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6. THE IDEALISATION OF APPRENTICESHIP[1]

INTRODUCTION

The past few years have seen a major resurgence of interest in vocational education generally and apprenticeship specifically. This is true for South Africa, where the research in this volume is focused, but equally true in other countries around the continent and elsewhere in the world. The reasons for this renewed interest are manifold, and dependent to some extent on context. One of the reasons focuses on a growing interest in the relationship between knowledge underpinning work, and the best ways in which people learn and apply knowledge to work situations. How a curriculum is designed in order to equip people for work through the appropriate transfer of knowledge and skills sits at the heart of educational and policy debates. The idea that the best way to prepare people for work is through exposure to the workplace has increasingly become the new consensus, for the classical trades and also for professions (Gamble, 2001). One of the oldest forms of this workplace-based education mode is the apprenticeship system, and it is this particular model that is examined in this chapter.

Apprenticeships locate the primary site of learning in the workplace, under the guidance of a master or mentor. This model, arguably, enables the apprentice to pick up the knowledge, skills, and dispositions required to master the tasks associated with the specific work process by immersing the learner directly and deeply in productive activity. It is a model with deep roots in many cultures and is possibly the oldest form of vocational training, in that all societies have at some point passed on skills and knowledge to the next generation through a process of slow immersion in the task under the guidance of an elder. Its centrality to most effective vocational education systems suggests that it is effective in facilitating the transfer of knowledge and skills most relevant to the workplace.

The idea of apprenticeship has not, however, evolved in a similar fashion in every society. Therefore, when the concept is used in policy and political pronouncements, or is borrowed across contexts, it needs to be carefully considered in terms of its institutional setting and how it aligns with local understanding of the concept (Turbin 2001). That apprenticeships have worked well in the past, or work well in other contexts, does not necessarily address the appropriateness and effectiveness of this pedagogical model in preparing students for the tasks they need to perform and for learning the knowledge they need to master in their local context.

This chapter sets out to examine how the institution of apprenticeship has evolved in a specific context drawing on an expanded Cultural Political Economy framework (Sayer 2001). By examining how the concept of apprenticeship has evolved over time in South Africa, the chapter seeks to illustrate the complex relationship between education and the labour market, and how this is always embedded in historical, economic, political, institutional and cultural processes, many of which fall outside the fields of knowledge, education or work. The chapter concludes by making a case for the centrality of contextual institutional analysis as an important parallel line of enquiry alongside pedagogical, curriculum and knowledge debates in understanding education and work.

THEORETICAL FRAMING AND METHODOLOGY

The chapter draws on the historical sociology tradition as its overarching approach (Collins, 1979; Elias, 1978). It is a tradition that holds that much contemporary sociological analysis does not pay sufficient attention to the historical processes that led to particular social formations. Critical to understanding formations is exploring the sociogenesis of a particular phenomenon over the *longue duree* so that one can make sense of the ways in which particular patterns have emerged over time. This is particularly important because much contemporary policy analysis and policy development looks at the immediate context and often searches for best practice in other settings, without understanding the ways in which the context has been shaped over time (Elias 1987). This orientation aligns with new institutionalist perspectives on organisations and institutional processes (Scott 2008).

The analytical concepts that I draw on are from the work of Susan Robertson and Roger Dale and their reworking of Cultural Political Economy into Critical Cultural Political Economy of Education (CCPEE) (Robertson & Dale, 2015; Sayer, 2001). CCPEE provides a set of lenses through which social formations and their social relations and subjectivities, in our case the education ensemble that constitutes apprenticeship in South Africa, can be examined and the mechanisms and processes explored. Instead of the classical political economy perspective, which gives pre-eminence to the economic base, CCPEE adds a cultural and educational dimension to understanding policy and practice from a critical theory axiological, and critical realist epistemological, vantage point. In addition, I examine the institutional dimensions through the regulative, normative, and cultural-cognitive systems that shape them (Scott 2008). This allows me to examine the ways in which the institution of apprenticeship as understood in South Africa has emerged through mechanisms and

processes related to each of the elements (cultural, political, economic and educational). Before exploring the different dimensions of apprenticeship drawing on these lenses it is necessary to provide some of the historical detail of the development of this ensemble.

THE CASE OF APPRENTICESHIP

Learning by observing and working with an expert in order to master a set of skills associated with a task or role is probably the oldest deliberate form of vocational education and has been present since hominids started living in social groups. There is substantial evidence that pre-colonial African societies made use of this pedagogical technique. In South Africa however the practice of apprenticeship as understood today can be most directly linked to the arrival of European settlers and the institutionalisation of those practices, rather than the traditions of pre-colonial African society (Adeyemi & Adeyinka, 2003). Consequently, apprenticeship is imbricated into the colonial and racialised social structure that flowed from the arrival of the European settlers (Kallaway & Swartz, 2016).

To illustrate this point, consider an undated pamphlet promoting the concept of apprenticeships produced by the South African Department of Labour.[2] In the section on what an apprenticeship is it states the following:

> The apprenticeship [sic] was born hundreds of years ago (the Middle Ages) in other countries, when young people worked under a master craftsman to learn trades. This was a form of inexpensive work in exchange for learning and the young men often lived in the craftsmen's houses. Women were taught in [sic] embroidery and silk-weaving.

