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Title: The Social Character of Secondary Industry in South Africa,
1915-1945. (With Special Reference to the Witwatersrand).

by: Bill Freund

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THE SOCIAL CHARACTER OF SECONDARY INDUSTRY IN SOUTH AFRICA, 1915-1945.
(With special reference to the Witwatersrand)

by Bill Freund

I

There can be little dispute about the significance and historic importance of the rise of South African secondary industry. Nonetheless, and despite the ready availability of general considerations, fundamental aspects of its development have received little attention, if any, in the historical literature.¹ This essay means to call attention to some of those aspects in the earlier phases of South African industrial development ending with the Second World War. The main focus will be on the forms and allocation of labour, an area which has been relatively neglected and the one that allows for an examination of economic changes through the historically specific character of South African society. The distinctive and extremely heterogeneous workforce of the first half of this century in secondary industry stands apart both from sectors of the economy developed earlier and from the industrial labour force structure that would follow.

This has been appreciated by a number of recent writers concerned with the history of white workers.² Underlying their interest in labour and early industry, however, has been a more basic fascination with the state. For both Davies and Yudelman, despite rather polemically exaggerated differences, the central issue is one of "incorporation" of one important sector of the working class, the white miners and industrial workers, by the state.

Taking political rhetoric of the day at its own value, both associate secondary industrial growth, particularly after the Nationalist-Labour Pact government came to power in 1924, with "artificial" protection from foreign competition in reward for the ever greater employment of "civilised" white workers at high wages who would in consequence vote for the ruling party. The Industrial Conciliation Act, the Apprenticeship Act (both actually passed before 1927 under Smuts) and the Wage Act appeared to enshrine racial favouritism even though it is widely realised that overt colour bar legislation was only of marginal significance. This was largely the view of C W de Kiewiet, whose history of South Africa concluded with an important chapter on the civilised labour policy. Radical scholars have accepted this view as well, however.³ David Kaplan has pointed out that this perspective masks an assumption that such a policy was "unnatural" interference with business operations; irrational politics intervened against the

glorious unseen hand to distort operations of the market. With the intervention notionally removed, it can be assumed that simple and direct employer preference for racially indeterminate labour at the lowest going rate was at all times rational economic policy.⁴

The incorporation model, whatever its political interest, is unsatisfactory in providing an explanation of what was actually happening at the level of the economy. What follows suggests that, although the intervention of the South African state was very significant both in establishing some of the parameters of industrial development and in shaping the structure of the labour market, that significance can be and has been exaggerated. It is essential to examine the actual conditions of production in the broadest sense, the strategies of capital and the means by which sectors of the working class struggled to establish options of their own. Our understanding of economic issues needs moreover to be wedded to the insights and connections developed in recent years by social historians.⁵ Perhaps the most perceptive work on early industry in South African economic development over the past decade has been that of David Kaplan. In recognizing both that the "civilised labour" policies of the state and that the impact of protectionism were far more qualified than has usually been acknowledged, has opened the door to pressing forward with questions about the actual accumulation process that need consideration.⁶

In the literature on capital accumulation in early twentieth century South Africa, there is frequently a striking emphasis on the imperative of "cheap labour". This work, which finds particular expression in the writing of Johnstone, Wolpe, Lacey and Legassick, insists on a peculiarly South African system of coercive controls weighing down upon adult male African labour and causally linked to a relatively rapid, dramatically sustained industrial growth. Extreme coercion and the homelands system made possible wages actually below the cost of human reproduction.

Such an emphasis carries the most conviction when applied to the crucial sectors of "gold and maize", mining and agriculture. As Wolpe wrote, however, "the problems of control (including the control of wage levels) are not, however, simply or primarily a function of the demand for labour-power which is cheap, but crucially a function of the condition of the production and reproduction of that labour-power". Wolpe proceeds thereafter to explain the distinctive conditions under which the Reserves were maintained and concentrated into Bantustan republics in terms of those conditions. The industrialisation of the cities, however, also requires special considerations both because the real dynamism of the contemporary economy now rests here and because it developed in conditions that cannot be explained simply in terms of an absolute cheapness of labour-power.

This is in any case an inadequate formulation. Unless we postulate an entirely parasitic robber economy, once the social reproduction began to take place in the urban landscape, we need to explore the conditions under which that occurred, whether the labour-power specified can be considered cheap or dear by any particular hallmark. Cheap labour or formulae about "ultra-exploitation" then can easily be turned into vapid cliches. All capitalists aim to lower their wage bills as much as they can; what in fact varies so much historically and requires examination are the specific circumstances that determine

the success and the conditions for that lowering thrust to succeed. South Africa, after all, is no Hong Kong or Taiwan. It has never known any particular success as an industrial exporter simply through the undercutting of rival producers through payment of lower wages. Hindson has explored thoroughly the inadequacies of cheap labour determination for the African working class, notably by considering the development of conditions for its reproduction under urban conditions, internal differentiation of African labour, the actual operation of the pass system⁸ and the enabling role, if often grudging, of the South African state. However, his thesis needs to be extended further in considering the pioneering phases of industrialization. During that era, the work-force did not consist predominantly of adult male Africans -- whose sweat characteristically has lain at the heart of cheap labour determinism -- at all.

The argument can be made that the limited and relatively slow rise to predominance of such a work-force in secondary industry belongs in fact to the pre-history of this sector of the economy when growth was quite restrained. Really dynamic and qualitative growth depended on a new labour force mix in time and the limits of pre-World War II industry do need strict delimitation. Yet it will be argued here that the extremely variegated South African industrial working class actually enabled a crucial and successful, if patchy, stage of industrial development to take place.⁹ Much of this work-force was relatively highly paid by international standards of the time. This is in considerable contrast to the situation in the mines and on the farms.

The move towards an industrial work-force consisting of a majority of adult male Africans occurred in the context of the long boom conditions that prevailed from the time that South Africa went off the gold standard in 1933. It developed intimately together with a process of change in the industrial labour process itself as manufacture replaced manufacture by fits and starts. The second part of this essay will concern changes in the position of capital and its apologists towards the social composition of the labour force and the history of attempts by the state, particularly after 1924, to meddle in that composition. However, the actual shifts that began to take place in this area from the 1930s came out of the accumulation process itself. At first, therefore, the focus must lie on establishing the characteristics of the industrial labour force and the main structural feature of industry.

South African industry sprang up from two distinct roots. One lay in the diverse opportunities that emerged from the concentration of workers and their families in urban centres. Food and clothing were two logical foci for development but other types of workshops producing building materials such as brickworks or simple consumer objects such as candles also were evident. Initially the rapid urbanisation that followed in the wake of the mineral discoveries brought about a great increase in imports. Local products, substituting for imports, began to be manufactured on a haphazard basis, although as a sector the food and beverage industry (so diverse that the term 'sector' is almost misleading) was easily the most important consumer industry before and even through World War I. Such manufacturing lacked much significant

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internal or national integration; hives of activity emerged at a dozen, widely scattered urban centres often focussed on a localised market. By 1915, the Cape Town and Johannesburg centres were far and away the strongest but the overall strength of the Rand had just begun to show.

PERCENTAGE OF NATIONAL INDUSTRY ¹⁰		
1915-1916		1922-1923
CAPE	37.4%	35.8%
Western Cape		18.2%
Port Elizabeth		4.1%
TRANSVAAL	29.9%	37.3%
Rand-Pretoria		33.2%
NATAL	25.9%	22.6%
Durban		12.0%
OFS	4.2%	4.4%

As has frequently been noted, World War I provided a very considerable stimulus to development through cutting off South Africa from British suppliers. The garment industry of the Rand and the boot and shoe industry of Port Elizabeth were among the best-documented benefactors. Such industries grew despite intense reliance on foreign raw materials and on foreign machinery.¹¹ Their extension, based on operative labour, could proceed on the basis of the expenditure of only a modest, locally-available capital outlay.¹²

This pattern of low-level import substitution in consumer goods has a classic ring; it is similar to early industrialisation processes in most parts of the world.¹³ What distinguished South Africa, however, was the simultaneous and rather rapid growth of an engineering industry, focussed on the Rand, to service the gold mines. At first cry, the mines represent a kind of apotheosis of imperialism; not for nothing did their evolution set Hobson going and provide fuel to the fire of Lenin and Luxemburg. They dwarfed all other contemporary Western investments in Africa and represented a great source of wealth for Europe. Yet, by contrast with colonial mining ventures elsewhere, they stimulated internal economic development substantially in the form of investment, urbanisation, infrastructure, skill development or any other criterion one would be apt to use. The supply needs of the mines were massive and the opportunities arose and continuously extended themselves for independent metal-working firms, independent from mines management and fully competitive with importers' wares because they were perfectly tuned to local requirements. Early foundries did generally focus on repair jobs and special commissions and almost entirely lacked a mass-production character.¹⁴ Yet within the South

African arena, they represented a remarkable development, very precocious by the standard of metal industries in countries at a comparable level of production and wealth in general. Already by the mid-1920s, a small iron and steel industry using scrap metal had arisen in several locales (Pretoria, Newcastle, the East Rand) in order to service rail and mines needs.¹⁵ The mines also stimulated the birth of the chemical industry, de Beers helping to give birth to African Explosives & Chemical Industries in 1924.¹⁶

The unintegrated structure of early South African industry has been noted. A related feature, which requires underscoring, is the absence of national integration. Each centre was relatively isolated and differences in industrial speciality, labour force recruitment sources, wage rates and cost structures were very substantial.¹⁷ In a recent thesis, Martin Nicol has emphasized regionalism as a means of coming to grips with the Cape garment industry.¹⁸ However the point needs application to each region; studies of South African industrial development need to avoid simply looking at the economy in the aggregate and develop an improved sense of local regional consciousness. If this essay has a focus, it is on the southern Transvaal industrial region with most references to Johannesburg and the East Rand. From World War I on but especially with the post-1933 boom, this region acquired a centrality, a national weight in the economy, that gives it a particular historical significance even though localised patterns elsewhere did not vanish.

Two sectors of the Rand economy already mentioned are of critical weight, the mines and the metal industry. Engineering became more and more concentrated on the Rand with time and the key to its industrial growth pattern.¹⁹ Of all the census-defined industries, only jewellery manufacture was more centred there. However, among the consumer industries, the particular importance of the garment trade requires attention. Of South African clothing factories, 28.2% were on the Rand in 1923-24 and 38.3% in 1932-33.²⁰ By contrast the Rand's share of food-related industries was more moderate and actually declined (15.5%, 1923-24; 14.6%, 1932-33). Engineering and clothing industries will continue to receive particular attention set against the other important forms of enterprise on the Rand: the mines, the railways and commercial trade.

