

# A LEGACY OF EMPIRE: THE IMPOSITION, EVOLUTION AND FAILURE OF CONSTRUCTION SKILLS TRAINING SYSTEMS IN KENYA AND SOUTH AFRICA

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Many countries that were part of the British Empire adopted or were obliged to introduce construction training systems similar to those practiced in Britain to meet the requirements of the colonial authorities and the economies that were being developed using 'Western' technologies. After independence many of these nations continued using these British-oriented forms of training such that today many of these training systems are still intact. However, in many of these countries, particularly in the developing world, the construction sector has developed in ways that have diverged from the colonial model and which has impacted negatively on the effectiveness and sustainability of the British colonial model of training, e.g. via the increased informalisation of the construction process. Moreover, whilst in Britain the training systems of the 60s have been subjected to diverse initiatives aimed at meeting the contemporary needs of the construction sector, in many commonwealth countries such as Kenya and South Africa, reforms in construction training have lagged behind or are non-existent, leading to the virtual collapse of the original British system. This paper discusses the cases of Kenya and South Africa as examples of how the imposed systems have changed over time to take into account the economic and social histories of each country and suggests that in both cases, the imposed colonial model failed to evolve and adapt and consequently gave room for new systems to emerge spontaneously that were better able to meet the built needs of both country's populations.

Keywords: artisans, commonwealth, training, skills, Kenya, South Africa.

## INTRODUCTION

At its peak, the British Empire encompassed a quarter of the world's population and landmass (Ferguson 2004). However, those facts hide a complex picture of different countries, nationalities and peoples who had widely varying experiences of being part of that empire ranging from countries like Australia, where the indigenous populations were effectively replaced by colonial immigration and new societies and economies constructed to occupy the same geophysical space, to situations like India, where complex societies and economies were co-opted and modified to meet the demands of the 'mother' economy of Britain, but where indigenous social structures, whilst affected, were largely left in place.

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Across the world, the built environment provides a permanent record of the legacies of empires; Roman engineering across Europe and North Africa being a clear example. Then, as now, the built environment served several purposes; providing colonisers and administrators from the mother country with “features of the lifestyle that they had practiced in their land of origin” (Diamond 2006:187), whilst also demonstrating the Empire’s economic, military and political might to the local population.

In doing so, a degree of homogeneity is imposed in building methods, industry organisation and architectural design. Diamond (2006) terms this as “cultural capital” ; being the knowledge and social organisation developed in their mother country. Just as the Romans used the same construction forms across their Empire in the private homes of Roman Citizens, and the public buildings within which the business of Empire was pursued (economically and culturally), so too, did the British Empire establish formal construction industries across the Empire to provide built products for the British diaspora that dominated the administrative and commercial life of the countries they lived in. Extreme examples in the private sphere are Sir Stewart Gore-Browne’s Shiwa N’gandu in Zambia (Lamb, 2000) and in the public sphere, Stanley Hudson’s replica of Belfast City Hall in Durban. (eThekweni Online, 2009).

Unsurprisingly, the formal construction industries in those countries adopted British patterns achieved through the direct transfer of skills via emigration from Britain, and/or the imposition of British training models on local labour to meet the demand of the colonial economies. However, following the dissolution of the British Empire, the post-independence social and economic changes of many of these countries have inevitably impacted on the demand for and nature of built forms. Consequently the construction industries of each country have evolved and with them the skill sets required. However, the extent to which formal structures and institutions put in place by colonial authorities (such as artisan training) have maintained relevance to post-colonial needs may differ greatly between countries.

This paper investigates the evolution of the artisan training systems in two Commonwealth countries, Kenya and South Africa, which experienced very different challenges following independence from the British Empire. In both cases the formalised training of artisans for the construction industry collapsed and gave rise to significant changes in the structure and practice of their respective construction sectors.

## **THE CASE OF KENYA**

The colonial history of the geographical area now known as Kenya dates from the 1880, firstly through Germany’s protectorate status given to Zanzibar, followed by the British taking control of Germany’s coastal interests and opening up the inland areas through the construction of the Kenya Uganda railway establishing British East Africa as a protectorate. Kenya gained its independence in 1963.