The pamphlet then makes the extraordinary temporal leap from the Middle Ages to the 1980s when the basic structure of the current apprenticeship system was apparently put in place by the Manpower Training Act of 1981. No mention is made (perhaps understandably so in a promotional pamphlet) of the racially restricted nature of apprenticeship that existed at that time. The reality is of course far more complex. What is omitted in this account is that from the arrival of the first European settlers in the 1600s to the 1980s, South Africa and all its social institutions were shaped by the forces of colonialism and (more recently) apartheid. These two phases are discussed in more detail below, followed by a discussion on developments in the period after the formal end of apartheid.

The first recorded references to apprenticeships in South Africa are enmeshed with slavery and the emancipation of slaves in 1833. In addition to general manual labour, much of the artisanal and skilled labour in the Cape Colony from the second half of the 17th century was done by slaves, and many slaves were highly skilled at carpentry and other trades. Over 60 000 slaves were imported into the colony from various parts of Africa and Asia, their geographic point of origin often linked to a particular type of skill or apparent characteristic (Harries, 2000). For example, slaves from Mozambique were prized as field hands, whereas skilled artisans were sourced from Asian parts of the Dutch empire. The offspring of European and slave liaisons were particularly prized as slaves and were given additional training (Giliomee & Mbenga, 2007). Indeed, the first formal school in the colony was for slaves (SA History Online, 2011). In 1775, during a period of labour shortage, the concept of apprenticeship was introduced to allow slave owners to 'apprentice' till their twenty-fifth year the children of male slaves and free Khoisan or Hottentot women. As labour pressures increased, this practice was extended to include any 'Hottentot child'. These practices were abolished in the late 1790s, but they were reintroduced with respect to free 'coloured' (mixed race) children between the age of eight and eighteen if they were deemed to be destitute or orphaned – or simply if they had grown up on the employer's farm (SA History Online, 2011; Feinstein 2012). Right from the start, apprenticeship in South Africa was a coercive and exploitative relationship rather than a benign relationship between a master craftsman and a novice. Furthermore, it varied across this period, depending on supply and demand in the local economy, as well as international social and political dynamics.

When the emancipation of slaves was promulgated by Britain in 1833, the skilled labour market was disrupted. Delays in enactment of this legislation in the Cape Colony were a direct result of the resistance to the imposed abolishment of slavery. The ensuing crisis resulted in significant social upheaval, including the migration of farmers out of the colony, who continued to enslave local people for some time after the British emancipation (Eldredge & Morton, 1994). There was concern that skilled slaves would withdraw their skills or increase costs (through wages and charges for labour) in a manner that would make many enterprises unviable. Consequently, the colonial government passed legislation that effectively converted the slaves into indentured apprentices, thus replicating many of the features of the slave system, including the passing-on of workplace skills from one generation to the next (Feinstein 2012: p.52-53). In addition, the British enforcement of the ban on slavery through patrolling the oceans had the perverse effect of ensuring a supply of 'liberated' slaves from captured slave ships to the Cape. These supposedly freed slaves were immediately indentured for periods of fourteen years and longer to local employers (Eldredge & Morton, 1994). Furthermore, this practice was continued in the Boer republics into the 19th Century through forms of child indenture. Where local labour was not available or could not be coerced, such as in Natal and the Witwatersrand, indentured labour was imported

from India and China (Feinstein 2012). These systems essentially ensured a continuation of the slave labour economy long after it had been formally abolished, and early forms of non-monetary payment of indentured labourers continued well into the twentieth century.

Over time, the former slave population predominantly became a part of the disparate groups that became known as 'coloureds' under apartheid race classification, and the tradition of apprenticeship remained stronger in this community than in any other. As E.G. Malherbe (1977:163) notes: 'For almost fifty years before 1900, bricklaying, plastering, painting, decorating, engine cleaning, shoemaking, tailoring, carpentry and masonry were in fact widely considered only fit for coloured men and overseas workers.' The concept of apprenticeship thus has a link in the Cape to the racially structured labour market that emerged in part from a system that depended on slavery for its artisanal skills. However, the institutionalisation and shape of the modern apprenticeship system is not directly connected to the history of slavery and has more to do with the overseas workers Malherbe mentions.