The Rand formed as well a distinctive labour market. It represented a particular amalgam of white and black. The intermediate racial strata, "Coloured" and Asiatic, although present, were greatly inferior in numbers to Africans and whites. The following table gives a sense of the proportion of the different races in the population in the biggest Rand cities. For the Transvaal as a whole, the masculine population in 1921 was 24.5% white and 73.1% "Bantu"; in 1936, 23.0% white and 74.8% "Bantu" and in 1946 22.8% white and 75.1% "Bantu". Of factory workers in 1923-24 in the southern Transvaal alone, 39,892 (61.7%, were "non-European" males and 22,183 (34.3%) were "European" males. The latter proportion was high by South African standards. In the following year, no more than 26.9% of the industrial work-force consisted of white males nationally.

In general, the Rand was a high-cost regional economy with particularly high housing costs jacking up the total.²¹ Within its working class, wage levels exhibited a spectacularly large range, an easily

recognized fact but one that calls for extended explication. As J H Botha wrote in 1928,

Een van die hoofkenmerke, indien nie die hoofkenmerk nie, van loonskale in Suid-Afrika, is die groot wariasie van skale en werklike verdiende lone tussen verskillende distrikte, tussen verskillende nywerhede en verskillende klasse van arbeiders in dieselfde nywerheid en selfs in dieselfde onderneming.²²

BIGGEST SOUTHERN TRANSVAAL CENTRES - POPULATION PROPORTIONS BY RACE						
	Euro- pean	Native	Asian	Mixed	TOTAL	
JOHANNESBURG	52.7%	41.1%	2.2%	4.1%	288.131	1921
	49.6%	44.1%	1.9%	4.3%	519.384	1936
	43.4%	50.6%	2.1%	3.9%	765.457	1946
PRETORIA	61.3%	33.5%	2.4%	2.9%	74.052	1921
	59.8%	35.2%	2.3%	2.6%	128.621	1936
	53.4%	42.7%	2.0%	1.8%	244.887	1946
GERMISTON	37.1%	60.5%	1.1%	1.3%	42.355	1921
	41.0%	56.1%	1.0%	1.9%	79.440	1936
	40.0%	57.7%	0.9%	1.5%	131.618	1946
SPRINGS	23.1%	74.8%	1.1%	1.0%	19.400	1921
	21.2%	77.3%	0.7%	0.7%	86.874	1936
	22.8%	76.0%	0.7%	0.6%	111.141	1946
BRAKPAN	28.8%	72.0%	0.2%	0.7%	24.644	1921
	31.7%	67.7%	0.1%	0.6%	54.811	1936
	32.8%	66.8%	0.1%	0.4%	83.456	1946
BENONI	30.4%	66.2%	1.2%	2.2%	47.641	1921
	27.1%	69.3%	1.2%	2.4%	77.760	1936
	32.8%	62.1%	1.5%	3.5%	74.238	1946

The essential factor in coming to grips with the shape of wages is an initial determination of the conditions engaging migrants to the area. Such a determination focusses particularly on three major labour sources: international wage levels for skilled workers prepared to come to the Rand from overseas, wage levels in regional (southern African) agriculture for black labourers (and to some extent, price values available to peasants for their crops) and wage levels in South African agriculture for white farmworkers. A fourth element that has to be considered in the determination of all wages is the question of family support and women's earnings, visible and invisible.

To begin with the first category, the need for skilled workers on the Rand went far beyond what the relatively small artisanal coastal communities could provide. As late as 1921, 55.8% of all South African fitters, 40.0% of all electricians, 59.8% of all typesetters, 52.1% of barbers and 48.3% of carpenters were foreign-born. This compares to only 5.8% of farmers and 10.0% of labourers -- or to 76.0% of company directors, 62.3% of doctors and 70.8% of chartered accountants.²³

Wages for experienced miners were also relatively very high because of the very high living costs in a newly-opened mining district in the African interior and because miners had to be lured from overseas. Unlike the craftsmen who serviced the mines, however, the miners were only in part in command of difficult to acquire skills. It is perhaps more accurate to speak of their mining commitment:

The good miners of the world have either been born the sons of miners or they have been subjected to the influence of a mining community, where mining was the prevailing and customary work and occupation.²⁴ mining is not a thing that the ordinary man goes in for.

Mining was not only arduous and liable to lead to disabling or fatal accidents; it also led frequently to the horrors of an early death from phthisis.

The large majority of mine workers at all times came from the indigenous African communities of the Southern part of the continent. The structure of black mining labour recruitment and discipline, including the influence of a reserve subsistence basis in the countryside, has been the subject of a number of important studies.²⁵ It should perhaps be stressed here that, while there was a significant amount of contact and interchange between the mine compounds and the outer urban world of the Rand, in general shops, homes and industries did not employ black men from the same labour pool. The black township population came above all from the rural Transvaal and Natal, which provided relatively few gold mine migrants. Of newly-arrived black workers on the Rand not employed in mining, sampled by the Native Labour Director's department in 1931, some 47.4% were from Natal/Zululand and 44.2% from the Transvaal. By contrast, only 3.6% and 10.6% of mine workers were from those sources respectively.²⁶ For this new urban population, the key wage incentive lay in the comparison of town earnings with those paid to black men of Transvaal and Natal farms.²⁷ The classic urban wage rate was £1 a week, compared to the skilled white man's £1 a day. A huge proportion of such a wage would go into the rental of a small, poorly inconvenienced room. By itself, it could not adequately sustain family life.

Only around the time of World War I does the African female population of the Rand begin to expand significantly from small beginnings, though then and for many years afterwards the state did not set direct impediments to women's town-ward movements. The hesitant establishment of African family life in the city²⁸ depended on accessibility of income beyond the man's principal wage. Women worked, typically brewing beer or taking in laundry, both of which could be combined with family rearing.²⁹ There is no reason to think that most African women ever expected to be supported by their husbands without working on the the

conventional European model. A non-brewer was seen by all as a "bad wife".³⁰ Children, hawking newspapers or caddying on gold courses, often contributed to the family income. The man himself frequently looked for extra work in order to extend his income.

While industry absorbed growing numbers of Africans, until World War II other labour sectors remained much larger in scale. In 1941 there were estimated to be 42,000 black domestic workers in Johannesburg while servants still outnumbered factory workes among Witwatersrand blacks as a whole.³¹ Domestic wages, relatively good at first, deteriorated compared to industrial wages over time.³² Van Onselen has also suggested that domestic labour was redolent with overtones of violence, sexual frustration and psychic humiliation, an atmosphere that spilled over into African urban life more generally.³³

All in all, it was a poor life in the slumyards of the central working class districts of Johannesburg and other Reef towns, able at best to provide a bare subsistence through the forms of stretching income suggested. Particularly given the dearness of living costs on the Rand, claims that the early black working class compared in living standard to the working class of continental Europe at the time seem somewhat specious.³⁴

It is notable that domestic work and beer-brewing combined to attract many African women to the Rand in the inter-war years. From small beginnings, the absolute number of women increased faster than the number of men for much of this time. It was women's labour which actually made African urban life sustainable while arguably providing less oppressive conditions than prevailed in the countryside where African women had virtually no access to cash and experienced an intense social subordination.

There was more differentiation within the African working class than this bleak account allows for, moreover. Individuals became competent carpenters and made a reasonable living selling to a township clientele; a bus driver, like those working on the lines that served the freehold townships of Alexandra and Sophiatown by the 1930s, made a far better wage than a labourer.³⁵ Certain categories of black mine employees were also paid relatively well while the mines were an important employer of black clerical labour.³⁶ However many workers earned less than the conventional £1 a week subsistence wage and figures at that level or even well below were so common as to represent a strong economic force. Rand wages were actually lower for Africans than in coastal cities (just as white wages tended to be higher). In different job categories, "non-European" wage rates varied between 15s8d and 23s9d p.w. vs. 16s7d and 27s2d for Durban or 26s7d and 36s7d for Cape Town, the highest national figures around 1925.³⁷

The £1 a day conventional white wage was more of an ideal apart from the mineworkers and the highly skilled after the general wage fall in the wake of the workers' defeat in the 1922 Rand Revolt particularly. Certainly the white artisan in South Africa, initially protected more by his scarcity value than the colour of his skin, aspired to and enjoyed a good life frequently. The £1 a day man could own a comfortable, electrified, well-appointed bungalow in grounds with a garden and support a small family well. He could in fact hire the services of a black man to do the menial house-work. His diet compared well to that of virtually any workingman in the world. Putting aside the threat of

personal misfortune (which was, of course, not a small one for the miner),³⁸ he had by any international standards a very reasonable wage indeed. During the pre-World War I years, gradually diminishing living costs (apart from housing) were enabling white immigrants to bring their wives out to Johannesburg and to establish a family life in as comfortable a manner as the high-wage but high-cost mining economy of the early days had enabled them to pursue as single individuals.³⁹ Of white mineworkers, 12% lived with families in 1897 and 42% by 1912.⁴⁰

It certainly seems remarkable that this class of men were ever involved in the fights of desperate intensity with capital that rocked South Africa between 1907 and 1922, culminating in the Rand Revolt which centred on the mines but had the support of many other workers. Yet over the well-paid man, because he was a relatively tiny proportion of the able-bodied male population of the sub-continent, hung what Frederick Johstone has called a cloud of "extreme structural insecurity". According to the 1926 Economic and Wage Commission only 10% of all South African wage earners made even so much as half the £1 a day figure at the £120 p.a. line (and surprisingly, over one-fifth of these were not white). Could not the scarcity/skill value that did make high wages feasible for some give way with time?