The colonial mindset’s inability to value the vernacular building skills of the indigenous African population in Kenya meant Africans were considered by the colonial authorities to be unproductive and lacking of any craft skills (King, 1977). The British and white European settlers who arrived in the early 20th Century to farm the interior central highlands were interested in replicating the building processes and technologies from their mother countries, not in adopting vernacular building forms and techniques. Consequently, the colonial administrators manipulated the formal school system to produce craftsmen to meet their skilled manpower needs; what King

(1974) describes as ‘the primary school as a factory’ philosophy. From 1911-1934 African pupils were indentured as they entered primary school. Most of their school day was organised around productive labour in a particular vocation (e.g. masonry, carpentry, etc.), to which the pupils were legally bound. After primary school the ‘natives’ continued the next three years of their apprenticeship at the Native Industrial Training Depot (NITD). This skilling of Africans was also driven by the desire of white settlers to substitute the expensive Indian craftsmen, who had been imported to build the Kenya-Uganda railway (1896-1901) with cheaper African artisans and break the Indian’s monopoly on the countries building industry. The response to this ‘market failure’ arising from the immigration of skilled artisans from India marked the introduction of the British apprenticeship system characterised by its narrow acquisition of trade specific skills with minimal theoretical knowledge (Clarke, 2005) as a means of acquiring craft skills in Kenya.

However, the Kenyan apprentice had radically different aspirations from the British apprentice. Whilst the latter were drawn from the working classes and were reconciled to a status of obedient skilled worker serving the needs of capital, the former was drawn from a tiny school-attending elite at the top of the native educational pyramid and considered themselves privileged (King, 1977). For them life-long careers working on settler farms were not attractive. Consequently, the apprentices viewed craftsmanship not as an end in itself but as a staging post to more prestigious and entrepreneurial careers in business, retail and land ownership. In addition, the five-year apprenticeships produced craftsmen that met the specialised needs of an industrialised economy but who were insufficiently versatile to meet the needs of the European-owned estates (who required multiskilled craftsmen) and who were equally unacceptable to the Indian firms who preferred on-the-job training (*Ibid.*). This marked the beginning of a mismatch between formally acquired craft skills and job market requirements.

The colonial government in Kenya lacked interest in the methods of craft skill acquisition used in the Indian community despite their effectiveness in destroying both African and European competition (*Ibid.*). Unlike their European working class counterparts, Indian artisans (mainly carpenters and masons) held relatively privileged positions in their community’s social hierarchy belonging to a caste whose services were only engaged in the construction of temples, public buildings and houses for the highest castes (Harilal and Andrews, 2000). Moreover, the Indian artisan was traditionally employed directly by the client and had direct control of a labour process, based on unwritten handicraft principles and practices developed through years of application (*Ibid.*) and acquired through on-the-job training. Indian skills in Kenya thus thrived chiefly on improvisation and were reproduced among their first African employees (King, 1977).

The parallel existence of the Indian craft training model in Kenya led to the emergence of a different class of African craftsmen who spread their skill throughout the country and in many areas constructed the first non-vernacular buildings in stone (*Ibid.*). These African craftsmen also practiced informal apprentice training; taking on learners for a fee who stayed with the masters until they felt they had acquired sufficient skill. The period of training was not fixed but depended on how long it took the apprentice to gain the skill depending on their aptitude and the work at hand. Trade tests were considered irrelevant; training was product specific and generally lacked integration with the next level of technology. However, the process succeeded

in filling the demand for marketable skills and unlike the formally trained artisans of the British system were more likely to remain craftsmen throughout their working life.

Ultimately, the informal Indian system proved to be more competitive and dominated the construction sector and the formal African craftsmen training and indenturing system in primary school was abandoned (*Ibid.*). The NITD was converted into a post primary level trade-and-technical school and five other such schools were established in the 1940s and 50s, producing teams of graduates who went around the country building government sponsored school blocks and furniture. Through building the government schools, NITD graduates gained sufficient work experience to become self-employed. However they were not readily accepted in a construction sector, which, by then, was dominated by Indian firms who preferred their own on-the-job training (King, 1977).

After independence in 1963, several initiatives were formulated to offer opportunities to school leavers to develop as craftsmen. The 1964 Industrial Training Act (ROK, 1983) was modelled on the UK's Industrial Training Act 1964, in an attempt to regulate training. The Act recognised only the UK style formal craft skilling and ignored the Indian model. The Act created the Directorate of Industrial Training (DIT), which took over the NITD trade-and-technical school and which continued to offer formal apprenticeships to secondary school leavers as the National Industrial Vocational Training Centre (NIVTC). Other NIVTC schools offering construction craft skills include Mombasa Industrial Training Centre (MITC) established in 1979, Kisumu Industrial Training Centre (KITC) in 1971, and Athi River Vocational Training Centre (ARVTC) in 2003 (DIT, 2008).

