ‘pure’ orthodox theory of competitive equilibrium, that Keynes had described as ‘disastrous if we attempt to apply [it] to the facts of experience’ therefore exactly suited the ideological climate of the time.

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<sup>13</sup> It is interesting to note that Japan currently (November 2001) has an interest rate of zero.

<sup>14</sup> Paul Ormerod suggests that the good showing of Germany in the Oil Crisis is an example of social and political context being fruitfully brought into economic decision-making. Workers in Germany recognised that a real reduction in wealth had resulted and that a demand for higher wages in this situation could only lead to inflation. The German mechanism for consultation between labour and business worked well and ‘as a result of the specific reactions in Germany to the oil-price shock the German economy emerged on a much more favourable unemployment/ inflation path than most of the rest of Europe (136). This demonstrated a ‘triumph for the German concept of the social market’ (134).

<sup>15</sup> Of an early book of Hayek's (*Prices and Production*) Keynes wrote ‘the book, as it stands, seems to me to be one of the most frightful muddles I have ever read ...and yet it remains a book of some interest, which is likely to leave its mark on the mind of the reader. It is an extraordinary example of how, starting with a mistake, a remorseless logician can end up in Bedlam’ (Harrod, 1951, p435).

The deregulation of financial markets in the 1980s in the Anglo-Saxon economies; the deregulation of and increased flexibility in labour markets ... the privatisation of state-owned industries; reductions in welfare programmes – all these themes flow from the logic of competitive equilibrium<sup>lii</sup>

The philosophy, or methodology, that has underpinned the neo-liberal era thus initiated, requires some further analysis in order to tease out its apparently very paradoxical nature.

#### *4.2 Neo-liberal economics.*

Hayek, Nobel laureate in economics, denied that analysis of the economic situation can provide appropriate tools for prediction and thus for intervention. He believed that economists will never be able to know enough of the facts to make more than general estimations - and this only within microeconomics<sup>liii</sup>. He interprets Adam Smith's 'invisible hand' as an evolutionary, organic development in which a free-market economy will automatically produce the best and most effective society<sup>16</sup>. Therefore any interference in its workings is very dangerous - particularly any assistance to the marginalised<sup>liv</sup>. So keen was he to promote the idea of the 'survival of the fittest' that he argued that the natural proclivity of people toward altruism had to cease in order to make 'the great society possible'<sup>lv</sup>.

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<sup>16</sup> The strength of economic arguments which reject 'end states' as Hayek does, is that they see economics as a process involving a myriad of transactions which cannot be appropriately captured in blanket legislation. In this regard the analogy with the growth of common law (which is built up over time and which very much involves human agency) is as useful as the analogy of biological evolution (in which interference may indeed be dangerous) is inappropriate - and yet the same theorists will advance both arguments (e.g. Norman Barry, 1988).

The other principal economic authority associated with this dawn of neo-liberalism was Milton Friedman who believed that economics ‘is, or can be an ‘objective’ science in exactly the same way as any of the physical sciences’<sup>lvi</sup> – the significance of an objective science being that you can predict and therefore control outcomes very precisely through appropriate intervention. This understanding, on the face of it, would seem to be in exact contradiction to Hayek’s. And yet both theories have been able to exist *together* throughout the neo-liberal era in a remarkable way. But this is less surprising than it at first appears. ‘The general approach in economics has assumed linearity as the norm, and the core model of economic theory, that of competitive equilibrium, still relies, for all its apparent mathematical sophistication, on the simple linear aggregation of individuals’ behaviour’<sup>lvii</sup>. Linear systems divorced from the world may just as well be seen to be under the direction of an ‘invisible hand’ as under any other inscrutably ‘rational’ system. This combination of rational systems shading off into Darwinian determinism closely mirrors the shading of Robert Nozick’s rationalism into Richard Rorty’s postmodern pragmatism explored below. It is therefore interesting to note that a third theoretical strand can also be identified in economics. This is represented by Donald McCloskey, who sees economists as involved in the art of persuasion rather than truth gathering, even in the apparently factual fields of econometrics and statistical quantification. His pragmatic approach makes him equally as accepting of neo-classical economics as of any other type – and he himself works within that paradigm<sup>lviii</sup>. It might almost have been predicted that McCloskey sees himself as ‘especially fortunate’ in having been directed towards pragmatism by Richard Rorty!<sup>lix</sup>

*Untenable justifications.* One of the principal reasons for the attachment felt by nearly everybody, economist or lay person, to this apparently illogical and unethical set of ideas (apart from the good things automatically associated with 'freedom') has undoubtedly been the unexamined conviction that the only alternative to it must be communism, and that that would be worse. And yet it is the similarities and not the divergences between these two systems that are the most striking if only they are examined more closely.

No leaders were in fact more firmly convinced that 'the economy determines in the last instance' than were Ronald Reagan (or those who ran the country on his behalf<sup>17</sup>) and Margaret Thatcher. And, while strongly defending a capitalist economic dispensation, Don Ross at the University of Cape Town is clear that he sees the underlying logic of capitalist and Soviet Marxist economic thought as essentially the same. 'The capitalist and the Soviet Marxist can ... be interpreted as arguing over the conditions under which material productivity growth will be highest' but they are fully agreed about materialism, and the predictability of human motivation. The only real difference lies in their estimation of the long-term viability of the system. 'The Soviet Marxist believes that, beyond a certain point, the capitalist's incentive structures get in the way of growth by generating inefficient concentrations of investment capital; the capitalist retorts that the Soviet Marxist severely underestimates the dynamic significance of technological change in preventing liquidity pools from clogging'<sup>18</sup>. Anybody observant of the recent global recession would be very hard pressed indeed to defend the capitalist position here. But

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<sup>17</sup> The inability of Reagan to take credit for decisions beyond a purely public relations role is explored in a book entitled *Reagan's Rule of Error*. A comparable, if slightly less extreme, situation could be argued to pertain today under the rule of George W Bush. The Republican Party as the political arm of Corporate America clearly ruled/ rules in each instance.

the point is rather that *neither* capitalist nor Marxist is able to see government's role as involved in the regulation and support of free people rather than in support of putatively rational economic systems (whether capitalist or commandist). The need to bring back responsible involvement in grass-roots reality, involving respect for the complexities of societies, and sensitivity to the real needs of electorates, is as far away from the one as it is from the other.

As Ormerod says 'the theoretical model of competitive equilibrium is a formidable intellectual construct' but the increasing failure of economists to predict economic events or to suggest remedies for economic failure suggests that the dawning of reality cannot be far away. In the mean time 'an internal culture has developed within academic economics which positively extols esoteric irrelevance'<sup>lxi</sup>. A similar situation arose in the Middle ages 'when the belief that the sun revolved around the earth led to astronomical models of great complexity as scholars struggled to account for ever more discrepancies between the observed paths of the heavenly bodies and those required by the theory'<sup>lxii</sup>.

In defending an intractable theory it is usually prudent that you do not look too closely at its logic and there is currently a noticeable unwillingness amongst economists to examine their underlying assumptions. 'Explicit methodology analysis and commentary are widely frowned upon in contemporary economics'<sup>lxiii</sup> and very little research funding is currently requested in South Africa by economists<sup>lxiv</sup>. There is also little emphasis placed by them on their discipline's past history and current context. Where Economic History departments are merging with Economics departments it is (perhaps ironically) because

of 'rationalisation', and not for academic reasons, and commerce students still very rarely learn economic history as an integral part of their commerce curriculum.

Governments tend to argue that they are expending all their energies in 'getting the economic fundamentals in place' before they can attend to pressing social problems. But a mechanistic market system will automatically select the needs of the diminishing number of the increasingly rich over the increasing numbers of the chronically poor, it will select machines over men and women, and saving over spending. Supply and demand mechanisms cannot deal with potential demand but only with actual demand as Keynes recognised in the 1930s, and actual demand is getting weaker by the day. At what point the 'fundamentals' will be judged to be 'in place' is not clear<sup>18</sup>.

In truth the depressed state of the real economies of countries since the end of the post-war boom has meant that government expenditure on welfare has had to be maintained and even increased despite the current ideological arguments against it. For third world countries starting from a negative resource base this of course has not been an option. The problem is made worse in that, at the same time, governments have universally accepted the responsibility to become 'lenders of last resort' to financial institutions that get themselves into difficulties. This artificial cushioning of business is understood as being essential to prevent the system from collapsing. But in reality one cannot indefinitely bale out both business and the poor, and the myth that national governments

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<sup>18</sup> Tony Blair is on recent record as saying that he does not intend to spend the rest of his life in politics. Given the logical difficulty in meeting his predictions this may be a wise decision.

cannot go bankrupt may ultimately be severely tested. Western governments are attempting to shore up a system by means that look increasingly unsustainable.

At the global level the genuine deregulation of financial markets gives governments – even the United States – very little room to manoeuvre. Here conscious thought is expended purely in the speculative games of the players:

In neoliberal orthodoxy, giving global markets free rein is logical because like all markets they are problem-solving devices and tend towards equilibrium. A more convincing account of the dynamics of world markets, however, suggests that expectations of price changes rather than prices as such drive decisions, and expectations are routinely swayed by psychological rather than economic phenomena<sup>lxv</sup>.

The clumsy and inadequate attempts to influence the directions of these speculations on the part of major national players – the G7 or G8 nations, the American Treasury (Alan Greenspan), and the supra-national financial bodies (the IMF and World Bank) were destined to become increasingly inadequate since international exchange controls were deliberately dropped between 1974 and 1987. As Richard Roberts says (*Inside International Finance*<sup>lxvi</sup>) this is not a new ‘system’ if by system you mean something deliberately planned for a purpose. You are not entitled when one of your wheels falls off to call the resulting vehicle a tricycle.

Overall the continued application of an unworkable theory can only be explained in terms of blind faith, or despair in the light of nothing better being apparently available. Of



course economic orthodoxy has allowed quite a large ruling elite to do exceptionally well, at least in the short term. However, since the Enlightenment the way to neutralise this perennial tendency for the rich and powerful to exploit any set of ideas that operate to their advantage, has been understood to lie in the way we structure society, and, at the individual level, in scepticism of the prevailing ideas themselves. In this way the not inconsiderable talents of the rich and powerful may be directed *towards* the good of society and *away from* damaging it. It is our singular lack of success on both of these fronts that has been so regrettable, and if disillusion is not to lead increasingly to terror, it may be necessary that we accept that economics is not a linear, 'rational' system capable of quantification or amenable to aggregation.