The white population itself was far from homogeneous. After the Anglo-Boer war, the Rand began to shelter a rapidly growing number of people driven off the land. The Afrikaner trek to the towns had begun, particularly from the Cape Midlands, the western Transvaal and the southern and western Orange Free State.⁴¹ The proportion of members of the three Reformed churches in the white population rose from 13.7% in 1904 to 23.8% in 1921 and 29.0% in 1936 in Johannesburg. For other Transvaal towns, corresponding percentages were:

	1904	1921	1936
PRETORIA	30.0	40.8	48.5
GERMISTON	18.5	33.3	44.2
BOKSBURG	18.9	32.4	40.4
BENONI		23.1	30.3
BRAKPAN		39.1	45.5
SPRINGS	15.3	22.6	35.0

The migrants had mastered a limited range of skills appropriate to rural life but with little appeal to urban employers. As Davies has pointed out, (mining and agrarian) capital had no very positive goal in ousting whites from the countryside and creating this new proletariat.⁴² White labourers would work for wages at a minimum set in term of white farm workers' earnings. Typical white farm wages on the eve of World War I were 3s6d-5s p.d. and so they remained for a generation.⁴³ Often household heads were preceded to town by their children, notably their daughters, who proved the most employable. For them, as well as the large number of unskilled white labourers who worked on

building sites and in brickyards, as trolley- or cabdrivers early in this century, wages did not approach even vaguely to the workingman's ideal of £1 a day.⁴⁴

White labour worked to establish two rather contradictory lines of defense faced with the long-term unfavourable market conditions for holding up what became considered as decent wages. One was the "rate for the job" philosophy characteristic of the trade unions. While certain white unions, notably the miners, notoriously held out for as tight a colour bar as they could manoeuvre or bludgeon through, most skilled workers realized that this would eventually lead to undercutting by an outcast black labour force. For genuinely skilled workers moreover, fears of encroachment and dilution by blacks were not very realistic in the short term, particularly before the 1940s.⁴⁵ "Rate for the job" was a strong rock to stand on.⁴⁶

At the same time, articulate workers' representatives dreamt of a South African version of the white Australia policy. Australia has frequently⁴⁷ been noted as a model for early South African Labour Party thinking. For the wandering, usually ultimately British-derived skilled or semi-skilled worker, Australia was the country par excellence which had provided a decent cultural and economic life for people like himself by defying capitalists' schemes and restricting the entry of cheap labour. Australian workingmen had used their political muscle to force employers to stick to hiring well-paid hands at all skin levels while strong tariffs protected the national market. If "rate for the job" made particular sense to the skilled workmen, something like "white Australia" (which could easily enough be adapted to the outlook of the nationalist-minded Afrikaner considering an urban policy) was more vital for the unskilled white labourer. Limitation or exclusion of black labour was crucial to the project; black meant cheap labour and an economy based on cheap labour.⁴⁸ "Any man is not worthy of his name if he will accept the position and remuneration that have always been secured to the nigger."⁴⁹

Towards the intermediate racial strata, Asian and Coloured, attitudes were ambivalent on the Rand if less positive than in coastal cities⁵⁰ where they were entrenched among the ranks of skilled workers. The African was, however, unabsorbable and must be as much as possible actually excluded from urban life;⁵¹ no party was more insistent on this as an aim than the Labour Party. Race thus had a great calling power as a defining characteristic. The white artisan, despite fears and prejudices, came to accept the unskilled white labourer as his fellow-citizen whose living standard required protection in the general interest but the African was another story. Exclusion of the African could not be expected to depend on the simple workings of market relationships or workplace struggles; it required the intervention on a very systematic basis of the state. Thus exclusionist ideas looked very quickly to the political sphere for a resolution.

Both "rate for the job" and "white South Africa" were defensive and exclusionist lines of thought, following the logic of what Stanley Greenberg has called a "bounded" working class.⁵² There is little reason to ascribe the origins of the consequent disunity among workers to the machinations of capital, however useful such divisions could in some respects be to bosses. Managerial assumptions of "competition"

between racial and ethnic groups were probably widely internalised among workers.

If politicians, intellectuals and others outside the working class trembled for white workers losing caste by living in slums cheek by jowl alongside dark-skinned neighbours, the evidence suggests that most such workers tried to hold themselves apart and much preferred to live in segregated neighbourhoods when they could. Koch has pointed to pressures exerted by whites in communities such as Doornfontein and Bertrams to have black yard-dwellers ejected while Pollak reported in 1930 the hostility of white women having to work in any physical proximity to "Natives".⁵³

By the early years of the century, most Afrikaner workers in Johannesburg were settling into a residential corridor that opened out into semi-rural housing in the west and only involved intense racial integration where the corridor tightened into a wedge, particularly in Fordsburg. A recent history of Afrikaners in Johannesburg paints a relatively convincing portrait of a more and more self-conscious ethnic group establishing its own distinctive economic and cultural niche in the city much like equivalent groups in North American cities.⁵⁴ The increase in Dutch Reformed Church membership from 13,521 in 1905 to 43,120 in 1930 bore witness to cohesion and to the prevalence of a rather law-abiding, family-orientated, religious community. Descriptions of the "fallen" character of the urban Afrikaner usually have to rely on discussion of involvement in the peculiarly South African "crime" of selling liquor to Africans.⁵⁵

Workers, as van Onselen puts it, "borrowed, shared and adapted practices drawn from older settings and put them to work in the new environment".⁵⁶ Hansi Pollak's finely-observed contemporary thesis on garment workers suggests some of the material factors that aided ethnic and racial cohesion at the workplace -- dependence of the new arrivals on informal work-groups called "sets", dependence on work veterans who taught new girls the ropes and made their lives more tolerable; recruitment following largely word of mouth.⁵⁷ These bonds re-inforced, as the author of an historical thesis on the same workforce some half a century later insists, ideas about who was who in South African society derived from outside the workplace.⁵⁸ In the industrial city of Benoni, while a fairly rich nexus of social organisations (churches, sports clubs, etc.) glued white communities together, the exclusionism of white society showed itself in extreme form by the ban placed on Africans so much as using the city sidewalks to pass by.⁵⁹ While the cultural and residential interpenetration among African, Indian and Coloured may have been far more intense and important, it must be said that "Babylon and Nineveh", no less than Chicago or Montreal, failed to unite the mass of migrants who swarmed to it into a melded population. Particularly perhaps in the absence of mass-production industry, communities, even while inter-relating, retained distinctive identities and formed ethnic groups often more sharply defined than they had been in rural areas.⁶⁰

White male unskilled workers played relatively little part in practice in secondary industry.⁶¹ It is instructive to examine the situation in the two important industries already introduced, engineering and garments. In the engineering industry, white labour was very notable but it was largely skilled labour derived from British

immigrant sources. Given the nature of the labour process, the workshop character of the early factories, there was rather little possibility of job dilution in the expanding trade. Highly skilled whites were matched up with unskilled blacks who performed the most menial labour and brought down the overall wage bill. Each moulder, according to union rules, required a "Native" to shovel sand from heap to mould, for example.⁶²

By contrast, the garment trade of the Transvaal became the province of the Afrikaner women machine operator. White female factory workers rose in numbers nationally from 4,586 (4.5% of the industrial workforce) in 1915/16 to 7,666 (5.9%) by a more restrictive definition in 1924/25 and to 13,234 (8.2%) in 1929/30. They were particularly remarkable as garment workers and in a few other forms of manufacture such as sweet-making and tobacco. Some 5,000 white women worked in Rand factories by 1930.⁶³

If we accept the results of Hansi Pollak's wide-scale 1930 survey of Johannesburg women factory workers, the greater part were very young. The median age for garment workers was 20, for women in printing 22, in leather manufacture 19 and in confectionary only 18. Some 83% were under 25.⁶⁴ Pollak also reported that 87% of garment workers were single, a figure she herself suspected was too high owing to the prejudice among some factory-owners and most workers that women married to fit, employed men should not be holding down jobs.⁶⁵

Nor were they paid a white man's living wage. Bosses tried to maximize the employment of girls who could be paid as minors.⁶⁶ White women factory workers were rarely the sole family bread-winner. Only 12.8% of those surveyed fitted such a category while almost 70% lived in households containing at least one male bread-winner, usually a father or brother. Typically, the white woman worker earned 20-40% of the total household wage.⁶⁷

Whether household income added up to a modest minimum, quite comfortable indeed by African standards, or, as in many cases, not, depended on circumstances given the absence of state welfare provisions: death, illness, alcoholism and other debilities.⁶⁸ Girls new to town were typically those who suffered real privation.⁶⁸ Pollak reported considerable acceptance of a situation whereby women were conventionally paid no more than half a man's wage (although this half might look quite good compared to that earned by unskilled white men), were generally considered to require male supervision to work properly and were defined as less skilled than men.⁶⁹ Consciousness changed somewhat along with an improvement in wages during the 1930s under the impetus of Solly Sachs' Garment Workers Union.

The garment trade also diverged in other respects from the white workingman's ideal. To begin with, the length of the working day was considerable,⁷⁰ particularly in the 1920s, and employment was markedly seasonal. Substantial use was made of juvenile labour. African children performed the most menial labour in the factories while African male (or Coloured female) pressers did the heaviest work for which they were paid less than the white female machine operators.⁷¹ One feature of this composite picture was the use of very poorly-paid African unskilled labour; another, however, was that it also allowed for the emergence of a small stratum of relatively well-paid African workers who made space for themselves in categories designed originally

for others. The related bespoke tailoring trade contained somewhat equivalent categories of labour -- in particular, intensely exploited newly-arrived Jewish immigrants who were working off obligations to their already established relatives in "ratshops" as well as generalised sweated conditions in marginal operations. Shadowing the Jewish tailoring firms and expanding Johannesburg and Germiston clothing factories using Afrikaner women workers were Indian outfits which similarly relied on exploitation of junior family members in the one case and on the operative labour of Coloured women on the other.

According to Pollak, few white garment workers were the daughters, sisters or wives of factory workers. The working class husbands and fathers tended to be employed in the building trades or in public service of some form. The best-off were miners; while the Rand Revolt of 1922 had cut off the advances of white miners and cut them down a couple of pegs, it is often forgotten that the mines continued to offer substantial numbers of relatively unskilled local whites well-paid jobs through the inter-war years. Afrikaner miners, starting in the aftermath of a lost strike in 1907, overcame fears and inhibitions about the grim underground world and began to replace British immigrants. They were becoming the large majority underground among whites during the post-1922 years and in general the linkages between miners and non-miners within the white segment of the working class seem more intense than among black workers.