The second phase wherein apprenticeship started emerging as a distinct feature of the skills system was during the mineral revolution. The discovery of diamonds in 1867 and gold in 1886 transformed southern Africa from a predominantly small-scale agrarian economy to one that rapidly industrialised and urbanised (Marks & Trapido 1988). The skills needed to service both mining and the associated industrialisation process (including an extensive rail network) were not locally available. Technical expertise was needed, particularly when the gold mining shifted from alluvial mining to very deep levels. The expertise was initially imported from England and global migrant miners who had been moving from one mineral discovery to another throughout the world (Hyslop, 1999). However, that supply of skills dried up during the First World War and so a local supply had to be found, resulting in the establishment of the first technical schools (McGrath, 1996). This heralded the birth of the formal technical and vocational system in South Africa, and also saw the development of regulated trades and – eventually – trade tests. However, it was a highly contested space in which emergent white unions aligned themselves with Afrikaner nationalist movements in order to protect the privileges of white workers, against the mine owners' desires to drive down costs by using whites primarily in supervisory roles and recruiting unskilled black labour (Feinstein 2012). Worker solidarity was trumped by racial solidarity and the apprenticeship system, particularly in the mining-related trades, was racially restricted and officially controlled through a series of regulations between 1918 and 1930 (although there remained some provisions to accommodate coloured artisans). Furthermore, in industries that had occupations which were not officially restricted, other requirements such as educational levels were used as a barrier to entry. The 1922 Apprenticeship Act specified a minimum school level of Standard IV, when less than 2% of the black African population had access to that level of education (Feinstein 2012: p.77). Direct or indirect job reservation continued until the 1960s with the 1951 Native Building Workers Act prohibiting Africans from undertaking skilled building work outside their own areas, and the 1956 Industrial Conciliation Act providing for the extension of job reservation to any skilled or semi skilled work, despite the increasing shortage of white labour to meet the needs of the expanding economy (Feinstein 2012: p.157).

Throughout this period, the form of apprenticeship was largely regulated by the duration of the training rather than the competence acquired, with the most significant reforms being the introduction of (initially optional) trade tests in the 1950s and an option of shortening the period of apprenticeship through an earlier test added in the 1960s (McGrath, 1996). However, the economic growth in South Africa in the middle decades of the twentieth century placed enormous pressure on the supply of skills. One of the mechanisms to address this was by giving the registrar of the national apprenticeship system the power to grant certification to those who could demonstrate competence through experience or the trade test without having come through a formal apprenticeship. Despite this, with the expansion of the economy and the improvement in the general wealth of the white South African population, the trades and their linked apprenticeships became less popular and there was increasing pressure from employers to either import skills (which would be expensive) or to open up access for blacks to the racially restricted trades (Posel 1991). Political pressure from employers, and internal and external pressures to accommodate a growing urban black aspirant middle class, eventually forced the government to make concessions and open up the trades to black Africans.

Concern with the poor level of knowledge demonstrated by apprentices resulted in the progressive evolution in the 20th century of a relatively effective dual training system in which bonded apprentices would get their theoretical training at a college while gaining the practical training attached to a master at a workplace. Despite the dual requirement of college-based courses and work practice, the apprenticeship system remained largely time-based and linked to historic occupations in the building, furniture, mining and engineering-related trades as these were the areas of the local economy that had needed skills. As the economy became more diversified the apprenticeship system remained quite narrow in its orientation. Unlike in European countries that used a similar system across a wide range of occupations, South Africa's apprenticeships (with the exception of hairdressing) were formally restricted to engineering-related trades (electricians, millwrights, boilermakers etc.) that supported the mining sector, as well as trades linked to construction, to the automotive sector and to manufacturing.

For a variety of international and local economic and political factors, in the last quarter of the twentieth century this model came under increasing pressure. The student and worker uprisings of the 1970s resulted in a number of commissions that proposed reforms to the education and training system. The reforms were enacted through the 1981 Manpower Training Act and established a new employer-directed system that included the National Manpower Commission, the National Training Board (NTB) and industry-specific training boards (ITBs). During the 1980s these bodies commissioned studies, including an investigation into the training of artisans.

The 1985 NTB and the Human Sciences Research Council (HSRC) investigation into the training of artisans detailed the state of apprenticeships, and the report painted a highly problematic picture. Apprenticeships were primarily time-based (between three and five years) with some theoretical training in colleges and the remainder consisting of on-the-job training which was often unstructured and unsupervised. The quality of the training and the resultant artisans was perceived to be poor, with many apprentices expected to learn simply by observing, often being treated as cheap labour and not being exposed to the full spectrum of the trade. The report advocated a major shift to an institution-based training system with a modular curriculum that emphasised performance over time (Kraak 2004).

Other pressures were also playing themselves out at the time. By the mid-1980s the economy was in decline, due in part to economic sanctions. A state of emergency had been declared and trades unions had taken on the mantle of leading the resistance against apartheid more generally within the country. The reform processes slowed as the state battled to retain control, and the findings of the NTB/HSRC study were not acted on immediately. The artisan training system went into a rapid decline between 1985 and 1990, with the number of engineering apprentices passing the trade test declining by half from 13 500 in 1985 to 7 000 in 1990, and halving again by 1996. This decline was the outcome of a number of factors, but probably the major reason was the decentralisation and privatisation agenda that had been advocated by the Riekert and Wiehahn Commissions in 1979. This policy direction, which was influenced by the global economic models now known as neoliberalism, saw the progressive retreat of the state from the training landscape and the unbundling and privatisation of key state companies in sectors such as transport and logistics, energy, and steel. In a time of economic decline, industry tends to prioritise profits over training. Indeed, it was these large state corporations, along with local government, that had accounted for the vast majority of apprenticeships – and these were increasingly cut. This decline in the apprenticeship system did not result in a shift in focus to other forms of vocational education. As Andre Kraak (2004) notes, the prominence given to apprenticeships at a time of decline (not just in South Africa) of the old craft-based model resulted in a failure to focus on other skills at other levels, and allowed employers to avoid the larger problem of the entire workforce and its skills needs.