Perhaps the strongest manifestations of non-linearity ... are the two inter-connected ideas that, first, there is such a thing as society; and, second, that the behaviour of the economy as a whole cannot be deduced from the simple aggregation of its component parts. From the interaction of the myriad decisions taken at the micro-level by individuals and companies, complex patterns of behaviour emerge at the macro-level of the system as a whole. These patterns do not simply relate to the workings of the economy in isolation. They define the social norms, the social and cultural context in which the economy operates – contexts to which ... Adam Smith attached great importance.<sup>lxvii</sup>

This means that we in effect create, as we are created by, the macro-economic climate in which we live. Therefore to translate Strohman's message about biology into economic terms: we need a new philosophy, or metaphor, or model for economic life. We thought the program was in the mathematical models and now we see that it is in society as a

whole and that society, through signalling pathways, is connected to larger wholes and to the external world.

It would therefore appear that ultimately determinism is unworkable in economics and therefore chaos theorists as well as behavioural scientists, specialists in Development Studies and others will be needed to illuminate this further – in short the interdisciplinary approaches of Mode 2 are indicated as in the case of biology. But it would also appear that we do need systems both for understanding and for controlling economic phenomena. We need an understanding based upon observable trends in human economic behaviour, and also ones that we help to create for desirable social ends. These would become Governments' responsibility to tend as *appropriate* systems rather than as linear, putatively determined ones. The most difficult thing may be to convince a bemused populace of the existence and nature of this need and of the impossibility of dealing with the crisis itself unless we recognise its existence. The disorder in society and the increasing failure of democracy that have accompanied current approaches are seldom seen as stemming from them and current economists should be pressed to defend their theories against these charges. Undergraduate and postgraduate students of economics should be the first to demand this explanation if they are to master the discipline in its entirety and not just a particular currently accepted version of it<sup>19</sup>.

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<sup>19</sup> An internet list [www.paecon.net](http://www.paecon.net) deals with the concern of students in this regard. It petitions that the following problems in the economics curriculum be addressed: the exclusion of theory that is not neoclassical from the curriculum; the mismatch between economics teaching and economic reality; the use of mathematics as an end in itself rather than as a tool; teaching methods that exclude or prohibit critical thinking; and the need for a plurality of approaches adapted to the complexity of objects analyzed.

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- <sup>i</sup> Hawking S 1988 *A Brief History of Time* (London: Bantam Books) p59
- <sup>ii</sup> Margolis J 1991 *The Truth about Relativism* (Oxford Blackwell) passim
- <sup>iii</sup> Dictionary of Philosophy 1979 (London: Pan Books) p316
- <sup>iv</sup> Gould S J 1990 'the Individual in Darwin's World' The Second Edinburgh Medal Address (London: Weidenfeld and Nicolson) p23
- <sup>v</sup> Geertz, C Endorsement of Lewontin's *It Ain't Necessarily So: The Dream of the Human Genome and Other Illusions* (London: Granta Books)
- <sup>vi</sup> Gould p2
- <sup>vii</sup> *ibid* p10
- <sup>viii</sup> *ibid* p4
- <sup>ix</sup> Lewontin R *It Ain't Necessarily So: The Dream of the Human Genome and Other Illusions* (London: Granta Books) p62
- <sup>x</sup> *ibid* p72
- <sup>xi</sup> *ibid* p73
- <sup>xii</sup> Lewontin p141
- <sup>xiii</sup> *ibid* p143
- <sup>xiv</sup> *ibid* p149
- <sup>xv</sup> Neurology 'Mind vs Matter'. *The Economist* June 26 1999
- <sup>xvi</sup> Lewontin p147
- <sup>xvii</sup> Strohman R 'Human Genome Project in Crisis: Where is the Program for Life?' *California Monthly* 4 2001
- <sup>xviii</sup> *ibid* p4
- <sup>xix</sup> *ibid*
- <sup>xx</sup> *ibid* p2
- <sup>xxi</sup> *ibid*
- <sup>xxii</sup> *ibid*
- <sup>xxiii</sup> Lewontin pxiv
- <sup>xxiv</sup> *ibid* p5
- <sup>xxv</sup> *ibid*
- <sup>xxvi</sup> Marais E 1973 *The Soul of the Ape. The Soul of the White Ant* (London: Penguin) Introduction p16
- <sup>xxvii</sup> *ibid* p24
- <sup>xxviii</sup> *ibid* p86
- <sup>xxix</sup> *ibid* p87
- <sup>xxx</sup> *ibid* p87-88
- <sup>xxxi</sup> *ibid* p86
- <sup>xxxii</sup> *ibid* p75
- <sup>xxxiii</sup> *ibid* Introduction by Robert Ardrey p42
- <sup>xxxiv</sup> Rorty R *Contingency, Irony and Solidarity* (Cambridge: Cambridge University Press) p33
- <sup>xxxv</sup> *ibid*
- <sup>xxxvi</sup> 'The Nature of Humans' article in *The Money Standard* December 1999 p23
- <sup>xxxvii</sup> Ross D 'Learning, Cognition and Ideology' The 2000 Richard Turner Memorial Address, University of Natal, Durban. p15
- <sup>xxxviii</sup> Ormerod P 'Neat little theories that crash into the real world' (Times Higher Educational Supplement September 18 1992)
- <sup>xxxix</sup> Gould S J 1990 'The Individual in Darwin's World'. The second Edinburgh Medal Address p22
- <sup>xl</sup> *ibid* p23
- <sup>xli</sup> Ormerod P 1994 *The Death of Economics* (London: Faber and Faber) p14
- <sup>xlii</sup> *ibid* p41
- <sup>xliii</sup> *ibid* p45
- <sup>xliv</sup> *ibid* p51
- <sup>xlvi</sup> *ibid* p38
- <sup>xlvi</sup> Harrod R F *The Life of John Maynard Keynes* 1951 (London, Macmillan) p638.
- <sup>xlvi</sup> *Ibid* p446
- <sup>xlviii</sup> Shutt H 1998 *The Trouble with Capitalism: An enquiry into the Causes of Global Economic Failure* (London: Zed Books)

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<sup>xlix</sup> Macmillan Encyclopedia 1981 (London: Macmillan)

<sup>i</sup> Shutt p36-37

<sup>li</sup> *ibid* p201

<sup>lii</sup> Ormerod p47

<sup>liii</sup> Hayek F A 1983 *Knowledge, Evolution and Society* (London: Adam Smith Institute) p21

<sup>liv</sup> *ibid* p53

<sup>lv</sup> *ibid* p30

<sup>lvi</sup> Hart J 1996 'Can Philosophy and Methodology be Helpful to Economics?' Unpublished paper presented at University of Natal seminar. p5

<sup>lvii</sup> Ormerod p178

<sup>lviii</sup> Fine B 1998 'A question of Economics: Is it Colonising the Human Sciences?' (Unpublished memo) p3

<sup>lix</sup> Hart 1996 p6

<sup>lx</sup> Ross p4

<sup>lxi</sup> *ibid* p20

<sup>lxii</sup> *ibid* p66

<sup>lxiii</sup> Hart p1

<sup>lxiv</sup> Observation by Professor of Economics, Merle Holden, 2001, concerning her period serving on the South African National Research Foundation

<sup>lxv</sup> A Giddens 1998 *The Third Way* Cambridge: Polity p148

<sup>lxvi</sup> Roberts R *Inside International Finance* (Orion Business Books)

<sup>lxvii</sup> Ormerod, 1994 p179

## CHAPTER 5

## A Mode 2 Critique of Contemporary Philosophy

*This chapter suggests that Mode 2 knowledge production is essentially involved with critical thought and to this extent that its role is philosophical. Through a critique both of Richard Rorty's pragmatism and of its analytic method, the chapter explores the contrast between this critical role and the one currently assumed by these dominant schools of thought. The chapter concludes with the suggestion that Joseph Margolis's strong version of relativism is of fundamental significance to re-thinking determinist theory, providing an alternative to both the analytic and post-analytic schools, and that it can also be seen as appropriately underpinning Mode 2 educational thinking.*

**1. Introduction.**

As an educational critique of the sidelining of conscious thought to the detriment of contemporary society, this thesis would seem to have to take us finally to philosophy itself – the discipline that makes thought its particular focus of inquiry, and illuminating the human condition its special task. Already philosophical considerations have been found helpful in illuminating the nature of Mode 2 thinking. Now a Mode 2 investigation must ask whether the discipline of philosophy itself is able to address more generally the problems identified by Manuel Castells as plaguing us in the Information Age.

Those branches of philosophy that are most significant in the English-speaking, Anglo-Saxon heartland of neo-liberal ideas and beliefs are overwhelmingly in or from

the 'analytic' rationalist school<sup>1</sup>. The alternative 'relativist' position suffers notoriously from an inability to escape the charge of incoherence and would not seem to be in a position to argue strongly for the truth or value of anything. It could not therefore perhaps be expected to illuminate or challenge currently intractable social realities. Approaches offered by the French 'poststructuralists' have met with little interest in Anglo-Saxon countries except within literary circles, and have been dismissed by neo-liberalism's own leading 'postmodern' thinker, Richard Rorty, as representing, politically, an ineffectual 'spectator left'<sup>i</sup>. Thus we are left with analytic thinking but with Rorty's 'postmodernism' in its post-analytic, neo-pragmatist form, increasingly infiltrating this very school that it first set out to challenge<sup>2</sup>. Which would appear to leave us with pragmatism and rationalism. On further investigation it will be found however that Rorty's anti-foundationalism is happy to leave science itself unchallenged and to take philosophy in directions that do not interfere with politics – in effect to abandon philosophy. Which would appear to leave us, philosophically speaking, with rationalism *tout court*, and with the need to investigate its demise.

Philosophy's current standing in the academy is tenuous, and like other powerful and respected disciplines of the past – English and Foreign Languages for instance – it often finds itself scraping a living in the shadow of Commerce. 'Logical reasoning' for Bachelor of Commerce students (like 'communications science' for business and

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<sup>1</sup> A recent survey conducted in the USA (completed December 2000) indicates the dominance of the analytic school. For instance one of the question was this: 'Here is a hypothetical situation ... a young philosopher says to you: "my professional goal is to make a name for myself not just in some speciality area but in the philosophy profession as a whole. I want to work in whatever philosophical tradition will maximize my chances of achieving this goal." Everything else being equal, which of the following philosophical traditions would you advise this philosopher to work in to achieve this objective?'. The results were: analytic philosophy 77%; continental philosophy 10%; pragmatism 5%. (Contact e-mail [rud@purdue.edu](mailto:rud@purdue.edu) )

foreign languages for the tourist industry) may seem to have lost its former glory in the transformation, but it must bide its time.