For the economic historian, two points are particularly important. One is that early Rand industry used substantial amounts of relatively expensive skilled white male labour but very little unskilled adult male white labour that might have demanded anything like the same wage. However, and this is the second crucial point, substantial other categories of white workers existed who were prepared to offer their labour for far less money (and without actually challenging the whole adult family pay structure). These were very important in certain consumer industries, notably the garment trade.² Compared to Britain, the garment trade in South Africa during the 1920s paid relatively comparable wages to³ operatives but the cost structure of production overall was higher. This was true despite the presence of certain categories of very poorly-paid unskilled workers, just as in engineering.

The state took much less interest in other industries, some quite important, which had fewer white workers so that sectors in manufacturing that actually did⁴ depend far more heavily on black labour have left vastly fewer traces. Even the visual images of black workers rarely appear in early trade and government publication photographs on industry prior to the Depression.

Brick-making is a case at hand. Van Onselen has discussed the role of this trade as well as other types of simple, heavy labouring work linked to construction that frequently occupied impoverished white arrivals to Johannesburg early in the century.⁵ A generation later, it had become a largely black trade in which the white:black ratio was among the lowest of any line of endeavour.⁶ Average wages were actually below those in the gold mines. In private enterprise, the African man was increasingly preferred for heavy, back-breaking labour (women in the case of laundry-work).

During the first decade following World War I, despite a torrent of state rhetoric on the problem of "poor whiteism" and polemics threatening state intervention in the secondary industrial labour market, both of which will be considered further below, the actual composition of the labour force did not much alter in a period of relatively modest economic growth. Just as the rising number of African women coming to the Rand rarely found employment in industry, the share of unskilled white men did not change too significantly. Between 1924/25 and 1929/30, the last pre-slump year, the national white work force in industry rose from 42,898 to 58,402, a rise of 36%. In reality more than one-third of this increase was accounted for by women workers (13,234 white women factory workers in 1920/30). Juvenile males and skilled workers account for most of the remaining increase.⁷⁷ In proportion to the entire industrial work-force, white males increased barely at all, from 26.9% to 27.8% -- especially in the wake of a decline from almost 35% in 1915/16 -- while African men increased simultaneously from 42.0% to 42.6%. Tariff protection after 1925 was meant to support white labour based industry especially (as were state contracting preferences), but there is little evidence that it actually did so. Europeans formed 40.3% of the work-force in industries protected by the 1925 tariff compared to a total proportion in the work-force of 32.8%.⁷⁸ Changes in the labour process and the intensity of supervision are apt to be relevant⁷⁹ to the slight increase in white male participation that did occur.

Just as the labour force did not much change in composition, its overall size did not greatly increase. The total industrial work-force of 162,329 in 1929-30 was a figure no higher than those obtained right after World War I, albeit on the basis of slightly different and more stringent calculations.⁸⁰ Contrary to the stereotype, the first years of Pact government rule was one of only moderate industrial expansion and little structural change. In particular white men continued to be represented in secondary industry overwhelmingly as skilled workers while white workers generally included an increasing proportion of women and juveniles who could be paid at less than a white man's pay "legitimately".⁸¹

This modest prosperity gave way to a slump in 1930. Surprisingly, in complete contradiction to the public fears of racist politicians, the result was an increase in the white proportion of the factory work-force during the Depression years.⁸² Between 1929/30 and 1932/33, white women's share in the total rose from 8.2% to 11.8% while white men's share rose from 27.8% to 29.0%, a figure comparable to that just after World War I again. Since overall industrial employment fell 12.3% in this phase, that latter percentage was still a decline in absolute numbers of individuals employed.⁸³ One can speculate that the Depression brought about a tendency to hire whites as they became prepared to accept lower wages but it is clear that the main reason for the increase lay in their relative prosperity and success of certain trades employing many whites. The important category of basic metal industries actually expanded its work-force during these years while white moulders were obliged to make do with fewer black "helpers"; the clothing industry expanded markedly during the early 1930s.⁸⁴ Printing, the most consistently skilled trade and the most heavily dependent of all on workers of British immigrant stock, barely declined at all in size.

In many factories, real wages actually increased during the slump years.⁸⁵ The impact of crisis proved, as indicated by the table above, rather little about the merits for capital of different types of workers. Industries survived well or declined independent of their racial/

INDUSTRY	WORKFORCE 1929/1930	white %	WORKFORCE 1932/1933	white %
Clothing/ footwear	16,744	61%	21,616	67%
Printing	8,414	73%	7,929	74%
Basic metals	10,784	41%	11,900	43%
TOTAL	162,329	36%	141,906	42%

gender labour force components and more substantially in relation to international economic forces in conjunction with the peculiarities of the South African market.

The real dividing line in the history of South African secondary industry needs to be drawn in 1933. A dozen virtually uninterrupted boom years brought about change of a sufficient depth that one can talk about the start of a structural transformation. The boom began when the government abandoned the gold standard which fuelled a price rise in gold and led to an expansion of mining. The engineering industry responded immediately; by 1934, many metal firms were already working again to full capacity with overtime available to workers.⁸⁶ In that year, ISCOR began operations. By 1937,⁸⁷ one-third of all South African steel consumption was locally produced. With the establishment of a steel mill in Pretoria, the possibilities for the engineering industry to develop beyond a service for the mines opened up. During the 1930s, work for the mines remained pre-eminently important.⁸⁸ However, firms began to turn to supplying the consumer sector of the economy. The onset of war in 1939 brought expanded production, profits and great technical advance. Basic metal industries employed 11,900 workers in 1932/33, 33,878 in 1939/40 and 61,834 in 1945/46. In the same years, transport equipment employment rose from 9,442 to 17,367 to 24,052, electrical machinery employment from 1,024 to 3,932 to 7,984 and metal products employment from 3,294 to 6,968 to 9,516.⁸⁹ The money value of South African metal and engineering products grew from £9m. in 1934 to £22.2m. in 1939 and £53.8m. in 1945. Early on, in the war, internally generated value surpassed the value of imports.⁹⁰ Prosperity in mines and metals exercised a great stimulus in turn on consumer goods production.

Several consequences need to be underlined. First is the absolute centrality that the engineering industry acquired within the entire industrial structure of South Africa during this era, a remarkable fea-

ture given the still quite low level of overall economic development.⁹¹ The engineering industry, as Kaplan has noted, profited from cheap raw materials and coal supplies and enjoyed little tariff protection. It was not strongly associated with the eternal pleas of W J Laite and the protectionist lobby that Bozzoli has documented. However, by contrast with that lobby, engineers were from the beginning keen on the establishment of ISCOP, whose generalised benefits began to be apparent in the late 1930s.⁹² During the war years, their interest in a "vast expansion of South African industry in general" brought them together with other industrialists more closely.⁹³ It is clear, however, that claims for the dependence of South African industrial fortunes on protected tariffs alone are quite incorrect, albeit frequently made.⁹⁴

Second, engineering expansion made possible national industrial integration. Intersectoral interactions began to intensify while imports from overseas began to shift slowly away from consumer products to intermediate and machine goods.⁹⁵ The engineering industry remained heavily concentrated on the Rand, though, while the Rand industrial zone expanded. Factories opened up in such distant points as Vereeniging, Alberton and Nigel. This meant that the Rand achieved an unprecedented national significance with somewhat over 40% of South African industrial activity reported by the eve of World War II, a concentration that has remained remarkably steady until recent years when industrial decentralisation has begun to exert a small impact. Consider the percentage increases in the numbers of employees in private industry between 1927/28 and 1941/42:⁹⁶

	WESTERN CAPE	DURBAN- PINETOWN	PORT- ELIZABETH	SOUTHERN TRANSVAAL	REST
TOTAL	88.5%	108.5%	67.2%	169.7%	52.2%
whites	63.5%	72.3%	45.0%	148.3%	29.1%

On the Rand, industrial production increasingly shifted from town centres to especially sited industrial zones, often on unneeded mine property.⁹⁷ South Africa had found its Ruhr.

Other features of the changing industrial economy have received some attention from Legassick, Kaplan and Innes, among others. The profitability of industry in the 1930s began to attract investment both by the mining finance houses (especially in engineering, chemicals, paper) and by foreign investors, who had hitherto played rather little part in secondary industrial activity. This brought back a short-lived pattern characteristic of the 1910s which had stopped with the severe business downturn in 1920 and never systematically resumed until now.⁹⁸ Correlated with such investment was an increase in the capital outlay and number of workers per plant, in the scale and corporate ownership character of enterprise and in the use of local materials in production.⁹⁹ For business, the era of mass production itself was everywhere

heralded and actually began to be inaugurated here and there in dribs and drabs. The machine operative became a more and more characteristic figure and state regulations had to be rewritten to allow for the presence of a new category of "semi-skilled" workers.¹⁰⁰

With this level of new investment, the industrial work-force expanded dramatically. Between 1932/33 and 1939/40, it grew from 131,906 to 282,779, a 99% growth in seven years. During the following six war years, it expanded again to 422,013 or by another 49%. This labour force was increasingly black. By 1945/46, over half the industrial workers counted, 215,582, were male Africans, an historic barrier crossed. During the war, a number of cases that evoked the hostility of white workers point to job dilution that brought blacks in direct replacement of whites. Usually, however, dilution took the form of reorganisation of the labour process intended to save on expensive skilled labour.¹⁰¹ The biggest shifts in the racial composition of the labour force took place not in engineering, where the racial proportions didn't much change but in some of the lower waged consumer industries, such as textiles, furniture making and food and beverages.¹⁰²

The expansive labour needs of industry could no longer remain within the pool whites could provide, despite the strong appeal of the metal trades to male white workers.¹⁰³ The white industrial labour force almost doubled during the first seven years after 1933 but thereafter growth was far slower. For men, the army presented an alternative labour market after 1939.