For the educational institutions that had provided the theoretical component of the apprenticeship system, the decline in the number of apprentices spelled disaster. In order to justify their existence, the colleges started enrolling students onto the theoretical component of the artisan training programme (the so-called N or NATED courses)[3] without their having to be indentured apprentices. This resulted in a growing number of graduates leaving colleges with national certificates and no practical or work-based experience, and consequently unable to take the trade test.

With the coming to power of the first democratically elected government in 1994, education reform went into overdrive as the old apartheid-based education system had to be dismantled and replaced by a new system that reflected the new institutional and political landscape. Although the key legislation that shaped the first phase of reform, the South African Qualifications Authority (SAQA) Act of 1995, originated from discussions between labour, employers and government, the vocational education system was left relatively untouched for the first five years as the Department of Education focused on the schooling system. The National Qualifications Framework (NQF) that was put in place as a consequence of the SAQA Act simultaneously brought all forms of education and training onto a single ladder, but also divided that ladder into three bands – general, further and higher education and training. The Further Education and Training (FET) Band followed the first ten years of schooling or adult basic education, and was supposed to comprise at least three different pathways: academic schooling in the last three years of high school, vocationally oriented programmes in FET colleges and work-based training programmes, including apprenticeships (or learnerships, a new form that was supposed to replace them).

The difficulty with this new landscape was that the existing apprenticeship system did not fit it neatly. The technical colleges and their qualifications had generally been viewed as post-school institutions, and certainly by the time an apprentice completed N6 level this would have been deemed a post-matric level, although the paths were so separate that this comparison had little value. By integrating everything into one framework the issue of levels and equivalence became a problem. If the qualifications were indeed at NQF level 5 or higher, then they should not be offered in a college focused on the FET band (levels 2, 3 and 4). Theoretically, then, the N6 and the associated National Diploma should only be offered in higher education institutions. However, the logical higher education institution would be the technikon (South Africa's version of a polytechnic), but these had recently been granted university status and were actively trying to refocus on degrees and postgraduate

programmes (not least because the funding formula made this a sensible decision). With no interest from the higher education sector to fill the gap, and no newly-aligned qualifications to replace the N courses, the colleges continued to offer the dated curriculum to students - who in many cases had no contract as apprentices with workplaces.

The critique that had been articulated comprehensively in the 1985 NTB/HSRC report, namely that the theoretical curriculum offered in colleges was dated and devoid of any practical or work-based component, finally resulted in a major curriculum reform fifteen years later. More accurately, the concerns raised in that report were addressed, although the report itself probably played little part in the process – rather, the new political and administrative structures resulted in the Department of Education taking ownership of the colleges and their curriculum and shaping them to fit the new logic. The multiple centres of political power associated with the skills system had affected the colleges significantly and also influenced the design of the new qualifications. The colleges were funded through the provincial education budgets and were thus subject to the prioritisation of the budget at local level. The curriculum, on the other hand, was determined at national level by the Department of Education but was not linked to the resources required to deliver it. Skills programmes and apprenticeships, unlike the full qualifications, were funded via the Sector Education and Training Authorities (SETAs) which fell under the Department of Labour. Typical of bureaucracies, there was little cooperation between the two departments or the provincial and national levels, and these separate regulative logics created conflicting imperatives. Political power and access to resources also played their role.

The national Department of Education was responsible for all levels of education policy and directly responsible for higher education institutions, but did not have control over the salaries and institutional budgets of the colleges. These were administered at provincial level. The bulk of the national department's work and the general public concern was focused on schooling, and there was particular concern with the large dropout and failure rates associated with the formal academic curriculum offered in the secondary schools. The colleges were viewed as a partial solution to this problem because they could form the basis of a parallel vocational stream to the academic curriculum. The National Certificate Vocational (NCV) was therefore not designed around an apprenticeship-based system as the previous curriculum had been but, rather, modelled on the structure of the National Senior Certificate (NSC). In fact, the core components of the NCV were identical to those of the NSC (with the exception that only one language was required) and in terms of National Qualifications Framework levels the two qualifications were viewed as equivalent and should therefore allow for the same progression onto higher qualifications.

The NCV curriculum was developed in a matter of months by expert groupings appointed by the department, leaving virtually no time for consultation with industry or the existing teachers, and when the programme was implemented most college-based teachers had received little or no training (Wedekind 2010). While in its basic design it addressed many of the issues of concern and critique that had been levelled at the programmes offered by colleges, it came in for heavy criticism very soon after being implemented.

The critique focused on a number of distinct aspects. Firstly, industry did not understand the new qualifications and were generally unhappy with the mode of delivery. They were used to the trimester system that allowed apprentices to be released for blocks of teaching or to finish three levels in one year, and a full-time three-year structure was viewed as impractical. Employers were not willing to take on apprentices who would then spend three years away from work (Field et al 2014).

Secondly, the curriculum was supposed to consist of a 40:60 split between theory and practice, but for a variety of reasons – including inadequate teaching spaces and equipment, lack of practical expertise among the teachers, and an overloaded curriculum (or underprepared students, depending on perspective) – and because the assessment focused on the theory, very few students were exposed to the envisaged practical components. This was compounded by the fact that the NCV had no requirement that students had to have workplace experience, in part because it was not conceived of as a qualification for apprenticeships but, rather, a broad vocational preparation that would be followed up by other in-company training or additional qualifications. Nevertheless, students were graduating with an NCV and without workplace exposure, which was deemed to be a major weakness. The industry view was that vocational qualifications should be linked to apprenticeships and the NCV was not.