Where there is an increasing call to other disciplines to be involved in helping cure a sick economy this has inevitably entailed a feedback to economic education. The commerce disciplines in the academy find themselves facing increasing pressure from industry and the business professions to deliver more appropriate graduates. The call is for graduates to be able to think clearly, communicate well, to have a thorough mastery of their disciplines and to have acquired the skills needed to solve the kinds of unpredictable and complex problems that will face them in a risky and competitive working world. These graduates must ideally be able to 'know' therefore in a far more comprehensive way than any textbook will be able to provide for them. They must be able consciously to seek out knowledge, to get acquainted with its nature and its reasons and understand how it approaches the world. They cannot have no opinion about it. Students who access knowledge in this way will be stirred to challenge the ideas they meet, to alter them, to be persuaded that after all they *are* sensible – or they will only 'learn' them under protest or mechanically. Weaver birds may 'know' how to build without knowing the least thing about the construction of nests – but this kind of knowing is only available to human beings in the way we digest our food or duck to avoid flying objects. *Learning* is other than instinct or 'phyletic memory' as Marais conceives it. It is the *conscious* acquiring of mastery from a position of initial ignorance or ineptitude.

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<sup>2</sup> This is explored interestingly in a recent article by Joseph Margolis 'Richard Rorty: Philosophy by Other Means' *Metaphilosophy* Vol. 31 No. 5, October 2000

Notoriously students have of course found it possible to bypass thought and 'reproduce' disciplinary knowledge in order to 'pass' exams – but everybody appreciates that this involves neither education nor the attainment of any meaningful qualification. This fiction is becoming ever more difficult to sustain particularly where the subjects themselves are entirely practical. Accountancy, for instance, as the reproduction of rules and calculation of figures in response to particular disciplinary formulas is almost impossible for the human mind to become attuned to. As critique of those formulas – as questioning of their reason, their ethics and their wider implications, and as grounds for their possible amendment, the discipline immediately attains meaning and sparks interest. Increasingly it seems that students must be required to ask 'how can you really know this?'; 'what kinds of things is it possible that you know about it?' and 'what are its practical and ethical implications?' – in other words they must be required to come to grips with these disciplines' philosophical underpinnings or else they will ever increasingly resist learning them.

This challenging Mode 2 education therefore seems to entail the kinds of skills that have more traditionally been seen as the preserve of philosophy. It is all the more surprising then to realise that philosophy itself, like genetics and economics, has found it possible in the current theoretical climate either to ignore or downplay them. As Rorty says 'analytic philosophers are content to solve philosophical problems without worrying about the source of those problems or the consequences of their solution'. And Joseph Margolis explains that analytic philosophy simply assumes that its method will establish 'justified true belief' despite the fact that, as he sees it: '[t]he use of 'true' is inseparable from our theories about what we mean by knowledge and the apprehension of particular truths' and therefore 'there is no way of giving



conceptual priority to alethic questions over epistemic or ontic ones', and 'neither logic nor epistemology is [therefore] an autonomous discipline though modern analytic philosophy has always mistakenly supposed they were'<sup>ii</sup> Analytic analysis thus *assumes* a decontextualised linear logic that begins to sound very familiar.

It would seem therefore to be impossible to ask of this analytic thought that it help illuminate the strength or otherwise of methodologies identical to its own. As with genetics and economics its own assumptions would require examination first. Richard Rorty's work provides perhaps the perfect opportunity for opening the discussion here both around analytic method (which Rorty continues to use) and around 'post-analytic pragmatism' as the alternative philosophical position he (and increasing numbers of thinkers within the analytic tradition) currently favour. I shall suggest that each, in either assuming truth or abandoning the search for it, reneges on grasping the possibilities inherent in critical conscious thought itself.

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## ***2. Richard Rorty and the eclipse of meaning***

### *2.1 Philosophy and the Mirror of Nature.*

Rorty's first major work *Philosophy and the Mirror of Nature* attempts to show that most of the assumptions behind the problematic of modern philosophy are 'doubtful' and he would like to see them made 'optional'<sup>iii</sup>. Rorty therefore sees this philosophical project to be 'therapeutic' in a way that he also ascribes to 'the three most important philosophers' of the twentieth century, viz. Wittgenstein, Heidegger and Dewey<sup>iv</sup>. If philosophy cannot be 'true', he suggests, it can at least be 'edifying'.

These ‘edifying philosophers’ aim, he suggests, ‘to help their readers, or society as a whole, break free from outworn vocabularies and attitudes’<sup>v</sup>. So far we may concur, but when we are told that, in their later work, each of these philosophers ‘sets aside epistemology and metaphysics as possible disciplines’<sup>vi</sup> we must protest. It may be Rorty’s aim to cure us of this ‘itch of philosophy’<sup>vii</sup>, but these other philosophers surely do not suggest that philosophy *itself* is a mistaken enterprise simply because they believe the foundational *conclusions* of earlier philosophers were mistaken? Rorty must take full responsibility for this upon himself. Only an understanding of epistemology as found in the analytic literature would justify such a conclusion.

Rorty’s ‘dropping’ of the idea of epistemology and metaphysics and ‘replacing’ it with ‘empiricism and naturalism’ can, in any event, have little meaning one would think, beyond, or different from, ‘Rorty’s philosophy is a form of empiricism and naturalism’. But he denies this. He says: ‘[w]hat pragmatists find so foreign in Derrida [he is debating here with other contemporary non-foundational thinkers] is his suspicion of empiricism and naturalism – his assumption that these are forms of metaphysics, rather than replacements for metaphysics’<sup>viii</sup>. (Note that he speaks for all ‘pragmatists’, ignoring the very great differences between them). However in order to dispel Derrida’s (and our) suspicions, empiricism and naturalism would have to be understood simply as ‘what is’ implying that it is impossible to think about this thought – since this would be an epistemological, and potentially a metaphysical, act. Rorty’s anti-mentalism stems from this position and his arguments in dismissing the mind-body problem therefore have to end up with (another) triumph for the body. This may get us very little further theoretically, but the side effects of his analytic arguments suggest that they may in some sense *never* be appropriate for addressing

the mind-body problem – their own principle problematic. Without any conclusion being attainable concerning the nature or existence of mind, this philosophy, I believe, cannot hope to illuminate our powers of ethical or practical action. A fairly detailed examination of Rorty's position may be necessary to argue the point.

*Rorty's conception of mind.* Rorty explains his use of the analytic method in *Philosophy and the Mirror of Nature* as follows:

The reason why the book is written largely in the vocabulary of contemporary analytic philosophers, and with reference to problems discussed in the analytic literature is merely autobiographical. They are the vocabulary and the literature with which I am most familiar and to which I owe what grasp I have of philosophical issues. Had I been equally familiar with other contemporary modes of writing philosophy this would have been a better and a more useful book<sup>ix</sup>.

He then goes on to explain his understanding of analytic philosophy itself

Analytic philosophy is one more variant of Kantian philosophy, a variant marked principally by *thinking of representation as linguistic rather than mental*, and of philosophy of language rather than “transcendental critique” or psychology, as the discipline which exhibits the “foundations of knowledge” (My emphasis)<sup>x</sup>.

It might be useful to keep in mind that thinking that understands representation as ‘linguistic rather than mental’ must be at a disadvantage from the start in any discussion of the mind.

Rorty calls the first section of *Philosophy and the Mirror of Nature* 'The Invention of the Mind'. He seeks to refute Cartesian dualism by suggesting that our understanding of the independent concept of 'mind' is purely intuitive and should now be superseded by 'physiological methods' which he would put 'in the place of psychological methods'<sup>xi</sup>. It should be noted that Rorty has no objection to psychologists using the idea of 'mind' the better to pursue their discipline, but he refuses to give 'mind' any philosophical status *beyond* psychology – 'we can have psychology or nothing'<sup>xii</sup>. Of course if 'mind' is purely physiological then what it pleases psychologists to designate as 'mind' is reducible to determinable processes, and Rorty's conception of psychology is inevitably behaviouristic. This he confirms<sup>xiii</sup>.

Initially he deals with the categorisation of mind as 'material', as 'spacial', or as 'phenomenal' – that is he discusses it in conventional analytic terms. But to somebody not initiated into analytic thought the fact that he can prove that the concept of mind cannot be rightfully placed in one or other of these categories can have no final significance in undermining the existence of mind as distinct from body. After all the addition of another category ('discriminating' for instance) might very well upset this apple cart. The arguments appear to get closer to dealing with the *nature* of mind when he introduces 'intentionality' and 'meaning' as indications of the special quality of mental activity. Rorty recognizes the difficulty involved in 'hitching pains and beliefs together'. 'Pains are not intentional – they do not represent, they are not about anything'<sup>xiv</sup>. This could be seen as the very crux of the matter to anybody concerned with defending mental capacity as something beyond a mere stimulus-response mechanism. But using the framework of analytic thinking allows him in the event to

side-step the issue. He discusses at length the different understandings concerning the links between sensation and intellect since the ancients – how the Greeks (wisely one would think) attached sensation to the body and saw intellect as separate, how this was altered by Descartes and Locke, and how it came finally to its modern distinction between ‘consciousness and what is not consciousness’. But this only brings back the original obscurity by potentially throwing pains and beliefs together as undifferentiated aspects of ‘consciousness’<sup>xv</sup>. He also diverts the argument by attacking the idea of considering pains as ‘universals’ with a single property namely ‘feeling painful’<sup>xvi</sup>. ‘The notion of mind-stuff as that out of which *pains and beliefs* are made’ he says ‘makes exactly as much or as little sense as the notion of “that of which universals are made” (my emphasis). Here he is not only again conflating sensation with belief, but also dismissing both within a linguistic argument. He then touches once again upon meaning, only to let it slip away permanently.

‘It seems perfectly clear, at least since Wittgenstein and Sellars, that the “meaning” of typographical inscriptions is not an extra “immaterial” property they have, but just their place in a context of surrounding events, in a language-game, in a form of life’<sup>xvii</sup>. But it is not whether inscriptions can be said to have ‘material’ or ‘immaterial’ ‘properties’ that is the issue here – that gives them meaning – it *is* ‘just’ the significance of their place in a particular context. (A noticeable device of Rorty’s is to include a casual ‘just’ or ‘simply’ to deflect attention from a crucial point, but we will not be deflected). And it is the meaning-making skill inherent in the *perception* of the *interconnections* between language (inscriptions), context and human being that

is at issue (and which I believe is precisely what also concerned Wittgenstein<sup>3</sup>). Again Rorty says:

The relation between an inscription – on paper or, given the hypothesized concomitance, in the brain – and what it means, is no more mysterious than the relations between a functional state of a person, such as his beauty or his health and the parts of his body. It is just those parts seen in a given context<sup>xviii</sup>.