Interestingly, and by striking contrast with Britain or the USA (but not Nazi Germany) white South African women did not offer themselves in large numbers for war-time factory work. In the United States, the war gave temporarily to many working class women a much better wage than the female job ghetto had historically allowed for. At first, South African industrialists expected much the same. "The obvious reservoir of dilutees is the army of women workers."¹⁰⁴ Yet in South Africa apparently equivalent women either took advantage of the increase in male salaries by staying home or preferred to move into clerical and sales jobs. While the number of white women in factories increased from 16,731 to 28,658 by 1939/40, it rose only to 34,765 in 1945/46. No more than perhaps 1,000 white women offered themselves for work in the vital engineering industry. In 1932/33, while 69% of women working in South African industry were white, the proportion had fallen to 58% by 1945/46. On the Rand, the proportion of white women garment workers fell from 74.7% in 1937/38 to 53.2% in 1943/44 despite a slight total increase. The main increase in employment were of Coloured women and African men.¹⁰⁵

By the crest of the war years, the unskilled white male workers was of little relevance. Even before the war had begun, ISCOR, which was intended as a state corporation to base itself on white labour, started to abandon its initial labour strategy and hire more blacks while a parallel shift had also occurred on the railways at the lowest pay and skill level.¹⁰⁶ Following the war, a commission was obliged to recommend the abandonment of the lowest category of regular railway work defined as "white" in response to the shortage of workers. While between 1939 and 1946, the number of skilled and semi-skilled "graded" workers increased from 48,084 to 65,998, "railworkers" declined from 15,181 to 12,521 for a shortfall of 5,000+ together with a further

shortage of 2,500+ "casual" workers. Placements in remote areas or in high-cost cities, (with many competing job opportunities) were especially hard to fill.¹⁰⁷ However, railway policy remained to avoid racially "mixed working" wherever possible.¹⁰⁸ Even though blacks were being taken on, the segregated work-force remained. The commission pointed out that white unskilled labour as it existed on the railways or in the post office -- which employed another 1,200 unskilled white labourers -- no longer existed in the private sector.¹⁰⁹ This was a decisive qualitative tilt in the national labour scene. From the perspective of the labour market, the South African economy was entering a new phase.

II

Having attempted to bring together the main features of secondary industrialisation before 1945, the remaining section concerns itself with the changing perspectives of capitalists on the labour force through the period and as well on the history of state ideology concerning labour in secondary industry. The best way to understand capital and state views is through identifying several distinct stages. Through the early 1920s, business did not have a closely articulated prospect of labour. It accepted the central significance of white operative and skilled labour in industry while orientating itself largely to the consumer needs of urban whites. Little attention was given to the actual predominance of African Coloured and Asian workers.

By 1924, white political discourse involved a South African version of the "white Australia" chimera almost inevitably. The state attempted to hector white industrialists in line with this to expand the white work force. In response, business began to express with some clarity its actual dependence on at least some forms of black labour and black consumption for the first time. Following the 1930s, this expression became the central tenet in South African business philosophy as applied to labour market needs. The state followed suit in time and by the end of the 1930s, was attempting to accommodate the new capitalist ideas. The entire process as well as the interaction between state and capital here outlined merits far more detailed examination.

The earliest South African industrialists did not see the composition of the labour force per se as a basic problem, so far as the publications that they sponsored lead us to generalise on safe ground. The central issue for them as Bozzoli has stressed, was the creation of a guaranteed national market through the erection of high tariff barriers, a subject about which the Smuts government made many promises before 1924 but acted very little.¹¹⁰ On Africans, the industrialist had rather little to say. Industrial South Africa described Africans as a national "asset" in 1921 but it was in the role of peasant cultivators and manufacturers of handicrafts that they exerted a positive force.¹¹¹ H J Choles, envisioning the African as a significant consumer of Cheap mass-produced industrial goods but even then as no industrial workers, was already a pioneer in 1923.¹¹²

By and large, manufacturers catered for the white market and thought of whites as their key labour force. The well-paid worker presented a very enticing market potential, making white South Africa as an ideal for the cities very attractive.¹¹³ The state had its own interests in a relatively well-paid and thus law-abiding and conservative working

class.¹¹⁴ The economic horizons of manufacturers were such that the number of rural whites arriving on the Rand constituted a very large, apparently sufficient labour pool. They were concerned, however, both with the docility and the pay rates of potential white labourers. Frequently they called for white workers to accept a heavier load and lower wages; "traditional" white contempt for manual labour was a great theme for bourgeois condemnation.¹¹⁵ Through the 1920s, a particularly acute note was struck by the many exhortations that poor white women, especially Afrikaners, go into domestic service and stop feeling too proud and independent to accept a servant's place.¹¹⁶ For the white industrial work-force to grow substantially, it was necessary that whites learn to work in a suitable manner and for competitive wages. Another ploy typical of the era was the insistence that higher wages, while justifiable, be rewarded through high tariffs from the state.¹¹⁷

Only occasionally does one encounter a manufacturer actually preferring African workers; it is surprising how frequently the superior performance of white labour is assumed or touted by management.¹¹⁸ Of course, to the extent that men were better-paid and more humanely treated, there may well be a rationale for the assumption that they worked better. The question of race cannot be subsumed in the issue of relative merits of groups for particular jobs; in addition, supervision was a central aspect. Only rarely did workers of different races, as South Africa defined them, work side by side on the same job. Racial segregation of sanitary and washing facilities was a legal requirement at the workplace.¹¹⁹ Just as white women workers very largely were considered to require male supervision,¹²⁰ so blacks were almost invariably supervised by whites. The rare exception, for instance, the occasional employment of white women in Indian and Chinese-owned laundries was frequently condemned as morally reprehensible.¹²¹ In this sense, there was a very hierarchial racial order which one suspects management perceived as highly functional to good order in general.

To this rule, though, there were exceptions and anomalies. The pre-1924 picture is striking for its inconsistency and the incoherence of business ideology. Affluent white customers are wanted but so are poorly-paid, docile white workers. Whites are assumed at one level to constitute the back-bone of industry yet they already constituted very much the minority of the work-force as a whole.

In 1924, the state came under the sway of the Nationalist and Labour Party Pact government. The Pact committed itself to altering the racial balance within the industrial work-force in favour of whites. Its spokesmen held moreover, that secondary industry contained the germ of a special destiny in serving as the basis for a modern, nationally integrated South African economy. Given such rhetoric, it is unsurprising that a number of authors of the last decade, interested in exploring the links between capital and the state, saw in the Pact a government representing "national" capital, usurping the hegemony of imperialist mining capital.¹²² A considerably more nuanced view comes from Kaplan on the economy and Bozzoli on the state, although neither distance themselves entirely from the notion of fractions in a national power bloc in conceptualising this era.¹²³ Yudelman has recently gone further in stressing the weakness of labour under the Pact and in em-

phasizing continuities with the pre-1924 regime in what he sees as the fundamental issue of the day for the state, coming to grips with a potentially revolutionary white labour force. In so doing, Yudelman still fails to explain the intensity of populist political ideology. He has ignored the difference between the state as an institution on the one hand and the politics of those who control it through the medium of electoral contestation at another. He has moreover, a rather naive and drastically oversimplified view of South African industry, claiming that "South African manufacturing capitalists ... are all created by the state".¹²⁴ Thus, despite some shrill invective, he actually falls into the same trap as Robert Davies in trying to understand material change by an unwavering gaze on the state, rather than the actual economy.¹²⁵ For all its limitations, by the mid-1920s, South African industry could not simply be reshaped to fit the desires of politicians, particularly given the limited tools then at the state's command.

The Pact government soon issued a far stronger tariff than the previous one and this was much appreciated by industrialists, even though the new tariff was actually quite moderate by international standards and the loudly-proclaimed fears of wrack and ruin were always rather exaggerated.¹²⁶ However, it would be inaccurate to think that industrialists consequently formed a pillar of the Pact government.¹²⁷ Chauvinism divided them from the Afrikaner Nationalists while class interest kept them from the ranks of Labour. Moreover they were deeply disturbed by the strong line the Pact took on labour and race both for fear of its practical consequences and more theoretically, as the very type of dangerous, unwanted and potentially menacing form of state interference with business prerogative that impractical people might demand.

The pillar of Pact labour policy lay in the advancement and protection of what was called "civilised labour". The new premier, General Hertzog, (rather ambiguously) defined "civilised labour" as follows:

...labour rendered by persons whose standard of living conforms to the standard generally recognised as tolerable from the usual European standpoint. Uncivilised labour is to be regarded as the labour rendered by persons whose aim is restricted to the bare requirements of the necessities of life as understood among barbarians and undeveloped people.¹²⁸

These sentiments were not entirely novel; they were in accord with utterances of General Smuts. What was new was the emphatic stress laid by the new regime in intervening on behalf of "civilised labour". What was potentially very radical was the assumption made that the reward ought to relate to its needs, not what suited the capitalist. This kind of rhetoric did not emanate from any fraction of capital; Pact politicians represented the bourgeoisie rather poorly. Nonetheless, it should not be mistaken for a workers' government or a revolutionary one, determined to fight capital; its economic policies were relatively timid. They represented a thrust that was disliked but tolerated by most businesses. The Pact adjusted its sights generally to what was practicable in the environment of a capitalist society dominated economically by those outside the government.

The high-water mark of Pact thinking of labour was undoubtedly the Economic and Wage Commission of 1925. While taking evidence from the left wing of the labour movement, the commission was rightly scored for the business bias of its majority.¹²⁹ There is still a contrast to be drawn with the grossly pro-business commissions of the Smuts era, not to speak of the presence of an articulate minority representation. Bill Andrews and Clements Kadalie were among those invited to testify before the commission.

Kaplan, Davies, Yudelman and others have all noted that the Pact was unwilling to defy the mining companies to reverse their historic strike-breaking victory of 1922. Neither the mines nor the farms could really be expected to provide high-wages jobs for large numbers of whites replacing blacks. Here secondary industry was to come in. For Nationalist Party spokesmen, even more perhaps than the Labour representatives closer to the realities of industrial conditions, the cities of South Africa could be the scene for prosperous, high-wage, all-white industries. In return, such industries would be granted national monopolies through high tariff protection.¹³⁰ Thus the Minister of Mines and Industries suggested in 1931 that mines and farms "can absorb all our natives". For Labour man Tom Boydell, a "civilised wage" alone could justify the very existence of an industry.

Under the Pact, especial attention was paid to the so-called "poor white" problem -- the consequences of the proletarianisation of the Afrikaners. "Poor whites" are a nebulous and ideologically defined category, self-evidently. Could a "poor white" be a worker for instance? The Rev. B P J Marchand giving evidence to the state in 1913 thought not; General Hertzog in 1922 thought the opposite.¹³² From the point of view of Afrikaner nationalists, their apparent degradation and distance from controls defined them; unless they could be "uplifted", they formed a permanently uncertain and potentially radical element in the population. For Labour, this relatively large unskilled population represented a first danger in their fight to keep up the high wages of white artisans. It was to "civilise" the "poor whites" that "civilised labour" policies were created, even when "civilised labour" was not defined in racial terms precisely. All wings of the labour movement, including the African ICU, were in their own ways, anxious that "civilised" labour be made to mean not white labour per se but well-paid labour; the Labour Party fought to push the definition of "civilised" wages upward.