Thirdly, while the traditional view of technical education was that it should be aimed at those students who were not able to cope with an academic curriculum and might have aptitudes of a more applied or practical nature, the NCV was designed deliberately in order to raise the status of vocational education and ensure that there was parity with schooling qualifications. This meant that while many of the students were enrolling at colleges in order to avoid difficult school subjects, and were being actively advised to do this by school principals wanting to improve their results, they were then confronted by those same subjects at much the same or even higher levels of complexity (Allais, 2006; Wedekind 2010). Pass rates in the first few years were extremely low, further undermining the credibility of the qualification.

The colleges found themselves straddling the contradictory views held by the two departments that had an interest in them, and simultaneously dealing with public pressure and criticism. The core funding to colleges

came via the provinces, but this funding was restricted to the new NCV, so most colleges were shifting all their resources on to the NCV and phasing out the NATED programmes. However, some colleges were able to secure other sources of funding for programmes, either through direct partnerships with industry or via the SETAs, and they were thus able to continue offering the older qualifications, sometimes in open defiance of directives from the Department of Education. When the rift between the two government departments was resolved through the creation of a new ministry and the Department of Higher Education and Training (DHET) in 2009, both programmes were funded from the same budget line. At this point the new minister of Higher Education and Training, Dr Blade Nzimande, who was under pressure from college lecturers and industry to retain the NATED programme, reversed the decision to phase these programmes out and instructed colleges to reopen the NATED courses for new enrolments. He also established a ministerial committee tasked with reviewing the NCV and NATED curricula.

Following a review of the National Qualifications Framework in 2002, a five year period of contestation between the two ministries eventually led to the original single framework being divided in 2007 into three overlapping sub-frameworks, each with its own quality council. A new quality council for trades and occupations (QCTO) was established to take responsibility for work-based qualifications, and this would include apprenticeship, thus ultimately doing away with the need for the NATED qualifications. The QCTO has determined that all occupational qualifications must have a work experience component which poses a challenge to the education providers that offer the qualifications because there are insufficient available workplaces where students can be placed.

At the time of writing, the apprenticeship system in South Africa continues to expand in numbers as policy makers look to this form of education and training for a solution to the skills crisis, the stagnating economy and youth unemployment. South Africa's National Development Plan has set a target of training 30 000 new artisans per year by 2030 and the DHET and its linked statutory organisations are actively pursuing this goal. However, the challenges faced by the apprenticeship system in 2017 are not that far removed from the problems identified in 1977 or thirty years prior to that. There remains a relatively narrow understanding of what occupations are suited to apprenticeships and there is a misalignment between the available workplaces and the proposed enrolment.

In the following section I discuss some of the underpinning concerns and issues that have shaped the apprenticeship system and discuss the role of knowledge in these debates.

READING THE APPRENTICESHIPS SYSTEM THROUGH A CRITICAL CULTURAL POLITICAL ECONOMY OF EDUCATION

What is clear from the brief overview of the development of the apprenticeship system in South Africa described above is that there are a number of overlapping figurations that influenced the development of the system over time and at particular moments in time. In this section I turn to Susan Robertson and Roger Dale's application of critical cultural political economy to the field of education (Robertson & Dale, 2015). For purposes of this discussion I will concentrate on a cultural, political, economic, and educational reading of the ensemble under discussion.

Unlike classic political economy, CCPEE acknowledges that culture and cultural influences are social constructions that emerge from large figurations and develop a degree of internal coherence that makes them independent to a degree from the economic base of the society, or individual agency. Two aspects of the cultural that continue to shape the system, the policies, and the practices associated with apprenticeship, are discussed here. Not surprisingly, given its centrality to the general historical development in South Africa, race has been a major shaping factor. But there are other influences on the system, one such being the particular class elitism inherited from the British colonial tradition. Each will be discussed in more detail below.

The racialised view of different forms of labour and different occupational categories is a thread that runs through the development and various iterations that have shaped apprenticeships. It is rooted much more deeply than simply at the level of specific groups using these categories instrumentally to protect their interests. To be sure, there are clear moments in time when race is invoked in this instrumentalist fashion to secure particular groups' economic interests, but the understandings of race endure over time and are enmeshed with understandings of religion, culture, the frontier, and a range of other intersecting, often contradictory beliefs which transcend the immediate rational economic interests. The figuration that we refer to as the South African society, in all its complexity, has deeply embedded understandings of how race and labour intersect, and these cannot be understood simply in terms of instrumental rationality or individual psychology. They develop and change, like all figurations, in ways that cannot be reduced to either of these.