With the majority of school leavers being primary school graduates, other institutions were set up to train craftsmen including the National Youth Service (NYS), which established a two-year program in 1966 funded by government, that linked little general education with productive labour and gave short intensive vocational instruction in, among other skills, masonry, plumbing and carpentry leading to DIT grade three trade test (King, 1977; Haan, 2001) and the Village Polytechnics. The Village Polytechnics (later renamed Youth Polytechnics) were developed in the mid 1960s by the National Christian Council of Kenya (NCCCK), to equip primary school graduates with skills e.g. masonry and carpentry, that would enable them to be self-employed or to find wage employment in their local communities. They were intended to prepare their graduates to exploit the income opportunities of the rural areas; to offer a low cost form of skilling; and to steer clear of formal trade certification. Training was generally informal with the institutions being self-sustaining by producing goods for the local market (King, 1977; Haan, 2001). Over the years the YPs abandoned their initial vision and became increasingly formalised, offering courses linked to formal trade testing. Some of the criticisms of the YPs include; the narrowness of their curriculum; training in skills that are not in high demand in the rural areas; graduates lacking tools and equipment to engage in self-employment; a poor image in the community where they are deemed to be catering for academic failures; widespread duplication of skills across institutions; securing few orders for their services resulting in trainees who lack practical experience; a situation exacerbated by limited industrial attachment; instructors with inadequate technical and pedagogical skills who are poorly motivated by earning low salaries; a lack adequate tools and training materials; and lack of sustainable financing (Boeh-Ocansey *et al.*, 1995; Haan, 2001).

Faced with these challenges, the skilling of construction craftsmen in contemporary Kenya continues to follow both the Indian system and the UK system in parallel, with the former maintaining its dominance with only 3 apprentices recruited in the formal craft training in 2002 (DIT, 2008). This dominance is sustained by the continued dominance of Indian owned firms in the Kenyan construction sector (Ministry of Roads and Public Works, 2007) and by African firm owners and craftsmen trained in the Indian firms adopting the Indian method when training their workmen.

## THE CASE OF SOUTH AFRICA

The history of South Africa is unique to other commonwealth countries in that it lies between the colonial settlement model by Canada, New Zealand and Australia, where migration was the dominant characteristic, and the exploitative colonial model of India, Kenya and Zimbabwe where a small colonial elite (in both relative and absolute numbers) dominated the local population. Thus whilst settlers numbered 60,000 at independence in Kenya, the South African population of white extraction currently number some 4.5million and continues to dominate the formal economy. This has been termed ‘colonialism of a special type’ or ‘internal colonialism’ whereby there is no ‘spatial separation’ between the colonising power and the coloniser (Slovo 1976). Consequently ‘independence’ in respect of the majority population, occurred in 1994 with the first democratically elected government, rather than with the establishment of the Union of South Africa in 1910. It is this history of the oppressors living alongside the oppressed that shaped the economy and society of South Africa and resulted in the current two economies model where a developed first world economy exists in parallel third world economy sharing the same geographical space.

The ideology of ‘apartheid’; Afrikaans for ‘separateness’ promoted dual ‘development’ where a formal economy was geared towards the needs of the minority white population whilst an informal economy evolved to meet the needs of the majority population, who’s interaction with the formal economy was regulated, through measures such as job registration, and the Group Areas Act of 1950. However, whilst apartheid as a ideology only dates from the election of the National Party 1948, the economic and social patterns they reflected and promoted dated from British colonial rule. For example, Cecil Rhodes’s Glen Gray Act of 1894 limited black property holdings in the Cape and prepared the ground for the Native Lands Act 1913 that first established black labour as being ‘guest workers’ in white areas. This separateness of the white and black society was institutionalised in the education system. Guest worker’ status, particularly in the urban areas, prevented the establishment of a settled black urban working class causing significant impacts on the nature of skills acquisition by in the black urban work force (stability being needed for the apprenticeship training model to work effectively).