At the same time, "civilised labour" was an inherent and very key part of the overall segregation outlook that had become dominant under the Pact (but was in fact largely accepted by all political forces in white South Africa and, to a substantial extent, outside the white community).¹³³ "Uncivilised" labour would clearly continue to have its place, mainly in the primary industries, but that place had to be linked to the maintenance and development of the Native Reserves. Thus a high-wage urban economy and a low-wage rural/mineral economy aimed in part at export markets could be harmonised socially and financially. It was openly hoped that the application of machinery could oust blacks and create slots appropriate for deserving and increasingly skilled and productive whites.

The most progressive sector acknowledged by the Pact coalition could be found among the representatives of the trade union movement, several

of whom were far to the left of the parliamentary Labour Party and who saw through the limits of segregationist utopias. Bill Andrews, spokesman before the Economic and Labour Commission of 1925, suggested that:

... the great question in this country is the gulf between the two sections of the working class; it is unnatural, it is unhealthy ... the sooner you can remove that glaring discrepancy between white labour and native labour the better for South Africa.¹³⁴

For Andrews, in other words, the Pact ought to have been aiming for a homogenisation in the value of labour-power that would in time bring up the wages of the black working class. He did not, in any case, believe that white workers could hold their own in the long term without taking the bulk of blacks with them. The intervention of the state to raise black wages was essential to Andrews' perspective, raises in mining and agriculture as well as in industry. The Andrews approach had a certain influence and credibility during the first years of the Pact when a unified Labour Party was represented in it. The Economic and Wage Commission actually felt that "detribalized" Africans should have their wages brought up to white levels and included in white wage dispensations.¹³⁵ Labour's outlook was however fundamentally contradictory, caught between the desire to upgrade and uplift all wages in the country and its exclusionist instincts which were in general much stronger and more viable than Andrews believed possible.

Even before the Pact came in, the state already moved towards legislating labour relations in a manner that is usually associated with the Pact, following the Rand Revolt. As Yudelma emphasizes, this 1922-24 phase marked an important stage in attempts to "incorporate" the white working class politically.¹³⁶ In particular, these years brought into operation the Industrial Conciliation Act, a piece of corporatist legislation that was meant to make strike action very difficult indeed while pushing trade union representatives into legally-binding discussions of wage contracts.¹³⁷ This Act excluded from applicability "pass-bearing Natives".¹³⁷ This meant in practice that Coloured and Asian workers and, as it turned around for a lengthy phase, African women, were included under its provisions. Exclusion of African men was vital to mining and agrarian interests, with their large, disorganised and poorly-paid African work-forces, recruited in large part through other means than the conventional capitalist market. The essence of the Industrial Conciliation Act was to preserve existing social relations within the industry, not to alter the boundaries of labour force recruitment or to perform any social restructuring. As such, it was far more significant than the very limited direct colour bar legislation enacted during the 1920s.¹³⁸

The Apprenticeship Act also belongs to the twilight of the first Smuts era. In regulating conditions by which youth could move from school through formal training in a craft to a good position on the labour market, it was intended to turn numerous "poor white" children into "civilized" adults. The educational provisions largely excluded non-whites from its scope in practice. Actually, apprenticeship statutory legislation did not have a big impact on the creation of a skilled

labour force at a time when deskilling was on the agenda; white youth generally preferred to make its own way towards reasonably paid jobs, just as state labour bureaux were avoided when alternative forms of job procurement could be found.¹³⁹ What the apprenticeship legislation did prevent, or rather control, was the tendency in secondary industry to use cheap juvenile labour and to fire youths when they reached the age where adult wages need to be paid. Apprenticeship contracts, largely in the building trades or engineering, rose to 8,225 by 1928.¹⁴⁰

It was the Pact government which introduced legislation that set up wage boards which could recommend "civilised" wages that could then be enacted in a legally binding manner. Officially this could then "provide safeguards for the wages and conditions of low-paid and unorganised workers".¹⁴¹ The legislative model for the Wage Act was Australian and the entire Australian political labour tradition was its inspiration.¹⁴² An important aspect of the South African wage legislation was its official colour-blind nature while ensuring the employment of "a maximum of Europeans".¹⁴³ Labour feared that capitalists would find it easier to undercut high-paid wages if jobs were racially defined, given the overall political strength of business, while the Nationalists feared that to label the lowest level of jobs as black would have enshrined the exclusion of white labourers from secondary industry.

Theoretically the Wage Act contained the potential for dramatic social engineering, transforming the whole nature of the South African wage economy. In practice, however, it failed to perform in this manner and served essentially as a conservative force, holding an existing scaffolding together.¹⁴⁴ For one thing, the mining and farming interests made sure that the act applied exclusively to secondary industry; thus, the major and still economically central sectors of the economy would have remained in a position to undermine any attempt to alter wage structures nationally.¹⁴⁵ Business hostility prevented the compulsory hiring of some or all of the work-force in factories at "civilised" rates according to fixed ratios.¹⁴⁶ Efforts to institute a minimum wage were blocked.¹⁴⁷ With regard to secondary industry rulings, wage determinations made by the board were often successfully challenged or set aside while penalties for non-compliance tended to be very mild.¹⁴⁸ The Board was entirely inconsistent in its variable willingness to award or not to award "uncivilised" workers wage rates over the years.¹⁴⁹

What was left was a sort of policing function that tried to punish unfair or marginal operators. As such the more effective and powerful manufacturers, following initial misgivings, tended to give the Board at least nominal support.¹⁵⁰ Although it is not intended to claim that a direct causal path existed, this tended to mean that the Board favoured bigger firms with a more corporate outlook.¹⁵¹

One group that resented the Act and denounced it as discriminatory was the Indian community. Indian representations largely concern its apparently negative effect on Indian manufacturers rather than its impact on Indian workers.¹⁵² While genuine discrimination was undoubtedly at issue, much of the particular difficulty that Indians had with the Act lay in the tight-margined, small-scale basis of Indian-owned productivity capacity in the inter-war years.¹⁵³

Did the institution of the Wage Board bring about the "whitening" or "blackening" of the labour force? There are a few claims either way with reference to certain trades where blacks had moved into a relatively strong shopfloor position and were fairly numerous, notably furniture-making and baking on the Rand. Both of these, unsurprisingly, are also trades where non-racial and black trade unionism acquired early support.¹⁵⁴ Relatively high wage determinations are at different times reported as leading to the firing of white apprentices, to the firing of black adults and to the firing of white adults. There are also examples extant where Africans profited from the establishment of an all-round "civilised wage".¹⁵⁵ The Wage Board was determined from the outset, however, not to tamper with the gender definition of jobs, thus allowing low-wage 'pink-collar' jobs to go unchallenged.¹⁵⁶ Women were considered officially to be worth half a man's wage, able to support themselves but not to support a family.¹⁵⁷

None of these shifts were more than marginal in impact; overall Union statistics do not easily reveal any consequences to the Wage Board system in labour force composition. Indeed it is hard in the better-paid spheres to see how the determination of wages could have brought about much change given that the best-paid industrial jobs tended to reflect genuine skill barriers not so readily overcome.

Where the Wage Board system might have made a great deal of difference, following the Andrews line, was in the determination of labouring wages. The really revolutionary step, following the Australian model, would have been to raise sharply the wages in general at this level (admittedly to have done so while leaving the mines and farms alone would have been effectively impossible).¹⁵⁸ The Industrial and Commercial Workers' Union, the African general union that flourished during the 1920s, was at first very enthusiastic about the Wage Act.¹⁵⁹ State intervention could now be applied to improving the wage level for the mass of Africans working at all jobs, it was hoped. In 1926, following major disturbances in the African community, the Wage Board actually made a general determination for the entire increase in the wage level from 3s p.d. to 3s6d p.d. (or fl p.wk., the ICU demand), staggered over a period of time.¹⁶⁰ Although it is claimed that the level the board approved was generally acceptable to black Bloemfontein and did much to calm the ruffled waters there, what is most striking is that the Board did not see fit to change the real structure of labourers' wages. Only a small proportion, of course, of the black workers of Bloemfontein, were engaged in secondary industry. The recommended wage was far below anybody's definition of a civilised wage and was certainly unacceptable to the patrons of the "poor whites" as such.¹⁶¹

Following the Bloemfontein determination, research was carried out in the interests of a determination for another politically tense Orange Free State centre, Kroonstad. Here, however, it was finally decided that since no "civilised" wage could be authorised, none would be made.¹⁶²

A third major effort, aimed at Durban and sponsored by the ICU, did not get so far and in practice the Wage Board moved out the business of adjudicating wages where Africans were primarily concerned for most of the 1930s.¹⁶³ Two negative points follow from this. The Wage Board, in practice, shrank from trying to push up black wages to a point where a broad non-racial unskilled wage, acceptable to the white labour movement as well, could have become the economic practice in

South Africa. Secondly, given that determinations were never put in racial terms, the Wage Board could therefore not serve as an effective instrument in the embodiment of an unskilled white "labour aristocracy" either.

ICU involvement demonstrates the extent to which a segment of the African trade union leadership was keen to lean on state intervention in order to promote African welfare. Towards the whole issue of the drastically unequal South African labour force, the ICU position was ambiguous. Rhetorically, Kadalie and others called for equality and a civilised wage for Africans; in practice, as in the Bloemfontein case, the ICU was happy to fight for marginal improvements that did not seriously alter the balance conventionally established within the political economy. The relationship of ICU strategies to the actual outlook of sections of the African working class is extremely difficult to establish.¹⁶⁴

We have surveyed above the limited extent to which the composition of the labour force in private secondary industry actually changed after 1924. Where the Pact government in reality made a difference was in those spheres which more traditionally belonged to state initiative. The Pact did not take on the mines in any attempt to reverse the power relationships and labour ratios established after 1922; however, it introduced a moderate protectionism, authorised the creation of the national Iron and Steel Industrial Corporation of South Africa (ISCOR), which the mining companies feared would raise their cost structure and squeeze their profits, and subsequently increased taxation on gold mining. The state itself greatly intensified the hiring of white labourers, a tactic that had been a significant feature of state policy, notably in the Transvaal, since before the Anglo-Boer War although the Smuts government had tended to lessen its scale.¹⁶⁵ The Pact government thus followed a well-worn and fairly acceptable route, from the point of view of capital.