In his autobiographical novel *Summertime*, J.M. Coetzee (2010: 112) likens the racial system to the caste system[4] in India and speaks of the taboo on manual labour in the white community in the mid-20th century: 'Just as in India it is a taboo for upper-caste people to clean up – what shall we call it? – human waste, so, in this

country, if a white man touches a pickaxe or a spade he at once becomes unclean.' Writing about a period some 200 years earlier, Feinstein (2012) cites an early explanation for what he refers to as a 'ubiquitous conviction of white settlers that manual work was not something they should perform' (p.50). Dutch East Indies governor Baron van Imhoff wrote in 1743, after a visit to the Cape colony:

> I believe it would have been far better had we, when this colony was founded, commenced with Europeans . . . But having imported slaves every common or ordinary European becomes a gentleman and prefers to be served than to serve. We have in addition the fact that the majority of farmers in this Colony are not farmers in the real sense of the word, but owners of plantations, and that many of them consider it a shame to work with their own hands.

Feinstein goes on to cite further examples from the 19th century where commentators in Natal and the Orange Free State point to the same reluctance by white people to engage in waged manual labour (2012: p.50-51).

This notion that it is beneath the dignity and calling of white people to do manual tasks did not hold true at all times and in all places, but even at times of significant unemployment (such as the so-called Poor White Problem after the South African War) whites remained reluctant to do unskilled manual labour (Feinstein 2012: p.85). During the periods of high unemployment amongst the white population manual work was reserved for whites, but this did not mean that the social understanding of labour as a taboo had been eliminated. Certainly, from the 1930s onwards, even educational policies explicitly associated certain categories of work with particular race categories. At its most pronounced are the statements of the architects of apartheid who infamously articulated this position. J.N. le Roux, a National Party politician declared in Parliament in 1945: 'We should not give natives an academic education, as some people are too prone to do. If we do this we shall later be burdened with a number of academically trained Europeans and Non-Europeans, and who is going to do the manual labour in the country?' (quoted in Hirson, 1979). This injunction was formalised into official policy under Hendrik Verwoerd's tenure as Minister for Native Affairs and Prime Minister, because, as he put it in 1954, shortly after the passing of the Bantu Education Act of 1953:

> There is no place for [the bantu] in the European community above the level of certain forms of labour Within his own community, however, all doors are open … What is the use of teaching the bantu child mathematics when it cannot use it in practice? That is quite absurd. Education must train people in accordance with their opportunities in life, according to the sphere in which they live … By blindly producing pupils trained on a European model, the vain hope was created among natives that they could occupy posts within the European community despite the country's policy of apartheid. This is what is meant by the creation of unhealthy 'white collar ideals' and the causation of widespread frustration among the so-called educated natives (Verwoerd, 1954, quoted in Clark & Worger, 2016: 57).

The link between race and specific occupational categories is very explicit in the quotation above. The tension between the instrumental and the ideational strands of this taboo and the reality of the economy act as tectonic plates shaping the societal development over the course of the twentieth century. While the episodic and cyclical nature of the South African economy required a different quantum of manual skills, on the other hand the South African population could supply that quantum from different portions of the community at different points. Thus, at times, policy has actively tried to recruit or coerce black labour (or import black labour), and then restricted black labour to certain categories of work when the white population was threatened (using concepts such as 'civilised labour'), and then had to relax those restrictions when white labour was not available (Feinstein 2012). Each economic imperative generated political responses (which in turn were coupled with a reaction that was linked to the taboo from the wider society) and not a rational analysis of the skills system. However, no matter what policy enabled or restricted, the desirability of apprenticeships was understood differently in different communities. For example, in the Cape the view of apprenticeship among large portions of the coloured community was different to other parts of the country owing to the specific local history described earlier. Thus, the institution of apprenticeship was shaped by norms and cultural processes which in turn shaped the regulative framework, but the regulative dimension did not necessarily restrict every understanding of apprenticeship.

The notion of the taboo on manual labour is not restricted to the cultural-cognitive aspects of the white South African population. At the most obvious level the resistance to apartheid included a rejection of the strictures imposed on black South Africans, including the reservation of certain types of work for certain categories of people. Much of the critique of Bantu Education has focused on the disparities in funding which contributed to different quality outcomes, but Bantu Education also had the overt intention of channelling school-leavers in particular occupational directions. Verwoerd's critique of the 'European model' is a rejection of much of the missionary-led education system which had in part given rise to the emerging African middle-class intelligentsia in the leadership of the African National Congress (Marks & Trapido, 1988). When the Bantu Education system was introduced there was widespread resistance to the notion that there should be different education provision for different race groups and that the Bantu Education curriculum restricted pupils' life chances by channelling them into certain types of work. Subjects such as gardening, woodwork and domestic science (home economics) were promoted over more abstract subjects.

This resistance ironically fed into the strengthening of a general rejection of manual labour as a valued activity.

In 1976, when school students rose up against the policies of the state education system, they recognised the way the system prejudiced their chances. The Soweto Students' Representative Council manifesto included the following explicit rejection of the occupationally restrictive nature of the education system: 'We shall reject the whole system of Bantu Education whose aim is to reduce us, mentally and physically, into "hewers of wood and drawers of water" for the white racist masters,' (referring to a biblical reference used by Hendrik Verwoerd) (Harsch, 1980: 297). The contestation over and resistance to a race-based understanding of the relative value of occupations has thus contributed to a generalised over-valuing of white-collar work in relation to blue-collar work.