But the crux of the matter is again ‘*just*’ those parts seen in a given context. What allows us to ‘see in a given context’ – to interpret relationships – if not the mind? This is the crucial ‘property of mind’ and not mind ‘as definable in terms of particular properties’ that we are seeking, and that Rorty obscures within the narrow confines of analytic thought. This *capacity* for discrimination, for seeing holistically, sequentially or laterally, for comparison and attribution, is what makes meaning, and thus makes education (as the development of this inherent capacity) possible. It also, I would suggest, makes art, music, and all the higher mental activities possible. Form and balance, proportion and cadence, poetry and laughter – all depend upon the fine-tuning of this inestimable skill. Let us note in passing that it is a skill that transcends language. It involves very importantly the understanding of cause and effect – of reason in this restricted sense – but it clearly, in human kind, far outstrips this pedestrian, if essential, ability. It is not something that can in fact be grasped by analysis but only within relationship, synthesis, projection, integration, multivalence – and essentially within context. Analytic thought, let alone the linguistic categories of analytic philosophy, can have little handle upon it. Derrida’s ‘*différance*’, aspects of

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<sup>3</sup> In *Philosophical Grammar* Wittgenstein indicates that grammar itself is insufficient to indicate meaning: ‘Is the meaning only in the use of words? Is it not the way this use interlocks with life?’ (PG65)

Hegel, Peirce, the later Wittgenstein, Heidegger, Margolis – and not Descartes, Locke, Hume<sup>4</sup>, Russell or Ayer, might have to be the starting point of understanding here.

Therefore while Rorty initially recognizes the nature of the mind, the analytic tools with which he tackles it leave it in the end as it was. It is entirely unsatisfactory to conclude either that 'we shall treat the intentional as a sub-species of the functional'<sup>xix5</sup> or that 'insofar as dualism reduces to the bare insistence that pains and thoughts have no places, nothing whatever hangs on the distinction between mind and body'<sup>xx</sup>. Rorty's arguments certainly cannot be used for dismissing the usefulness of the concept of epistemology and from there reach the conclusion that physiology is everything! To be fair Rorty admits that he is 'painfully aware of the lacunae in the story [he has] told'<sup>xxi</sup> and he moves on to consider the problem in other ways.

'Persons without Minds' is the celebrated illustrative chapter concerned with 'the Antipodeans' – an imaginary people who have always understood pains and thoughts in purely neurological terms. Again, clever and original as this device may be, we are left unconvinced. The arguments about sensation are once again unable to deal with the ability (capacity) to grasp cause and effect let alone the finer mental attributes. We get close to the problem when one of his Antipodeans admits to have been mistaken: 'It looked like an elephant but I realized that elephants don't occur on this continent, so I realized that it must be a Mastodon'<sup>xxii</sup>. This involves comparison,

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<sup>4</sup> The position of Hume depends upon whether the empiricist or the 'Scottish naturalist' aspects of his work are the focus. The former would leave him where I have put him – the latter would shift him next to Peirce. This distinction is explored interestingly in a recent book by HO Mounce *Hume's Naturalism* (Routledge, 1999)

<sup>5</sup> This form of argument may be recognised as similar to economic arguments which run 'we shall assume x' and from this assumption, build a model of the world.

memory, and the rectification of error through a grasping of cause and effect. Therefore I would argue that it is not possible to suggest, as Rorty does, that this sentence could as easily be rendered 'I had G-412 together with F11, but then I had S-147, so I realised that it must be a mastadon'. No single 'S-147' as one neurological impulse, would be able on its own to bridge the gap between the first impression and the changed perception, nor would 'G-412' together with (a single) 'F11' be adequate to handle the first impression. An intricate juxtaposition of memory, logic, knowledge learnt in childhood, perception of the difference in the length of the tusks, together with quite complex language skills, would have to go into the process of reaching this rational conclusion. In effect we are talking about an Antipodean mind. Even extraterrestrial Australians – not to mention the 'strong poet' Rorty himself – cannot but be allowed to think!

Rorty does indeed take the arguments somewhat beyond the linguistic and the neural, in his later chapter on 'Privileged Representations'. Here he argues that he cannot see that knowing some, (philosophical) things can be in any way privileged over knowing other (non-philosophical) things and, given this impossibility he asks 'whether there remains anything for epistemology to be?'<sup>xxiii</sup>. But I would suggest that here he is seeing epistemology in terms of a narrowly determinist 'justification'. To argue the impossibility of examining the nature of knowing from the impossibility of selecting specific outcomes of knowing, would seem to be confusing epistemology with ontology and also to be teleological.

Even Rorty's eventual retreat to hermeneutics (Chapter 7 'From Epistemology to Hermeneutics') remains very firmly in the physicalist camp. 'Hermeneutics is an



expression of hope that the cultural space left by the demise of epistemology will not be filled<sup>xxiv</sup>. It is really a coping device 'only necessary in incommensurable discourses' that is, in situations where people do not already have a common understanding. No translation is necessary in periods of 'normal science' at which time hermeneutics will, presumably, become redundant. He believes that the fact that 'people discourse whereas things do not' is really only a trivial difference because 'once we can figure out how to translate what is being said, there is no reason to think that the explanation of why it is being said should differ in kind (or proceed by different methods) from an explanation of locomotion or digestion'<sup>xxv</sup>. Now this is really strange. The reason that I am able, or interested, to argue about Rorty's views is not different in any definable way from the reason that my digestion is dealing with the crisp olive bread that I ate for lunch? Is he quite sure of that? Amoebas and even Venus fly traps digest things.

None of this appears therefore to help us either to understand or to abandon epistemology, nor does it dispel our fundamental fascination with the topic and with its significance. Overall as Richard Lewontin says '[w]hatever our theory of the brain it must be so constructed that it helps us to think about thinking. Thus we cannot avoid, from the beginning, the problem of the relationship between three pounds of flesh and the quality of mercy'. (Three? no matter)<sup>xxvi</sup>. Analytic thinking is not so constructed as to allow us to ask the appropriate questions, let alone to reach satisfactory answers.

Now Rorty, although he uses their methods, is concerned overall to undermine and displace analytic philosophy. It is because he sees philosophy *as* analytic philosophy

and he sees the shortcomings in this, that he is bent upon abandoning philosophy altogether, however difficult this may prove to be. He therefore falls back upon literature and hermeneutics to produce ‘edifying philosophy’ and ‘conversations’ – particularly ones that will encourage us to continue ‘the conversation of the West’<sup>xxvii</sup>. This is the only available moral watchdog and the only means we have of advancing the human condition. He feels philosophy has abandoned any moral purpose. ‘Given their scientistic metaphilosophy ... analytic philosophers are content to solve philosophical problems without worrying about the source of those problems or the consequences of their solution’<sup>xxviii</sup>. And he feels that it is pointless to pursue a philosophy, as Thomas Nagel does, that is ‘after eternal and non-local truth, even though we know this is not what we are going to get’<sup>xxix</sup>. Rorty’s disillusionment with *analytic* philosophy, therefore leads him to assume that this is all there is to philosophy and to attempt what Margolis describes as ‘philosophy by other means’<sup>xxx</sup>. At the end of *Philosophy and the Mirror of Nature* we understand that Rorty’s object is the possibility of replacing philosophy with a more socially and ethically concerned political project – and this becomes the subject of his second major work *Contingency, Irony and Solidarity*. Whether this project is a feasible one must be the subject of the following section.

## 2.2 *Contingency, Irony and Solidarity*

From the beginning *Contingency, Irony and Solidarity* is clearly continuing the theme of *the Mirror of Nature*. It questions why the great thinkers of the Enlightenment, Kant and Hegel, stopped short of giving philosophy’s claims *over* to science and why philosophers have continued to assume that philosophy can find what science cannot<sup>xxxi</sup>. He believes that ‘it would make for philosophical clarity if we just *gave*

the notion of cognition to predictive science<sup>xxxii</sup>. This handing over of the responsibility for thinking to science would free social and political issues from any direct connection with discoverable truth. The essence of Rorty's 'non-philosophical' empiricism is summed up in the contention that: *'The world is out there, but descriptions of the world are not. Only descriptions of the world can be true or false'*<sup>xxxiii</sup>. This idea is in fact fundamental, I believe, to any understanding of the nature of Rorty's thinking. It reveals him not only to be unable to escape from the tyranny of language (*'descriptions of the world'* are philosophy – an analytic, and a twentieth century, tyranny) but also as the extreme anti-realist that H O Mounce finds him to be<sup>xxxiv</sup>. Materialism and anti-realism are not incompatible for, as Mounce says 'materialists seek to eliminate "meaning" and "purpose" altogether'<sup>xxxv</sup>. It is not therefore inconsistent for a materialist to acknowledge a real world that can have no meaning for us, as Rorty does. However the resulting understanding of the determined, but indeterminable, 'world out there' and humanity below or beyond, describing and re-describing itself at will (at least as it fondly imagines) is a very unfortunate one for achieving the practical liberal democracy that he desires (very genuinely it would seem, unlike his fellow neo-pragmatist, Stanley Fish).

To indicate the wider significance of these ideas, Rorty's position can be recognised, as an apparent social reality, in the work Manuel Castells. Castells suggests 'we are just entering a new stage in which culture refers to culture, having superseded nature to the point that nature is artificially revived ("preserved") as a cultural form'<sup>xxxvi</sup>. The anti-realism here would seem to present us with a vertiginous experience of the postmodern world – the depthless veneers of Fredric Jameson or the 'forces of seduction' of Jean Baudrillard. Historically however (it might be wise to remember)

societies that choose to abandon reality have not had a large measure of long term success.

The thrust of *Contingency, Irony and Solidarity* is then Rorty's controversial attempt to divide 'private irony' from public liberalism – philosophy from politics. His contention that all 'metaphysical' ideas are mistaken and that philosophy has no power to underpin or to debunk other areas of culture means that it cannot underpin (or debunk) a political programme. The philosophical endeavour – the realm of the 'ironist' who sees philosophy the way Rorty does – must remain an individual and private concern. Liberals are a self-appointed group ('we liberals') who just happen to think that cruelty is the worst thing one can do. Their public commitment has no basis in theory. The lucky chance that led to liberal, western, democratic systems proliferating since the Enlightenment, is due to a Darwinian fluke which provided appropriate grounds for these new metaphors ('re-descriptions') to take root and flourish at the time<sup>xxxvii</sup>.

That Rorty's attempt to divorce politics from philosophy largely fails has been thoroughly explored – particularly by Nancy Fraser<sup>xxxviii</sup> but also by others for instance Simon Critchley<sup>xxxix</sup>. Politics is a practical activity and one that cannot be divorced from ideology and conflict and only a Durkheimian functionalism could encompass Rorty's utopian spreading of liberalism, as Fraser argues. And the spread of liberalism also entails the spread of current neoliberal economic ideologies as Critchley warns. 'Rorty's definition of liberal as ethico/ political ... pays no attention to the economic liberalism ... which is indeed in the process of rapidly and violently

globalizing itself, more often than not without an accompanying commitment to tolerance and the abhorrence of cruelty.’<sup>xi</sup>.