The railways particularly became the employer of a large stratum of "poor whites". Some 4,245 were taken on within the first ten months of the new government alone.¹⁶⁶ By 1931, 14,551 unskilled whites were working on the railways.¹⁶⁷ The state also commanded other spheres -- municipal labour, the postal service, afforestation and public works schemes and state-sustained rural settlements -- which absorbed whites without skills.¹⁶⁸ In addition, white boys from modest backgrounds entered the police and the military.¹⁶⁹ On the railways and in the postal service, Africans and Indians were actually fired in big numbers in order to make way for whites. Interestingly, Coloured workers were considered part of the legitimate sheep-fold by the Pact government and were also included in many of the relevant programmes. It is remarkable that while Coloured wages were consistently significantly lower than white, on a scale comparable to the black-white differential in the USA, the usual state apologetic stressed the lack of discrimination and liked to point to the odd example of the very successful Coloured workman.

Unsurprisingly this labour substitution in state service was bitterly resented by its black victims who came to assume that the whole civilised labour policy represented nothing more or less than an attempt to exclude them from decently paying jobs.¹⁷⁰ The South African Institute of Race Relations spokesman Rheinallt-Jones, however,

recognised that the Wage Act did not have any consistent impact of this kind in the private sector.¹⁷¹ He tried, typically for enlightened liberals of the 1930s, to fight for a non-racist interpretation of "civilised labour" as well as a flexible approach to segregation more generally that would allow some space for the indigenisation of black workers in town and for the recognition of the black middle class in South African society.

Despite his apparent advantages, the white railway labourer was no labour aristocrat.¹⁷² His wages (5s p.d. for adult males and less for youths) was far below any standard of "civilised labour" set by spokesmen from the labour movement, one reason why his employment was tolerable to capital.¹⁷³ It was more comparable with the wage of a white woman machine operator in a garment factory than a skilled male machinist or a miner. Often white women factory workers are reported earning quite as much as brothers or husbands in the railways.¹⁷⁴ However, this adult male wage was still better than that an African worker could hope to earn in practically any sector. Poor railway wages were, moreover, accompanied often by certain perquisites, most importantly the provision of free or subsidised housing.¹⁷⁵ However basic the railway labourer's modest house, it represented a substantial advance over the crowded room in a yard in Doornfontein or a shack in Sophiatown where the black worker of the 1920s was likely to be living.¹⁷⁶

The substantial employment of unskilled white men by the state, to a point which made unemployment rare, had a general uplifting effect on white wages. Johannesburg and the Rand towns continued, through the 1920s, to harbour many "poor whites". Increasingly though, this was due more to the absence of decent social welfare provisions that could handle the problems of the ill, the old and the unfortunate rather than to generalised economic conditions.

The grimmest believable descriptions of white poverty in the Transvaal towns really belong to the pre-World War I era, especially to the slump years before the establishment of the Union in 1910.¹⁷⁷ The 1920s witnessed sensational literary accounts bemoaning immiseration and degradation in the urban environment, in which the most hideous feature of all was the inter-mingling with "Natives" and the loss of "race pride". At first it was hoped by some to dump "surplus Afrikaners" back on the land in organised settlements.¹⁷⁸ In reality, as the Carnegie Commission noted, the "poor white" problem was overwhelmingly a rural one. In the towns, and particularly on the Rand, whites were far less likely to suffer from poverty.¹⁷⁹ They were also less likely to encounter the "evil" of intercourse between white and Coloured families.¹⁸⁰ For the urban dweller, any problem of poverty, apart of course from numerous individual hard cases, was a transitional one. The Carnegie Commission remarked that a survey of 169 "poor white" migrants to town showed 35.6% who were labourers but only 16.9% in the second generation of males.¹⁸¹ According to William Macmillan, almost one-third of white relief applicants in towns had actually been there six months or less.¹⁸² Smuts shrewdly made the same point.¹⁸³ The emphasis on urban poverty really reflected the anxieties of the Afrikaner bourgeoisie and intelligentsia, who were in the process of beginning to assert control over the wider white working class urban population against what at first seemed very heavy odds.

This does not really account, however, for the relative political quiet after 1922. The political standpoint of workers cannot be deduced directly from material conditions (or political deals). The remarkable decline in militant conflict with the state is not really explained therefore by theories of state intervention or incorporation, whether during the Pact years or before. Jon Lewis claims that the scholarly literature has seriously underestimated the intensity of strike action in the 1920s and early 1930s on the part of white semi-skilled workers; nonetheless this intensity cannot compare with the politically charged atmosphere that had prevailed earlier.¹⁸⁴

Although the Pact genuinely failed to interfere with the prerogatives of private enterprise, business was disturbed by its more general course of state intervention.¹⁸⁵ However pleased it was at Pact support for tariff protection, the business community actually opposed the creation of ISCOR at first and was hostile to the emergence of a state-run industrial sector.¹⁸⁶

The "civilised labour" policy caused even greater problems. State rhetoric on the obligation of secondary industry to employ deserving whites only intensified with the Great Depression and in reality was never more aggressive than the phase when the Pact gave way to Fusion in 1933. However timid and limited the application, the underlying idea that labour (or some sector of it) deserved a certain level of wages regardless of business needs, was disturbing.

On the defensive, industry was obliged to take a position on labour issues. Just after the Pact came in, Edgar Brookes, then a liberal proponent of segregation, publicized in the principal manufacturers' mouthpiece, Industrial South Africa, his view that industry must remain largely the preserve of "civilised" white workers from top to bottom while Africans, unhappy and decaying morally in towns, required a shift in economic development to their Reserves first and foremost.¹⁸⁷ To the extent that black labour could not entirely be displaced, it was best to segregate factories from top to bottom. The quixotic Brookes disliked the hierarchial order whereby blacks always took orders from whites. Instead factories should either be white or black from top to bottom in his view.¹⁸⁸ He thus reminds us by implication that manufacturers' resentment of interference in the structure of their labour forces did not necessarily mean that they had a generalised or principled hostility to a racial order.¹⁸⁹

Few manufacturers were prepared to oppose the concept of "civilised labour" openly. It is striking how many continued to report that they preferred to hire whites whenever their cost structure permitted and some felt that smaller numbers of more motivated and better-paid whites were able to do the work of greater numbers of blacks.¹⁹⁰ The father-figure of South African manufacturing ideology, W J Laite, expressed views that were very consonant with a generally racist outlook and pleaded even into the 1930s for manufacturers to look constantly for ways of expanding white employment.¹⁹¹

However, from the middle 1920s, capitalist ideology, admittedly still inconsistently, was increasingly concerned to defend the necessity for hiring some black labour.¹⁹² Sometimes the defense is in and of itself racist; blacks are needed to perform unpleasant, mindless

tasks whose performance goes against the grain of what white manhood is supposed to be about. Sometimes it makes the perfectly accurate point that the future of white employment lies among the skilled and supervisors whose numbers inevitably increase along with those of black production workers. There is, in other words no competition where rival races in Darwinian fashion seek to "oust" one another.¹⁹³ Manufacturers in this period began to concern themselves with the black consumer in South Africa as well as with the potential reaction of black consumer opinion to exclusionist labour practices.¹⁹⁴ By 1934, Industrial and Commercial South Africa was editorialising that "the root of the difficulty which faces industries is the small consuming market of the country".¹⁹⁵ In complete contradistinction to Brookes and to the spectrum of white politicians then prominent, a capitalist ideology began to materialise of expansion based on harnessing the labour of black workers, mass production methods and a national market not confined to whites. The very business-orientated Native Economic Commission of 1932, sensitive to this trend, paid attention to the problem of improving the stability and calibre of the black industrial work-force. For the new business outlook, the entrenchment of an unskilled "aristocracy" of white labour on the feared Australian model that would violate all "economic laws" was anathema.¹⁹⁶

The intensified capital accumulation process after 1933 brought matters forward rapidly. Themes that had been embedded, somewhat incoherently, in a total view that still at least nominally accepted the "civilised labour" policy now came into their own. When Walter Madeley, Labour minister in the wartime government, insisted in 1944 that secondary industry could thrive without black workers, a final evocation of the Australian will-o'-the-wisp, he was held up to scorn by the manufacturers' mouthpiece and treated aggressively as a fool.¹⁹⁷ The major 1945 Board of Trades and Industries assessment of South African industry, far more typical of Smuts' government's view by this time, fails even to mention civilised labour as an aim.

Industry saw its future in consolidation and capital investment in integrated, expanded and in some respects deskilled, mass production and there could be little doubt that most of the relevant "semi-skilled" workforce would necessarily be African. The first bursary set up in honour of W J Laite's memory ironically focussed on the "changing role of Natives in the Union's secondary industries".¹⁹⁸ Illustrations in South African Industry and Trade pointedly showed industrious natives in the Belgian Congo each at his place beside a machine. In the 1920s, some were prepared to defend the African condescendingly as the ideal performer of heavy, mindless labour. Now it turned out that

... Natives are nimble-handed and do very well as factory hands, standing up to the boredom of repetitive processes much better than European labour.¹⁹⁹

It is easy to think that industry simply was concerned with the question of the African's cheapness; it was not. More to the point was the sheer inadequacy of the size of the white labour force to power substantial growth and capital's capacity to restructure labour processes so as to bring blacks in without actually confronting white wrath or fears.²⁰⁰ During the boom years, manufacturers began to con-

ceptualise much more systematically the potential of the black consumer market; this was the logical place where furniture manufacturers, garment makers and processed food processors needed to touch base.²⁰¹ Indeed the mines and the farms are specifically attacked for cheap labour policies that prevent the expansion of the black consumer market; the critique of mining management in the 1940s on the part of industrialists concentrated as much on this issue as on protectionism.²⁰² As one industrial spokesman wrote acidly, "the voortrekkers of manufacturing industry see in this year of grace possibilities no longer circumscribed by the gold mining industry's vision of cheap labour".²⁰³ Not, of course, that manufacturers were themselves planning any impressive wage hikes.