From the 1930s, the South African economy transformed from a predominantly agricultural and mineral economy to a more broadly based industrialised urbanised economy, requiring a more technically skilled work force. Apprenticeship Committees which were established for each industry (including building and construction) in 1922 were tasked to achieve this but faced resistance from the rapidly urbanising and unionised white working classes to apprenticeship applications from black workers (Siebert 1986) through the operations of ‘closed shops’ or a high minimum ‘rate for the job’ preventing black labour from pricing itself into the market (*Ibid.*). The Bantu Education Act 47 of 1953 (RSA 1953) embodied the apartheid ideology that as native Africans had no place in white society any education above a certain exploitable level

was pointless (Ladzani 2001). The consequence of this was that two distinct labour markets existed for black and white labour respectively (Siebert 1986) with apartheid legislation imposing constraints on the black labour market in respect of mobility of labour (the 'pass laws'), training and promotion (the 'colour bar') and on the organisation of labour and collective bargaining (*Ibid.*).

The consequences was that whilst the number of apprenticeships rose dramatically from 1935 to the early 1950s, when the South African economy underwent rapid industrialisation, this was followed by long term decline with only isolated growth in the late 1960s and early 1980s (Fedderke *et al.*, 2003). The limiting of opportunities for African's to gain skills on the basis that they would not need these skills either in their own 'homeland' third world economies, or as unskilled migrant labour in the 'white' first world economy, resulted in a highly inefficient technical education system that was incapable of meeting South Africa's economic needs (*Ibid.*)

By the 1960s the skills shortages forced the floating of the colour bar, and an emphasis on building up white skills capacity through enhanced training and immigration of skilled white labour (Chisholm 1983). However these were only temporary solutions. Apprenticeships were opened to Coloureds and Asians in 1971 and blacks in 1979 with major investment in pre-service and in-service training infrastructure in black urban areas as it became apparent that the skills shortage could only be met through the training of elements of the black workforce (*Ibid.*).

Despite these changes, apprenticeships have continued to decline. The number of apprentices who completed their training between 1985-92 halved (Horowitz *et al.*, 1996). This paradox may reflect the dual role apprenticeship training plays in readying the apprentice for the work environment, in that it has not only a technical component, but also a social component; the secondary socialisation of the worker for their status and role in the labour force and in broader society. However, by the 1970s, the largest source of potential artisans; the Bantu educational system, had become the locus for anti-apartheid activism (Chisholm, 1983) and were producing those least likely to accept indenture to white employers. In such a politicised society few non-white school leavers would rush to become apprentices to white capital.

Whilst politically, the government desired a purely migrant black labour force, based in the black homelands, the needs of capital required a 'partially settled stabilised labour force' (Chisholm, 1983:358). Consequently, black urban townships such as Soweto emerged to provide the necessary labour in the cities that the formal economy required. Faced with a technical training system that excluded them, and a steady demand for homes within the growing black townships, the emergence of an informalised construction sector that met the needs of the black urban and peri-urban population was inevitable.

In the absence of formalised training, a parallel unofficial craft training system located in black, coloured and Indian communities that relied on a traditional apprenticeship system similar to the Kenyan Indian situation and reflecting very similar needs arose based on craft traditions introduced through migration and indentured labour contracts prior to the apartheid era. Alongside this remained the white dominated formal construction industry which had taken on the traditional craft-training model from Britain adapted to an industry that had historically relied on a management/technical cadre of highly skilled white or expatriate labour to supervise a large black semi-skilled and unskilled workforce (CIDB 2004); an extreme version of the British craft model described by Clarke and Wall (2000). Thus the white dominated trades tended

to be those requiring higher technical skill (electrician, plumber etc.) with those skills that could be communicated with a lower level of education (plastering, decorating, bricklaying) being 'reserved' for the coloured, Indian and to a lesser extent, black workforces.

The current formal artisan training system was initiated by the Wiehahn Commission in 1979 which led to the Manpower Training Act (RSA 1981), and the formation of the National Manpower Commission and the National Training Board (NTB). In 1990 sector specific Industrial Training Boards (ITBs) were established to administer and certify industry training. Following the 1994 elections, the Congress of South African Trade Unions (COSATU) joined the NTB to generate policy to democratise the governance of industry training (Macun 2001) which had previously been largely employer and government led. This resulted in the Skills Development Act (RSA 1998) which established the National Skills Authority (the replacement of the NTB) and the Sector Education Training Authorities (SETAs), which replace the ITB's (Mancun 2001) with construction sector training managed by the Construction Education Training Authority (CETA). In parallel, the apprenticeship system was replaced by the 'learnership' system linked to the new National Qualifications Framework (NQF), which was also influenced by the experiences of the current British system of Modern Apprenticeships.