Rorty however believes that ‘without traditional concepts of metaphysics we cannot make sense of the appearance-reality distinction and without this distinction one cannot make sense of the notion of “what is really going on”. ‘No more metaphysics, no more unmasking’<sup>xii</sup>. A political stance that ‘drops’ the notion of power in this way might be seen as the equivalent to a theory of mind that ‘drops’ the notion of ‘mental activity’. It may be convenient, but it is hardly conducive to conclusive argument. And it is particularly unhelpful for a political project to suggest that thinking is determined and not determining – since any discussion of power cannot avoid the use of reason in delving under the rhetoric to assumptions and intentions. Rorty is in effect forced by taking this stance into a position of positive aversion for reason. ‘One way of seeing edifying philosophy *as* the love of wisdom is to see it as the attempt to prevent conversation from *degenerating* into inquiry’<sup>xiii</sup> (emphasis added). Inquiry smacks of the power of human thought to make real discoveries. It suggests an independent world that we may be able to inquire *about* – and it entails ‘meaning’. It is interesting to note here that Rorty is scathing of contemporary Oxford philosophers’ attempts to salvage the idea of epistemology as something beyond language, especially Dummett who ‘sees philosophy of language as foundational because he sees epistemological issues now, at last, being formulated correctly as issues within the theory of meaning’<sup>xiii</sup>. In Rorty’s understanding (philosophical) issues are not resolved, indeed they are not capable of resolution, they simply ‘fade away’<sup>xiv</sup>.

Rorty's systematic attack on reason is greatly assisted by both Darwin and Freud – the two great nineteenth century weavers of stories about unconscious systems that control us despite ourselves. Indeed for Rorty 'pragmatism *starts* from Darwinian naturalism' (emphasis added)<sup>xlv</sup>. Now whether 'naturalism' is compatible with materialism depends crucially upon whether it is Peirce's form of 'naturalism' or Darwin's that is being considered. Peirce's naturalism sees the mind as the starting point of knowledge but popular Darwinism understands human beings as in the final analysis determined by evolution and this is the notion of 'naturalism' that is currently prevalent. Different Dictionaries of Philosophy give 'naturalism' as (a) 'the philosophical belief that what is studied by the non-human and human sciences is all there is ... Naturalists since Darwin insist especially upon the evolution, without supernatural intervention, of higher forms of life from lower and these in turn ultimately from non-living matter'<sup>xlvi</sup>. And (b) 'an approach to psychology and social science which assumes that human beings are essentially physico-chemical systems' or (c) 'any philosophy which sees mind as dependent upon, included within or emergent from, material nature'<sup>xlvii</sup>. (A) and (b) ignore mind altogether suggesting that ultimately the material is everything and the only alternative is the supernatural, and (c) is ambivalent, but perhaps allows for Peirce's understanding that 'meaning and purpose ... are not the products of human activity for there is no activity, recognisable as human that does not already possess them'<sup>xlviii</sup>. The significant distinction nowadays becomes therefore not whether *God* comes into this picture, but whether *we* do. A critical study of Rorty's position here begins to reveal that while intent on eliminating God, Darwin may have unintentionally eliminated humanity at the same time.

In parallel arguments Freud explains reason and ethical sensitivity in 'rationalist' terms that create us as adaptive and reactive but not personally responsible – and Rorty concurs (as we have seen). 'Freudian moral psychology [overcomes] ... the romantic attempt to exalt ... a mythical faculty called 'will' over an equally mythical one called 'reason'<sup>xlix</sup>. And 'Freud makes it possible for us to see science and poetry, genius and psychosis – and most importantly, morality and prudence – not as distinct faculties but as alternative modes of adaptation'<sup>l</sup>. Thus, along with reason, ethics as we know it dissolves. Believers in 'modes of adaptation' see the body as in control – believers in 'faculties' acknowledge the independence of mind. The illumination of this difference within the evolution of consciousness has already been explored.

This disdain for reason and meaning therefore takes us from an uncertain, shifting world where we are at the mercy of the chance discoveries of men of genius (Rorty's 'strong poets') into the yet more frightening world of complete prediction and control. That is, from

'the final victory of poetry in its ancient quarrel with philosophy – the final victory of metaphors of self-creation over metaphors of discovery – would consist in our being reconciled to the thought that this is the only sort of power over the world which we can hope to have'<sup>li</sup>

to

Physicalism is probably right in saying that we shall some day be able 'in principle' to predict every movement of a person's body (including those of his larynx and his writing hand) by reference to microstructures in his body'<sup>lii</sup>

And

There is no requirement that people should be more difficult to understand than things ...  
there is no metaphysical reason why human beings should be capable of saying  
incommensurable things, nor any guarantee that they will continue to do so<sup>liii</sup>

If this is the view of humanity that results at the micro-level of individual human nature, a similar understanding must emerge at the macro level of politics and history. And it does. 'Europe did not decide to accept the idiom of romantic poetry or of socialist politics or of Galilean mechanics. That sort of shift was no more an act of will than it was the result of argument. Rather Europe gradually lost the habit of using certain words and gradually acquired the habit of using others'<sup>liv</sup>. And 'Our language and our culture are as much a contingency, as much a result of thousands of small mutations finding niches (and millions of others finding no niches) as are the orchids and the anthropoids'<sup>lv</sup>.

In the case of scientific developments Rorty is (predictably) supportive of Thomas Kuhn's paradigm shifts, but with a linguistic twist. Scientific revolutions are merely 'metaphoric re-descriptions'. The 'literal' is what language allows us to handle in 'normal science' while the 'metaphorical' allows us to make more theories<sup>lvi</sup>. In fact Kuhn as a natural scientist found his own conclusions about the historical and human value-laden nature of scientific revolutions to be more difficult to accept wholeheartedly than Rorty does. In his introduction to *The Structure of Scientific Revolutions* Kuhn says that his book 'will provide no more than the main outlines of an answer [for the question of] how development through revolutions can be compatible with the apparently unique character of scientific progress'<sup>lvii</sup>. In other words, how is it that mere historical contingency always seems to lead to each



successive paradigm being an improvement on the last? It transpires that these outlines rely for their legitimation upon a Darwinian understanding. Evolutionary theory is ‘almost perfect’ Kuhn believes, as an explanation for scientific progress. New paradigms are established through ‘the resolution by conflict within the scientific community of the fittest way to practice future science’. An ‘invisible hand’ is therefore seen as directing the decisions taken in science laboratories or research and development departments towards the best solution. Forces other than scientific may indeed be present (as discussed above) – but these others would not need to be accompanied by neurological adjustments in the brain! Kuhn however considers that ‘however inscrutable at this time, neural reprogramming must also underlie conversion’<sup>lviii</sup>. This is pure Darwinism. Our apparently independent decision-making is caused by an inscrutable internally determined development.

Rorty’s pragmatist interpretation is slightly different – what seems to us as progress in understanding is only really to be seen as ‘more useful’ as it allows us to ‘cope better’. ‘Our “inchoate questioning” may or may not turn into “inquiry” within normal discourse’<sup>lix</sup>. Why this is such an unsatisfactory, and indeed insulting, explanation, requires more consideration. It assumes randomness rather than intelligence. It envisages the rat trying ten different ways out of a maze until it finds the one that leads to food or escape, and finally picking the one that allows it to ‘cope better’. Rorty then attempts to draw us further into this web of illusion and un-reason by suggesting that ‘[a] *trivial consequence* of what it means to “decide” or “invent” is that we can’t predict our own ‘actions, thoughts, theories, poems, etc. before deciding upon them or inventing them’<sup>lx</sup> (emphasis added). Only a very uncritical acceptance of the importance of language as the route to truth could blind Rorty (or his readers)

to the fact that invention is *not* a trivial consequence of the language we use to describe it!<sup>6</sup>. (This particular attempt to bypass what is in fact essential surely could not work if we had not already been mesmerised by 386 previous pages of his text). More sinister is the underlying biological determinism which goes beyond the meaning of “decide” or “invent” to the core of the matter – that we don’t in reality, in Rorty’s world, either “decide or invent”. What Rorty *really* believes is that ‘some atoms-in-the-void account of micro-processes within individual human beings will [eventually] permit the prediction of every sound or inscription which will ever be uttered’. In scientific ‘reality’ Rorty is certain ‘there are no ghosts’<sup>lxi</sup>. The nature of the confusion between ‘rational human inquiry’ (from Rorty’s postmodern position, ultimately impossible) and ‘rational overarching systems’ (the undisputed nature of the world, since linear reduction and analysis are the nature of reason itself) gradually emerges here.

For Rorty therefore we are the playthings of a system that constitutes us through our biology, and like the proles in Orwell’s *1984* we can be allowed to think whatever we like because ultimately our ideas will not matter. In fact Rorty’s fascination with this novel and his ability to see it as in some way *supportive* of his stance is indeed remarkable, given that its celebration of realism might be considered fatal for his project.

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<sup>6</sup> Wittgenstein is clearly intended as the source of this thought. Again Rorty’s cavalier borrowing from other thinkers has the odd effect of making us mistrust them both. Useful as the idea of ‘word games’ is as a hedge against certainty and transcendental reason, one suspects that ‘the limits of my language’ cannot be ‘the limits of my world’. This must be one of the few limiting aspects about Wittgenstein’s otherwise extraordinarily liberating thought.

'The obvious, the silly and the true had got to be defended. Truisms are true, hold onto that! The solid world exists ... stones are hard, water is wet ... Freedom is the freedom to say that two and two equal four. If that is granted all else follows.'<sup>ixii</sup>

As Mounce says, it is an extraordinary reading of this passage to suggest as Rorty does that it

can be seen as saying that it does not matter whether 'two plus two is four' is true, much less whether this is "subjective" or "corresponds to external reality". All that matters is that if you do believe it you can say it without getting hurt. In other words what matters is your ability to talk to other people about what seems to you true, not what is in fact true. If we take care of freedom, truth can take care of itself. If we are ironic enough about our final vocabularies, and curious enough about everyone else's, we do not have to worry about whether we are in direct contact with moral reality, or whether we are blinded by ideology, or whether we are weakly "relativistic"<sup>ixiii</sup>.

But it is surely precisely Orwell's point that without the truth we *cannot* take care of freedom (or morality, or false ideologies). The simple truth that all of us are able to find unaided is, in the last resort, our only guarantee of freedom. Mounce's masterly turning of the tables upon this reading suggests that Rorty's anti-foundationalism, as anti-realism ensures that we can not only recreate ourselves but that others can recreate us. If by means of terror or misinformation we renege on our beliefs there is then nothing for us to hold on to – we are at the mercy of the Party. Mounce holds therefore that Rorty and Orwell's character O'Brien who 're-programmes' dissidents so that they come to love the system 'differ in their politics but in their philosophy they are indistinguishable'<sup>ixiv</sup>. The more serious problem is however that philosophy

and politics *cannot* be thus separated. A politics without human thought or morality will inevitably turn out to *be* the politics of *Nineteen Eighty-Four*.