The race-based taboo has its roots in the history of colonialism and European notions of racial superiority, and thus it became inscribed in the class structure that developed in South Africa. For this reason it is difficult to separate race from class in South Africa, but there are some specific class dimensions that cannot and should not be reduced to race. For example, while slavery was race-based, the function of slavery in the economy is not helpfully understood simply through a race-based analysis. Similarly, class does overlap with race but cannot be reduced to it. In order to understand the effect of class on apprenticeship one needs to examine its socio-genesis separately. The unfortunate consequence of the racial taboo described above is that it has reinforced (particularly English) colonially inherited prejudices about the relative value of blue-collar work vis-a-vis white-collar work. These class perspectives are intimately tied to the ways in which a colonial bureaucracy was constructed within the British Empire and how this was mapped out in local contexts. Once nested in the consciousness of the local (both settler and indigenous) population, these prejudices remain deeply entrenched and resilient in society across socially constructed race categories. Thus, within the white community vocational programmes are viewed as of lesser importance, at best a remedial alternative for those not able to cope with academic curricula, or for those who are in some way delinquent (Wedekind, 2008). This bias is felt throughout the system and has resulted in the second-tier status of vocational education within the academy, research community and policy makers. For example, until very recently there were almost no university-based researchers who focused on technical and vocational education and there were no teacher education programmes geared towards the sector (Wedekind, 2016).

This classed perspective across race groups is evidenced in the frustration expressed by teachers in vocational institutions who complain about the attitudes towards their subjects and the fact that they are always seen as a last resort when all other academic avenues have been closed. Academic education has always held more prestige across diverse communities and therefore technical education was often associated with remedial education or as a vehicle for dealing with juvenile delinquents (Badroodien, 2004). Indeed, only recently have special needs schools had their names changed to schools of skill. When the Department of Basic Education recently proposed the introduction of a new vocational curriculum to be introduced in primary schools, this was justified on the grounds that the current primary school system is too demanding for the majority of learners, who would be better served by a skill-based vocational curriculum (Allais, 2017).

The very idea of who becomes an artisan and what constitutes an apprenticeship also becomes culturally embedded. Once established, much like the race and class based taboos about work, these traditions develop a logic of their own that are not easily dislodged, even if perfectly rational reasons exist for change. Thus, while it would be inaccurate to claim that the modern apprenticeship system arose directly from the slavery-based system of the same name, the tradition of who does what sort of work in particular geographic regions of South Africa can quite probably be linked back to the racialised structure of the labour market that emerged at the time of the abolition of slavery (Feinstein, 2005; Keegan, 1997). The regulative institutional form of apprenticeship changed with the advent of industrialisation, but particular trades remain connected to particular communities for reasons that have their roots in the structure of the labour market at the end of slavery.

The longevity of the time-based apprenticeship system, when this had been shown to be problematic almost a century ago, provides another example. Once artisans have come through a particular system and have served their time, they help maintain the system through their role as masters and because many of them take up managerial roles. Certain norms and taken for granted understandings of how apprenticeship should be reinforce the institutional form of apprenticeship, regardless of the regulative shifts that may occur. Thus, when educationally-led curriculum reforms are introduced, the employers and the qualified artisans are at best suspicious and at times openly resistant to the changes, based on a belief that the system they trained in represents the optimal form. When the changes are imposed there is tremendous nostalgia for a largely mythical past. This in part explains the pressure that the minister of higher education and training came under to retain and reinstate the outdated NATED curriculum.

The particular history of the development of South Africa's economy has also shaped how apprenticeship is defined. Prior to the mineral revolution the primary skills needed in the agrarian economy were linked to the needs of the construction, transport and furniture industry – masons and carpenters in the main. With the advent of mining (and associated industries) this was expanded to include the relevant engineering fields. With the

exception of some service industries such as hairdressing and parts of the hospitality industry, this particular configuration of occupations that have apprenticeships associated with them have remained, even though South Africa's economy has diversified and requires technical skills in much broader fields. These historical patterns over time become constitutive schema of what is culturally taken for granted, and later shape the regulative dimension when they are codified in an act.

The shifts in the economy and the expansion and contraction of the labour market has placed pressure on the apprenticeship system at various stages across time. Indeed, the political pressure to racially restrict or to open access to apprenticeships is tied closely to the economic dynamics at the time. However, the economic pressures do not override other dimensions of the apprenticeship ensemble, as educational organisations, government departments, funding bodies, and a range of actors in the public and private sector contest and shape the system. This results in resilience when economic rationality might suggest reform or disbandment, and similarly can result in major curriculum or qualification changes that have no perceived value in the labour market. Thus, the apprenticeship system has been subject to the effects of regulatory and policy processes (or their absence) that are not tied either to apartheid or post-democracy ideology or economic imperatives. Across the twentieth and early twenty-first centuries there are moments when the logic of government shaped the system. The decisions by politicians to establish ministries with responsibilities for different parts of the system as was the case between 2004 and 2009, or the establishment of particular commissions, or the structures established to maintain quality or to fund skills all have consequences for the ways in which the system of apprenticeship is established and how it evolves over time.