These changes have taken place in the context of a long-term decline in formal construction demand since the 1970s. This together with the global trend towards subcontracting not only eroded incentives to train such that CETA only registered 56 learnerships by 2003 (CIDB 2004) but also resulted in a decline in formal employment in the construction sector from 255,000 workers in 1990 to 214,333 in 2002 (*Ibid.*). However, the same source cites the 2001 South African census which indicated 520,000 were active in the construction sector, indicating a large informal component, that as with Kenya operates outside the formal sector, or interacts with it through labour only subcontracting or in the provision of the less technically skilled subcontractors.

## CONCLUSIONS

Craft practice, which was traditionally communicated solely at the point of production, was fragmented by the introduction of modern machinery and the increase in speed in the craft process (Braverman 1974). This limited the opportunity of the apprentice to gain full exposure to the different branches of their craft (Gamble 2003). In response, the limited, practical experience was supplemented by a more general theoretical training, formalised with the founding of the City and Guilds of London Institute for the Advancement of Technical Education in 1871 which became the model for much of the rest of the British Empire. However, this response was for an industrialised nation such as Germany or the UK. It did not necessarily reflect the skill needs of colonial Kenya with the unintended consequence that the status of the products of the NITD became 'the 1920s counterpart of a student in some elite secondary boarding school or technical college in the 1970s' (King 1974:184). In contrast, in South Africa, artisan training, from which black, Indian and coloured South Africans had been excluded for so long, arguably became conflated with the need to submit to the needs of white capital and was rejected and replaced in black, coloured and Indian communities with an informal training system built on pre-apartheid traditions.

That the apprenticeship model seemed to be successful in South Africa between 1935-1970 seems to be more a product of the rapid development of the industrial base at the time, which mobilised the white workforce supplemented by migration from the metropolises. Although employer-led, the employers of many apprentices were the public sector through government agencies and parastatals (e.g. railways), many of which (such as the railways) were used as a mechanism to ensure full employment for white (particularly Afrikaans) labour (Siebert 1986) and could be arguably described as political/social interventions rather than economic.

As Randall (1993) argues, “it is not training which provides jobs but, rather, the structural requirements of the market which determine what jobs, and at what pace, are needed” (*Ibid.* 52). The trend to accept the Western model of apprenticeship, which focuses on a form of pre-service work preparation rather than employer sponsored in-service training in Kenya, has clearly collapsed for the majority under the pressure of the technical fragmentation of the industry and the demand for subcontracting. The preference of the in-service training of the Indian artisan model is overwhelming in Kenya, and understandably adopted given the historic lack of access to formal skills training for non-whites in South Africa. The recent changes in South Africa are specifically under-pinned by the desire to link the informal and formal sectors in order to improve the chances of those who have been historically marginalised to participate in the formal first world economy. Thus strategies around the recognition of prior learning (RPL) are being adopted as they can be tied more easily to the outcomes-based philosophy of the NQF than the traditional British trade certification model.

The above highlight the need for Kenya and South Africa to review the inherited craftsmen training system with the aim of customising it to the current needs. Clearly context is critical. The balance between migration (from the metropole of the mother country, or other parts of the British Empire such as India) and local labour, the role that social and economic structures play in defining the skills required and the inabilities are likely to be reflected, albeit in different ways, in other parts of the British Empire. Understanding these differences and similarities provide an opportunity for all countries to reflect on the complexities of skills training and its relationship with their historical, social and economic development.

## **FURTHER RESEARCH**

Naturally in such a short missive, the complexity of the changes undergoing societies and how these are articulated through the training systems and the needs for skills in countries is impossible to discuss in any detail. However, it is hoped that this paper might stimulate discussion on the emerging craft skills and prevailing modes of training in countries that share the colonial history of the British Empire. The possibility exists of a comparative study between countries to see if the varied post colonial experiences in countries such as Malaysia, India, Kenya, Uganda, South Africa and others can provide insights into the evolution of skills training systems. Whilst the underlying technology is becoming increasingly globalised, it is likely that it will be history, culture and the context of practice that will be the greatest determinants of the differences between training systems.

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