Rorty's postmodern anti-foundationalism is the aspect of his work that is most commonly considered, but his acceptance of the reductive nature of science and of evolution are as fundamental. The conjunction of these two positions would seem to represent the core not only of Rorty's thought but also of current hegemonic thought more generally, and both would seem to be fundamentally at odds with thinking aimed at practical, ethical intervention in the world.

### ***3. Other supporting philosophies***

If for Rorty, and to a lesser extent for Kuhn, rational thought cannot be seen as the primary source of knowledge, we should not be surprised. But it would appear much more odd to find that this is also the case with significant contemporary thinkers who would normally place themselves as far as possible from anti-foundational 'postmodernism'. Rationalists by definition, one would suppose, have faith in the power of the individual rational mind, as they have in rational overarching truth. But on closer consideration this position has its hazards and is potentially contradictory. Pre-determined systems cannot easily be linked to the contingent power of independent minds. Rational minds can in fact only co-exist with a rational world if they discover the true 'codes' and may then with confidence be guided by them, giving up any need to be critical of core assumptions (since the truth requires no scrutiny of assumptions to illuminate it). But if ultimate truth were to prove elusive then rationalists would have nowhere to go – except, that is, to Darwinism and its current interpretation, genetic coding. This, like Rorty's post-analytic pragmatism, manages to combine overarching reason with explanations of human behaviour as

(apparently) free and yet predetermined in the last instance – as does the other guiding principle of the neo-liberal world – economic modelling. And it is *this* that creates the common thread that allows rationalists to occupy the same theoretical space as relativists in our strange and confusing postmodern age.

*Robert Nozick.* To understand this rationalist dilemma a little further let us consider Robert Nozick. Nozick would probably be generally considered as representative of the extreme right ‘libertarian’ wing of the liberal spectrum particularly in view of his famous defense of a libertarian position in *Anarchy, State and Utopia*, while Rorty places himself on the moderate left (against some, but by no means all, of the evidence). Nozick claims in the introduction to his book *The Nature of Rationality*, that ‘rationality provides us with the potential power to investigate and discover anything and everything’<sup>lxv</sup>. Here he clearly means an individual’s powers of reason or ‘inquiry’ – exactly those powers that Rorty denies. But Nozick assumes both aspects of the classic Enlightenment understanding of human reason, as individually attainable *and* as unlinked to time and space, so that context is superfluous. That is, Nagel’s search for ‘eternal and non-local truth’ is still on – the search that he (and Nozick as it turns out) knows will not succeed. The problem is that context is the milieu of consciousness – the site where reason becomes operational, and Nozick (like Nagel) has to face up to the fact that reason de-contextualised is frustratingly unable to reach its envisaged potential. The examples he chooses to illustrate this are the philosophical problems posed by ‘induction theory, the existence of other minds, the external world, and justifying goals’ which, he says, remain intractable<sup>lxvi</sup>. But a little thought will reveal each of these problems to be in effect *created* by its presupposition of unchanging regularity – by *being* divorced from context. Inference

of general laws from particular instances, given the wildly diverse and contingent nature of society and the quantum and relative nature of the natural world, is simply never going to be possible. The existence of other minds and of the external world if seen as the source of knowledge itself, cannot be its end. And it seems wise to agree with Derrida that no goal may ever be entirely justifiable, but nor will the responsibility for taking a decision about it ever be transferable to some outside agency or general principle<sup>lxvii</sup>.

Given then that transcendent reason will not solve these problems Nozick has no way forward to offer – apart from ideas of ‘decision theory’ and ‘game theory’ (discussed above) that he admits to be of limited practical application – except, as suggested, to take Rorty’s route and buy into ‘Darwinian naturalism’. He believes that rationality may in the final analysis be simply ‘an evolutionary adaptation with a delimited purpose and function designed to work in conjunction with other stable facts performing other functions’ which are beyond our power to grasp. At any particular stage in our evolutionary development reason only has to be ‘true enough’<sup>lxviii</sup>. Rationality is therefore, for Nozick, as for Rorty, seen not as an independent capacity – but simply a function like other functions that enable evolution to progress. (‘We shall treat the intentional as a sub-species of the functional’<sup>lxix</sup>) If we were further up the evolutionary scale, this would seem to suggest, we might be able to solve the insoluble and induce the un-inducible, but from where we are we cannot. Nozick is in effect willing to abandon both philosophy and reason at the point where they fail him and (like Rorty and Kuhn) to accept the idea that human thought is ultimately determined and not determining. To find that his politics involve society as ideally determined through economic orthodoxy, is entirely compatible with this outcome.

*Contemporary theories of cognition.* An increasing area of academic debate has recently developed around this putatively 'scientific' nature of knowing. New theories of cognition are burgeoning. For instance Don Ross believes that 'evolution *never* leaves the possibility of developing schemata for organizing universally critical domains to the discretion of individual learning' (original emphasis)<sup>lxx</sup>. And he writes '[s]ome writers (e.g. Churchland 1979 and Gopnick and Meltzoff 1997) insist that our folk-psychological apparatus for interpreting people, including ourselves, as intentional agents is a theory, and one that is almost certainly false in at least its fine details'<sup>lxxi</sup>. Ross toys with this idea himself, believing that 'although some theories may plausibly be biologically installed in typical minds ... ideologies [should be seen as] 'optional software'<sup>lxxii</sup>. (We have at least a modicum of choice as far as our politics is concerned!). Once installed however, a particular ideological 'software package' will make it almost impossible to think otherwise. As Rorty says, a person's 'final vocabulary' entails his ultimate beliefs beyond which is only 'helpless passivity or a resort to force'<sup>lxxiii</sup>.

The conviction implied by all of these positions that science, like the Earth in medieval imagination, is itself a determining centre around which all else must revolve seems to be drawing these thinkers further and further into a web of complex invention induced by this particular unexamined premise. It must be appropriate to call a halt here and ask whether science is really 'the measure of man' or whether it is not perhaps the other way round.

#### 4. Conclusion.

The implications of these positions for the education of students are important if we are to consider philosophy as having its traditional role. 'Philosophy can be foundational in respect to the rest of culture because culture is the assemblage of claims to knowledge and philosophy adjudicates such claims'<sup>lxxiv</sup> as Rorty suggests before he sets about undermining this possibility. This traditional role would seem to be problematic for a Mode 2 educational understanding however. Mode 2 would need both to be able to validate knowledge strongly in order to argue for its effectiveness in any particular context *and at the same time*, to be able to challenge its very roots and re-construct them where and when necessary. Let us consider each of these requirements.

The need to be able to hang on to the role of philosophy as underpinning strong defensible positions is important in the face of prevalent ideas like those of Rorty's fellow post-analytic pragmatist Stanley Fish. Fish may believe that 'having an epistemology' is a slightly absurd and effete notion<sup>7</sup>. However if he tells us that 'First Amendment jurisprudence – filled with words and phrases like autonomy, freedom, the market-place of ideas [and] individual self-improvement' are for him 'either empty and incoherent or filled with a coherence I don't like' then (if we still believe in philosophy) we know a great deal about this epistemology whether Fish sees himself as 'having an epistemology' or not. We know for instance that in this kind of knowing, coherence is indistinguishable from incoherence, and that the foundations of democracy are by that token indefensible. Similarly with Ross who believes that '[h]istory, 'consciousness', 'freedom', 'thought' itself can all, in a tradition partly

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<sup>7</sup> '... your epistemology – should you be odd enough to have one' (Fish S, 1998)



descended from Hegel, denote aspects of reality which to thinkers such as Hume and Smith – and for that matter Descartes [we notice a slight hesitation here in his putting Hume together with Descartes<sup>8</sup>] – are simply impossible objects of reference<sup>lxv</sup>. As a strong believer in the latter empirical rationalism therefore, Ross's epistemology excludes very specific aspects of the human condition as unknowable – and these the ones that particularly concern us<sup>9</sup>.

It is important therefore that students can recognise these philosophical issues and that they can discuss, refute or defend them. If this critical role is not open to the academic community significant figures within it, like Fish and (in the South African context) Ross *as representatives and defenders of prevailing ideas* will entrench the notion that there is no such thing available to their students as critical thought. This is in effect to close the door on Mode 2 thinking in the academy in the name of (confusingly) either nihilism or established certainties. But either will serve as well to keep current disciplines, including economics and genetics, secure, since both prohibit the efficacy of alternative thought. Here we have perhaps located the heart of the tension between current disciplinary knowledge as certainty (or radical uncertainty) and its Mode 2 'other' as education, as thought, as the philosophy of Socrates – famously accused some twenty-three centuries ago of having corrupted the youth by challenging them to think.

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<sup>8</sup> It is worth considering that currently dominant philosophies that find their roots in Descartes and Hume are grounded in a tradition that bases itself on transcendent rationalism and the denial of the provable logic of cause and effect – both being positions that this thesis is at pains to challenge throughout.

<sup>9</sup> This brings us back to the discussion in Chapter 3 concerning the ambivalent philosophical position of Liberalism, and its current association with the thinking of Hume rather than Kant

The resolution of the tension between philosophy as secure and foundational and its death in neo-pragmatism – neither of which will suit our purpose – is to repair to the age-old, but unpopular, solution of relativism. This position is one that the philosopher Joseph Margolis suggests has been shamefully neglected for the last two and a half millennia since Plato and Aristotle persuaded us, on fairly flimsy grounds, that Protagoras was wrong.

The marvel is ... that the whole history of Western thought has been arrested on this single pivot for at least twenty-five hundred years and that, although it cannot be supposed to be the single most important conceptual dispute confronting the human race, it is a most strategic issue implicated very centrally in nearly every question that *is* thought to be philosophically essential. Vindicated, relativism has the force of deepening, in the most profound way, every incipient doubt regarding the presumptions of cognitive fixity, certainty, unconditional truth, irrelevance of context and history and personal and societal perspective in both theoretical and practical matters – hence, of course, regarding the timeless reliability of specialist pronouncements on the grand Truth of anything – once and for all<sup>lxxvi</sup>.

Margolis also reminds us that ‘the prevailing philosophical winds ... are blowing more and more favourably in relativism’s direction than was ever true in ancient Greece’<sup>lxxvii</sup>. The discoveries of science itself over the last century [think of relativity, quantum mechanics, chaos theory] allow that ‘there is certainly no consensus *now* that it is either incoherent or wildly unreasonable to suppose that the real world has no fixed structure’<sup>lxxviii</sup>. But this does not entail at all that there is no truth. It can be seen rather that ‘[o]rder does not require or entail unconditional invariance, not at the level of the real structures of the world, and not at the level of the conditions of our understanding and intervening in the world’<sup>lxxix</sup>. Again

'[t]he robust relativist *shares* with the opponents of relativism the ordinary alethic options of bivalent and many-valued truth-values: his distinction rests rather, in theorizing that, in this or that sector of inquiry, the intelligible world can coherently support truth-claims that, on a bivalent model, would yield inconsistency and self-contradiction'<sup>lxxx</sup>.