Once these organisations are formalised and resources and rules are established, they become institutions that develop their own *raison d'être*, often transcending its envisaged purpose. In addition, individuals and groups have direct interests in the work of the organisation and its resources, thus ensuring that they continue to function. For example, because SETAs were tasked to distribute levies, they actively had to find training providers in order to allocate monies. This generated an entire training industry linked to private and public providers that had little to do with actual needs in the labour market, and ensured the retention of programmes in colleges that would otherwise have disappeared.

Finally, what of the educational? Robertson and Dale's (2015) CCPEE perspective provides a set of lenses that focus on the ways in which the cultural, political and economic shape the educational ensemble. However, there is also an internal dynamic to education. There are the debates about what to teach, how to teach and what type of teacher and students are required to achieve certain educational outcomes. These internal educational ideas and debates interact with the institutional and policy levels at various points and shape and are shaped by them, but also have an internal logic and discourse that are driven by actors and ideas that operate in networks and that cannot be reduced to the externalities. For example, the introduction of outcomes and competence-based modular curricula in much of the vocational and general education system, and its failures and reforms, show how these processes develop over time in ways that are tied educational philosophy and particular discourses within local and international intellectual circles as much as to politics and policy (Guile et al, 2017).

What is surprisingly absent from the discussion of apprenticeship is any sustained engagement – with a few notable exceptions (see, for example, Gamble, 2001, 2013; Young & Gamble, 2006) about the appropriateness of this model as a pedagogical technique, and the underpinning knowledge structures that are required in order to achieve competence in the specific field. To be fair, educationists and sociologists have at various points questioned the veracity of claims that the apprenticeship system is optimally designed for preparing people for work. In the 1970s the model was critiqued for focusing primarily on time served as an apprentice without any particular justification for this. However, forty years later the model has remained largely the same, with little variation across different types of apprenticeships. Similarly, while there is recognition by sociologists that the nature of work is changing rapidly and the knowledge and skills required are changing, the major consequences of these insights has been the addition of modules that add on new skills or include communication or 'soft skills' rather than any significant rethinking about apprenticeship itself.

CONCLUSION

What is, hopefully, clear when one views the institution of apprenticeship in South Africa across the *longue duree* is that this pedagogical practice of learning through doing on the job has been shaped over time by a range of social, economic, institutional and political factors. What has not been possible here has been a fuller engagement with the ways in which these local dynamics have been shaped by wider international and global forces. These are equally significant, particularly as policy borrowing and lending and global comparison regimes become increasingly influential and problematic (Barabasch, Huang & Lawson, 2009; Turbin, 2001). The concept of apprenticeship is often presented as being understood internationally across contexts, and because of its effectiveness in some countries it is viewed as the most effective pedagogical vehicle for teaching young people to become adept at particular forms of work. What I have tried to show is that apprenticeship in

South Africa has distinct meanings in specific contexts that might baffle outsiders to the context, and also remain resistant to policy interventions.

The world of education and the world of work are being brought ever closer together in South Africa and elsewhere. Policy makers seek closer alignments in order to resolve crises experienced in the economy and wider society, and – through a range of accountability and funding mechanisms – force educational institutions to align themselves to the primary objective of preparing people for the world of work. Within the field of education we pay increasing attention to the pedagogical strategies and the knowledge structures that will achieve this alignment across various parts of the system. Apprenticeship is probably the oldest example of this explicit alignment between education and the workplace, and so it is important to understand its mechanisms and the reasons for its resillience.

A historical sociological perspective on the development of apprenticeships, coupled with a critical cultural political economy of education analysis begins to unpack the complex interactions that shape the educational ensemble over time. What is very clear from the case presented in this chapter is that debates over knowledge, curriculum or pedagogy (that is the 'educational' aspects) are but one, often less central, dimension of the social process of the emergence of an institutional form. In order to make sense of the educational, we need to look both inwards at the educational, but retain a focus on the other dimensions: the cultural, the economic and the political, the institutional, and the ways these emerge and change over time. It is this multi-focal lens that the CCPEE approach enables. A focus purely on the internal education features of knowledge and pedagogy cannot provide an adequate understanding of how work and education interact, and any analysis that privileges one or other external or contextual feature will also only provide a partial account. To deepen our understanding of the relationship between education and work, and how this is mediated, we need to hold all of the dimensions, and understand their interactions.

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NOTES

[1] This chapter builds on an argument presented as a keynote address to the International Network on Innovative Apprenticeship (INAP) conference held in Johannesburg 2013. That address was published as part of the proceedings (see Wedekind 2013). Some parts of this chapter cover similar ground to the background in the paper in the proceedings, but the overall focus is different.
[2] I estimate that it was produced in mid to late 2000s but it is still accessible on their website http://www.labour.gov.za/DOL/downloads/documents/useful-documents/skills-development-ct/Apprenticeships%20pamphlet_pamphlet.pdf
[3] NATED stands for National Technical Education and refers to a series of policy documents that govern the curriculum for the theory component of apprenticeships.
[4] Coetzee is not the first person to draw an analogy between the caste system and the race based system in South Africa. Writing in 1982, Christie and Collins declare that the 'role assigned to schooling in preparing colour-castes for sub- and super-ordinate positions is stated quite unambiguously' in educational policy (Christie and Collins, 1982). Reddy, on the other hand, problematises the analytical merger of race and caste (Reddy, 2005).

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