Margolis also contends that opposition to relativism is a form of 'benign blackmail'. We do not want to accept relativism because it seems to threaten chaos – but this is not an acceptable philosophical argument. 'We have been whistling in the dark these many years, pretending to draw our strength from an invariant order of norms and natures that we cannot confirm'<sup>lxxxi</sup>.

From the standpoint of 'Mode 2' education this is clearly a supportive, indeed a necessary, philosophical position to adopt. Critical consciousness if it is freely to question assumptions in collaboration with other thinking from other paradigms must start from this position or be forever fettered by some prior and superior 'truth'. It is a position allowing contingent circumstances and feedback systems to be taken into account, historical and cultural variances to be acknowledged and yet it does not preclude truth *within* context, nor does it argue for any irreducible differences. It is the position implicitly taken by Professor Lewontin (on whose knowledge of genetics this thesis has drawn extensively) when he says:

There are many things in the world that we will never know and many that we will never know exactly. Each domain of phenomena has its characteristic grain of knowability. Biology is not physics, because organisms are such complex physical objects, and sociology is not biology, because human societies are made of self-conscious organisms. By

pretending to a kind of knowledge that it cannot achieve, social science can only engender the scorn of natural scientists and the cynicism of humanists<sup>lxxxii</sup>.

As educators we need the disciplinary expertise of a range of specialists including crucially at present economists and biologists. But a Mode 2 philosophical approach of 'robust relativism' would free the disciplines' experts, their students, and the concerned public, to think about them more constructively, more broadly and more modestly. If disciplinary roots are seen to be strong this strength can be defended – if not it can be challenged. It will be apparent here that this is a position entailing individual responsibility<sup>10</sup>.

If the full *ontological* implications of a 'Mode 2' approach to both education and philosophy appear increasingly to be Margolis's idea of relativism then the full *ethical* implications of this will involve an equivalent role for individual human responsibility best captured by the two twentieth century philosophers Emmanuel Levinas and Jacques Derrida. For Levinas reason is not required to justify ethics which precedes it, and his idea of moral consciousness is, like Derrida's, not as a moral code or branch of philosophy but as 'a way that disrupts traditional moral thinking and all claims to good conscience'<sup>lxxxiii</sup>. There will be no 'grail' which will tell us what it is to be human. We will need to interpret that for ourselves. Derrida puts it this way:

Good conscience as subjective certainty is incompatible with the absolute risk that every promise, every engagement, and every responsible decision – if there are such – must run.

To protect the decision or the responsibility by knowledge, by some theoretical assurance, or

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<sup>10</sup> If analytic philosophy's inability to get beyond language is (typically) a fascinating and frustrating conundrum, the impossibility of all philosophy, of all thought, to imagine that it can get beyond (thought) itself is surely of deeper significance.

by the certainty of being right, of being on the side of science, of consciousness or of reason, is to transform this experience into the deployment of a programme, into a technical application of a rule or a norm or into the subsumption of a determined “case”. All of these are conditions which must never be abandoned of course, but that, as such, are only the guardrail of a responsibility to whose calling they remain radically heterogeneous<sup>lxxxiv</sup>.

It would seem therefore that the second half of the twentieth century did produce two thought systems capable of overcoming its own particular cul-de-sacs of knowledge. Margolis’s recovery of relativism from the limbo in which it had remained since Plato, frees educators for the formidable but ultimately rewarding tasks involved in Kant’s injunction ‘*aude sapere!*’ – dare to know. And Derrida’s conception of individual human responsibility, like Levinas’s, takes us beyond language as the perceived single vehicle of thought into the ‘space’ of interconnectivity in Derrida’s *differance*<sup>lxxxv</sup> and the pre-rationality of Levinas’s ‘face of the other’<sup>lxxxvi</sup> – in which meaning, and ethics, are born – a philosophy for the twenty first and subsequent centuries perhaps<sup>1112</sup>.

It is therefore Margolis’s contribution that would seem to be fundamental in that it destabilizes and opens up for rethinking all the invariances of thought that have constrained us for the last two and a half millennia – without at the same time undermining any of the *justifiable* knowledge that we so badly need and have so

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<sup>11</sup> There does need to be a caution here. We have not yet perhaps acquired the tools that will make this philosophy possible. As Margolis says ‘whatever can be *distributively* claimed about the world and our discerning powers cannot be disjoined from the linguistic categories in which they are framed’ (Margolis 1991, p198). But it is equally clear that knowing exceeds and precedes language. Like nuclear fusion this conundrum awaits elucidation.

<sup>12</sup> Here is surely one of the ironies both of contemporary philosophy, and of the boundaries set by disciplinary knowledge. Rorty, who denies philosophy its traditional role and hands this over to literature, is being heeded by philosophers but not by English scholars. But Literary Studies have claimed Derrida as their own, whose message involves the intuition of meaning itself – even beyond its restriction within language.

painstakingly acquired. The potential philosophical and social implications of this, essentially educational, approach are best captured by Margolis himself.

I regard the defense of relativism as a strategic part of a much larger philosophical venture that is likely to collect the strongest currents of the end of the century and to dominate the best thinking of the new century. I say the "best" thinking because my own comfortable cynicism sees the world bent in the most determined way on deepening everywhere the influence of every benighted vision imaginable; at the same time the planet is being utterly used up. So the "best" thinking is desperately needed. The larger venture is one of producing a conceptual vision (or any number of such visions) of our place in the world, coherent and humane, at the same time it discards, one by one, every last trace of the (grand, pretended) invariances – the perennial truths – of ultimate reality, knowledge, thought, rationality, virtue and value, logic, science, intelligibility and the rest that have falsely reassured us all the while we disorder the planet<sup>lxxxvii</sup>.

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<sup>i</sup> Rorty R 1998 *Achieving Our Country* (Cambridge, Mass: Harvard University Press) passim

<sup>ii</sup> Margolis J 1991 *The Truth about Relativism* (Oxford: Blackwell) p8

<sup>iii</sup> *ibid* p xi

<sup>iv</sup> *ibid* p5

<sup>v</sup> *ibid* p12

<sup>vi</sup> *ibid* p6

<sup>vii</sup> *ibid* Dedication.

<sup>viii</sup> Mouffe C (ed) 1996 *Deconstruction and Pragmatism* (London: Routledge) p16

<sup>ix</sup> Rorty R 1980 *Philosophy and the Mirror of Nature* (PMN) (Oxford: Blackwell) p8

<sup>x</sup> *ibid*

<sup>xi</sup> *ibid* p10

<sup>xii</sup> *ibid* p228

<sup>xiii</sup> *ibid* p210

<sup>xiv</sup> *ibid* p22

<sup>xv</sup> *ibid* p51

<sup>xvi</sup> *ibid* p31

<sup>xvii</sup> *ibid* p25

<sup>xviii</sup> *ibid* p26

<sup>xix</sup> *ibid* p32

<sup>xx</sup> *ibid* p69

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- xxi *ibid*  
 xxii *ibid* p71  
 xxiii *ibid* p210  
 xxiv *ibid* p315  
 xxv *ibid* p347  
 xxvi Lewontin R 2000 *It Ain't Necessarily So* (London: Granta Books) p93  
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 xlii Rorty PMN p372  
 xliii *ibid* p263  
 xliv *ibid*  
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 xlix Rorty PMN p33  
 l Rorty CIS p13  
 li *ibid* p40  
 lii Rorty PMN p354  
 liii *ibid* p347  
 liv Rorty CIS p6  
 lv *ibid* p16  
 lvi *ibid* p17  
 lvii Kuhn T S 1996 *The Structure of Scientific Revolutions* (Third Edition) p8  
 lviii *ibid* p204  
 lix *ibid* p384  
 lx Rorty PMN p387  
 lxi *ibid*  
 lxii Orwell G 1990 *Nineteen Eighty-Four* (London: Penguin Books) p84  
 lxiii Rorty CIS pp176 - 177  
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 lxv Nozick R 1993 *The Nature of Rationality*. Princeton: Princeton University Press p xi  
 lxvi *ibid.* p xii  
 lxvii Derrida J 1993 *Aporias* Stanford: Stanford University Press  
 lxviii Nozick p123  
 lxix Rorty PMN p32  
 lxx Ross p8  
 lxxi *ibid* p7  
 lxxii *ibid* p20  
 lxxiii Rorty CIS p73  
 lxxiv Rorty PMN p3

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- lxxv Ross p5  
lxxvi Margolis 1991 *The Truth About Relativism* (Oxford: Blackwell) p2  
lxxvii *ibid* p5  
lxxviii *ibid* p4  
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lxxxiv Derrida J 1993 *Aporias* (Stanford: Stanford University Press) p19  
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lxxxvii Margolis 1991 p ix



## CONCLUSION

My original research question was the one all thinking South Africans must have asked themselves not only once but hundreds of times, in the months (and now years) since we became a democracy: ‘whatever happened to transformation? – and for that matter to democracy?’ The answer seemed at first to be economic, but perhaps with educational and even ethical extensions that fed back to economics: ‘We are a poor country. There isn’t the money for the social projects we would like to put in place. And then of course we don’t have the trained people. And there is the endemic corruption and crime, which will further inhibit foreign investment’. All of this suggested that we were locked into a system and one designed to crush us. And this is in fact exactly what the research has revealed. We *are* locked into a system and one designed specifically to crush us! But it turns out to be a system of thought and not of economics – one designed in the nineteenth century, but with roots going back to Plato.

Thought, however, is not the province of economists, and therefore while the problem presented itself at first as economic it has turned out to fall more within the province of education, as the encouragement of productive thinking, and finally of philosophy, as thought’s arbiter. And education, it appeared, was currently brimming over with useful ideas for the unsettling of entrenched thought systems – only these had no teeth so long as the existing thought systems themselves had all the power on their side. And if this began to sound like a tired Marxist argument, it soon became clear that a Mode 2 critique could make as short shrift of Marxism in its determinist mode as it could of ‘invisible

hands', 'the survival of the fittest' or 'DNA coding' as the determining mechanisms of humanity. But having caught the beast and tied it down, what to do with it? It is an educator's role to make thinking happen – but not to suggest better systems of thought to replace any that they may have unsettled. If the problems with disciplinary knowledge, as it currently exists, were readily exposed by a Mode 2 type of investigation, it still required discipline specialists themselves to suggest better ways forward and ultimately philosophers to critique the soundness of these alternatives. In this case it appeared that all the specialists needed were currently available. Jonathan Jansen, Linda Chisholm and Ruth Jonathan in Education itself; Paul Ormerod (drawing liberally upon John Maynard Keynes) and Harry Shutt in Economics; Steven Jay Gould, Richard Lewontin and Richard Strohman in Biology (amongst many others that the research did or did not track down) all independently presented ways ahead in their respective fields that drew upon other disciplines, that were reflexive, critical, holistic and democratic – in effect entirely in line with a 'Mode 2' educational approach. (Only this barbarous term itself would still seem to await revision!). It is not in the nature of critical thought however to suggest that these or other 'experts' will ever have conclusive answers. The research itself is far from making any such claim. Appropriate and not conclusive answers must be what critical thinkers claim within the human sciences – and these answers will always be open to revision in new circumstances.

But beyond this lay the even more intractable terrain of Darwinist determinism. The more sophisticated our understanding of the chemistry and electronics of knowing, the more difficult it would seem to be to imagine that ultimately this would not encompass

all there is to knowing – that is consciousness itself. *The Origin of Species* allowed it and DNA awarded it! But not very convincingly in either case, as it turned out. This ontology suggested both invariance at the level of the species, or system, as a whole and indeterminacy at the individual level – precisely the philosophy of Richard Rorty – increasingly the spokesperson for current Liberal thought. But the philosophy of Joseph Margolis tells us that the opposite is the more convincing and indeed practical and pragmatic way of seeing ‘what we can know’. We can know nothing invariantly – but at the local and particular level we can know a great deal – an ontology to allow disciplines to speak to other disciplines, and appropriate policy to be implemented without deferring to systems and expertise beyond our ken.

But what of epistemology? Here the origin of our species itself had, we find, been theorised by Eugene Marais almost a hundred years ago (on the basis of impeccable scientifically-based research) to have turned on this very point of consciousness. Independent thought itself (put philosophically, an epistemology of individual critical consciousness) he believed, was what had given us the evolutionary edge. And this was an idea to be vindicated at the turn of the twenty-first century, again in the Southern tip of Africa, not too far from where Einstein proved the curvature of space. Caves close to Knysna on the eastern coast of the Cape Province revealed that the human species – our direct ancestors – were making ever more sophisticated tools and even the beginnings of art and adornment one hundred thousand years ago. No other species could begin to match this ability. We in fact came out of Africa and colonised the world because (as

Marais had suggested) we could think on the instant and act collaboratively<sup>i</sup>. Whether we will retain our place here perhaps turns upon this same ability.

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<sup>i</sup> 'Ape-Man: Adventures in Human Evolution' *BBC World* documentary series, screened in South Africa October - December 2001.

## ADDENDUM

## A Mode 2 Imperative in Commerce Curricula?

*The Current Curriculum in Commerce.* Commerce Faculties are currently the largest, richest and fastest-growing in South Africa, but their curriculum has come to reflect the very particular interests of the time quite narrowly. As the ‘new economy’ came to dominate the ‘real economy’, and the object of business became finance, the nature of preparation for a business career came to focus specifically on financial management and financial expertise – on ‘earnings per share’ above profit *per se*. People were needed who could produce figures attractive enough to encourage investors – and accountants became increasingly important. People were needed to weigh and balance the most cost-effective means of producing goods in situations of increasingly cutthroat competition – and managerial accountants became important. Auditors’ roles became more ambivalent when they were asked to provide a range of financial advice beyond their primary role of scrutinizing the accuracy and transparency of the figures. Specialists were needed to manage, and if possible avoid, tax, and to predict the future risks involved in various investments – so tax specialists grew in numbers and actuarial science became the elite discipline – more popular with top academic achievers now than medicine. And the management of business itself, rather than management of a particular business, became possible only when a company’s finances outweighed its productive activities in importance.

Therefore as Faculties of Commerce have expanded their intakes they have also directed their curricula very specifically towards producing graduates with expertise in Accounting, Managerial Accounting, Tax, Auditing and Finance with especially high academic requirements set for acceptance into Actuarial Science. Economics (while compulsory) stands, with Organisation and Management, one notch below Finance in the hierarchy of subjects studied and both are taken at third year level in the University of Natal only by those intending to specialise in them. The majority of students will hope rather to take the 'Big four' – Financial Accounting, Auditing, Managerial Accounting and Tax in their final year. Here neither real goods (only 'widgets') nor real people (only 'unit labour costs per hour') are the first focus of study. But, perhaps more significant still is the lack (up till now<sup>1</sup>) of courses that provide specific contextualisation, historical perspective or critique of these disciplines themselves.

This need for critique is important when you consider that 'creative accounting' was an increasingly significant feature of the 1980s as competition grew to present finances in the most flattering light possible – that is until the practice was exposed by Terry Smith in his book *Accounting for Growth*<sup>i</sup>. After this shareholders and the general public demanded greater accuracy and transparency – and the rules were tightened up. This climate of critique has continued in the UK where new accounting practices are subjected to rigorous review<sup>ii</sup>. But this is less the case in South Africa, where, despite priding itself on its very high academic requirements for entry into the top ranks of the profession, the Accounting profession, in the main, decides and the public concurs. In marked contrast

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<sup>1</sup> It is my special task to oversee the establishment of an appropriate foundation course for the Faculty – a task that is in its infancy as I write. Whether this will become a genuinely critical course or one which

to the UK, professional accounting exams also largely fail to address contentious issues or the implications of current practice. But at least every major University (except the University of Natal, Durban) has a copy of *Accounting for Growth* in its library. Only one university however (Rhodes) has a copy of probably the most readable and challenging book to question orthodox economics: Paul Ormerod's *The Death of Economics* on which I have drawn extensively in this thesis<sup>iii</sup>. Both authors are successful British businessmen. Ormerod has been a visiting Professor of Economics at London and Manchester and was for many years the head of the Economic Assessment unit at *The Economist*<sup>2</sup> as well as having served in the early years of Margaret Thatcher's government. He was also one of the many economists who participated in the ANC's Macro Economic Research Group (MERG) in the early 1990s. Clearly these authors would not want the western economic system to fail, nor to be exposed as having such shaky foundations as might cause it to fail. But the exposure of shaky foundations might very well be needed to allow it to *continue*. Familiarity with the nature of these foundations would seem to be a necessary requirement to ensure the continuing strengths of any discipline into the future. Interestingly, it looks as if just such a focus on foundations *is* beginning to impinge upon the status quo whether the academics concerned fully recognise it yet or not.

*The Educational Imperative.* The increasing dissatisfaction of business and commerce with the current curriculum, along with its unacceptably high failure rates (even at the

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serves simply to increase the linguistic and logical skills of our students remains to be seen.

<sup>2</sup> Ormerod's background is similar to Harry Shutt's (whose book *The Trouble with Capitalism* I have also drawn on in many places). Shutt is cited in that book as 'an international economic and business consultant' and 'a former Senior Research Consultant with the *Economist* Intelligence Unit'. He is more pessimistic

country's leading universities) have begun to cause serious anxiety within commerce faculties themselves – a concern that is becoming more urgent now that South African government funding is potentially linked to 'throughput' of students. The problem has resolved itself into the educational question 'why are our students not learning?' Answers have been sought firstly through a focus upon language usage – the understanding being that students are deficient in written and verbal language skills. But the linguistics educators who are drawn in to advise necessarily also consider the construction of meaning within commerce discourses, and this begins to probe the nature of the discourses themselves and their significance for those who are required to learn them<sup>3</sup>. Better reasoning skills are also increasingly being called for and as a consequence philosophers are asked to present courses, but the best philosophy courses in critical reasoning will involve a consideration of the significance of critical thought itself<sup>4</sup>. The natural aptitude for commerce disciplines (or the lack of it) of individual students is also under scrutiny, and a plethora of aptitude testing techniques are being developed, with certain educational psychologists focussing exclusively upon the acquisition of Accounting knowledge<sup>5</sup>. But these necessarily also address the wider contextual and social implications of measuring aptitude and the nature of the tools they need to employ. In fact all of these specialist educators have supreme difficulty in containing their advice within disciplinary commercial knowledge as they find it, and all suggest that learning

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than the other two about the economic system as a whole, but he nevertheless also seeks practical ways to maintain a viable western economic system and not ideological ways to destroy it.

<sup>3</sup> For instance Moragh Paxton, language director for the Commerce Faculty at the University of Cape Town is working on a doctoral thesis entitled 'Appropriating new discourses: the intersection between academic curriculum and student voice in a first year economics class'

<sup>4</sup> The new philosophy course to be offered to the University of Natal's elite Business Science students will address not only current logic as understood in analytic philosophy – but also the philosophical tradition of critical thought since Socrates.

<sup>5</sup> For example Denise Faller of THORT and Dr Maretha Prinsloo of Magellan Consulting in Johannesburg



facts and making calculations in an unexamined practice is asking an almost impossible task of students. However it remains true that in November 2001 this critical approach to education has not been able to find more than a toe-hold in commerce faculties in South Africa as yet. In my experience only Denise Faller's spectacularly increased success rates in postgraduate Accounting amongst black students is causing more serious re-thinking. As a cognitive expert employing linguistics and psychology to enhance critical thinking skills she is now involved as an advisor at the highest levels of assessment for the South African Accounting Board examinations<sup>6</sup>. From the point of view of the purity of disciplinary knowledge therefore the barbarian educators are at the gates, but probably only Denise has thus far been granted a seat at the table.

The principal factor continuing to inhibit the questioning of the disciplines' own assumptions of knowledge would appear to involve an ideological barrier that, like the Berlin Wall or the Apartheid State before 1989, might seem to be indestructible without warfare. But the interesting thing is that where the chinks are already appearing these are not being made by ideologues but by practical educators. To an educator, to question the core assumptions of the neo-liberal economic and political system, its knowledge of human nature and the nature of its proposed solutions to social, political and economic problems, suggests simply better ways of teaching and learning, not to mention the flooding in of common sense. The educator, like myself, with an added political interest in transformation, and any good Rawlsian or Appian liberal democrat, would see further

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<sup>6</sup> Denise's recent appointment as advisor to the Public Accounts and Auditors Board (PAAB) assessment committee clearly involves a classic Mode 2 situation. As an outside cognitive consultant her proven expertise is being used by a professional body for the improvement of its practice in conjunction with input from the academy.

that Mandela's original vision of peaceful transition to reason, justice and fairness can only outlive his own too easy capitulation to orthodoxy, if orthodoxy itself is up for scrutiny. 'The business community worldwide' need not (should not) in fact be seen as the final arbiter of truth.

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<sup>i</sup> Smith T *Accounting for Growth* 1996 (London, Century)

<sup>ii</sup> Interview with David Oakes, Senior Lecturer in Accountancy at the University of Natal concerning his extensive experience in accountancy and accountancy teaching in the UK.

<sup>iii</sup> Information obtained from University of Natal Inter-library loans 2001

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