Business interests did not take up the issue of black political rights but by the early 1940s, their ideologues regularly took up the issues of loosening pass controls, the acceptance of the black family as permanent town dwellers and the tolerance of African trade union membership.²⁰⁴ This went together with developments in public policy, the creation of substantial segregated working-class housing in the 1930s -- 61,000 Africans in Johannesburg City Council housing by 1937 -- and the reorganisation of the Wage Board after 1937 to cater primarily for the wage issues raised by African workers.²⁰⁵ If the Wage Board determinations did not directly cause black wages to rise thereafter, it validated real increases that depended on boom-time demand for black labour that made it a scarcer commodity and on the significance of the black trade unions that for a time flourished in secondary industry on the Rand.²⁰⁶ According to one scholarly assessment, "the State allowed a virtually uninhibited flow of African families into Johannesburg through the 1930s and early 1940s".²⁰⁷ The scientifically trained and tested African worker, decently housed and healthy, was a necessity according to one frank business report, "even if only from the point of view of profit-making".²⁰⁸

This assessment should not at all be mistaken for an assertion that South African industrialists had abandoned racism. On the contrary, the same industry spokesman advocated urban segregation -- with black workers compulsorily despatched far from white residential areas, some aspects of influx control retained and rigid racial separation at the workplace supported. They did not advocate a racially undefined workforce nor were they planning on hiring any black management. Supervision was the appropriate and correct job for the white man even when he no longer monopolised essential skills in the old ways. As a supervisor he had, in fact, a great future in industry.²⁰⁹ Robert Davies is right to emphasize the "racist hierarchial character of the social division of labour adjusted to new circumstances".²¹⁰ Indeed, Jon Lewis stresses that the deskilling process entailed a considerable rigidification of that order as whites ceased to be operatives and acquired increasing control over black workers.²¹¹

Nonetheless there is an impatience from the perspective of capital with the impediments that white workers' organisations were able to put up to the spread and intensification of mass production techniques and to the white workers' fear²¹² of being pushed out of an essential role at the point of production. The transformation of South African industry actually went slower in reality than in the dreams in capitalists'

heads and would only enter full crescendo during the renewed boom of the 1960s.²¹³

White workers' fears in the 1940s tend to be more directed against the intensified black presence in the city than in the workplace. However, it ought to be stressed that we need to know far more than we do about the changing consciousness of white workers and other workers during the boom period and its aftermath. Their social history has yet to be written. The increasingly industrialised Coloured population also is an unknown quantity. For Africans, some social history has been written, descriptive accounts of shebeens, jazz and gang crimes coupled with discussions of the intense problems notably in housing, that beset the swelling African urban population.²¹⁴ Little of this however actually looks at workplace relations or the perspective of Africans on labour in mass-production factories. The centrality of this new black industrial labour force and the impending marginality of the white brought on the infamous swart gevaar panic which would play a big role in losing Smuts the 1948 election and consolidating Nationalist Party rule thereafter.²¹⁵

By 1945 secondary industry had matured, in summary, to a point where the dominant social and economic issues of the following thirty years had emerged. From under the shadows of the now discarded "civilised labour" policy connected with an important phase where manufacture, not machinofacture, was dominant and the labour force extremely mixed, it had become primarily dependent on the work of black operatives. Industrial activity was weighted heavily towards a strong engineering sector, which had been born in response to the needs of the gold mines but was in process of becoming the central integrating force technologically in South African industry. The level of integration as well as the pace of import substitution was rapidly advancing. The Rand had acquired a national dominance because of its heavy industrial complex as well as its range of consumer industries that created a particular developmental weight and texture. Industry's "organic intellectuals" to use Bozzoli's notion, had advanced from infants squawking long and hard for tariff protection into spokesmen over a range of issues, in which labour policies were fundamental. Through the period of the post-1933 boom, their opinions received an increasingly more respectful hearing on the part of the state and the reform strategies mooted in the final years of Smuts' SAP government bore their imprint.

Between the 1940s and the 1970s, the view of industrial capital towards the labour force did not greatly alter. However, the state was much less in harmony with industrialists after 1948 for a number of reasons. At first, this made business more docile and flexible but during the 1960s, when a particularly rapid phase of expansion came up against the most rigid phase of apartheid formulation under Verwoerd, the strains were very noticeable. To some extent, the resultant clash echoed the controversies of the Pact era forty years earlier. The last decade has witnessed the shift towards a new era, one of increasingly warm relations between big industrial capital and the state, still under the control of the Nationalist Party, while capitalist ideology has itself altered for a number of reasons among which the most important area is the need for accommodation with a well-organised black labour movement, the emergence of a very large, entirely town-raised black proletariat and a declining interest in any particular racial hierarchy

at the workplace. Moreover, a section at least of the still very powerful mining industry has also shifted its traditional attitudes towards labour substantially in sympathy with industrial views.

Projecting to the present hopefully highlights the distinctive historic nature of the era under discussion above as well as that of the contemporary one. Just as the actual imperatives of accumulation can consequently emerge more clearly as a result, it ought to become clearer how to view in relation the changing perspectives of capital and the state as well.

NOTES

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3. C W De Kiewiet, A History of South Africa: Social and Economic, (Oxford University Press, 1941); Martin Legassick, "Gold, Agriculture and Secondary Industry in South Africa, 1885-1970: From Periphery to Sub-Metropole as a Forced Labour System" in Robin Palmer & Neil Parsons, ed., The Roots of Rural Poverty in Central and Southern Africa, (Heinemann, 1977); Marion Lacey, Working for Boroko; The Origins of a Coercive Labour System in South Africa, (Ravan, 1981).
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6. Kaplan, "Politics" and "Class Conflict, Capital Accumulation and the State: An Historical Analysis of the State in Twentieth Century South Africa", Ph.D thesis, University of Sussex, 1977.
7. Harold Wolpe, "Capitalism and Cheap Labour-Power in South Africa: From Segregation to Apartheid", in Wolpe, ed., The Articulation of Modes of Production, (Routledge & Kegan Paul, 1980), p. 291.
8. D C Hindson, "The pass system and the formation of an urban African proletariat in South Africa: a critique of the cheap labour-power thesis", D.Phil. thesis, University of Sussex, 1983.
9. For instance, between 1916 and 1941, South African industrial growth was speedier than that of Canada, Australia or New Zea-

- land, Board of Trade & Industries Report 282, Investigation into Manufacturing Industries in the Union of South Africa, 1945. (henceforth BTI 282)
10. These figures and others below, unless otherwise stated come from the Official Statistics yearbooks published annually.
 11. For the garment industry, see Monica Cole, South Africa, (Methuen, 1961), pp. 447-49.
 12. Lewis, p. 49. This is a subject which needs far more research.
 13. See Martin Nicol, "A History of Garment and Tailoring Workers in Cape Town 1900-39", Ph.D thesis, University of Cape Town, 1984, pp. 33-38.
 14. Webster, pp. 68-69; Lewis, p. 39.
 15. Cole, pp. 407-08; Derek Humphriss, Benoni, Son of My Sorrow, (Benoni Town Council, 1968), 279-80; C S Richards, The Iron and Steel Industry in South Africa, (Witwatersrand University Press, 1940), pp. 41-50.
 16. A J Norval, A Quarter of a Century of Industrial Progress in South Africa, (Juta, 1962), 29.
 17. UG 12/1914 Report of the Economic Commission (Sydney Chapman, chairman).
 18. Nicol, op. cit. makes this point forcibly.
 19. Union Statistics Official Year Books report that 34.3% of metal and engineering plants were on the Rand in 1923/24 and 46.4% by 1932/33.
 20. Idem.
 21. UG 12/1914. Rents were then more than twice the level of Cape Town and almost twice the level of Durban or Port Elizabeth, p. 11.
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26. Native Economic Commission, 1930-32, Report, UG 22/1932. See also W M Macmillan, Complex South Africa; An Economic Footnote to History (Faber & Faber, 1930), 247.
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 29. See Ellen Hellman, Rooiyard, A Sociological Survey of an Urban Native Slumyard, Rhodes-Livingstone Papers 13, 1948 and André Proctor, "Class Struggle, Segregation and the City: A History of Sophiatown 1905-40" in Belinda Bozzoli, ed. Labour, Townships and Protest (Ravan, 1979).
 30. Ellen Hellman, "The Importance of Beer Brewing in an Urban Native Yard", Bantu Studies, VIII (1934), 44.
 31. Eleanor Hawarden, "Municipal Policy and Native Welfare", Race Relations, VIII (1941), 47.
 32. Compare Conrad Norton, Opportunity in South Africa, (Rockliff, 1948), 95 with accounts such as Hellman, op. cit.; Edward E Koch, "Doornfontein and its African Working Class, 1914 to 1935; A study of Popular Culture in Johannesburg", M.A., University of the Witwatersrand, 1983; Charles van Onselen, op. cit. "The Witches of Suburbia: Domestic Service on the Witwatersrand 1890-1914", 13.
 33. Van Onselen, II, "Witches".

34. Report of the Economic and Wage Commission (Chairman, Stephen Mills), 1925; UG 14/1926, p. 26.
35. Report of the Economic Commission, UG 12/1914; Koch, pp. 117, 162; Macmillan, p. 269; Charlotte Leubuscher, Der Südafrikanische Eingeborene als Industriearbeiter und als Stadtbewohner, (Gustav Fischer, Jena, 1931); A Lynn Saffery, "A Colour Bar Question: Native Bus and Taxi Drivers", Race Relations, I (1934), 17-18; Social and Industrial Review, V (30), June 1928, 428.
36. Sean Moroney, "Mine Married Quarters: The Differential Stabilisation of the Witwatersrand Workforce in 1900-20" in Marks & Rathbone.
37. UB 14/1926, 12-13. In different categories, "non-European" wage rates varied between 15s8d and 23s9d p.w. vs. 16s7d and 27s2d for Durban and 26s7d and 36s7d for Cape Town, the highest figures.
38. See assessments in UG 12/1914; UG 14/1926 and in P R Golding, "The Conditions of Employment for White Workers in Urban Industry 1880-1948", M.A., University of the Witwatersrand, 1976, especially 202.
39. Golding, 172.
40. Van Onselen, I, "The World the Mineowners Made: Social Themes in the Economic Transformation of the Witwatersrand 1890-1914", p. 31.
41. Macmillan, 60.
42. Davies, 57.
43. SC 9/1913, pp. 637-38. For similar figures a decade later, see UG 14/1926, 90-91; Macmillan, 99.
44. For harsh early conditions, see Report of the Transvaal Indigency Commission, 1906-08, TG 13/1908 and van Onselen's essays, "Johannesburg's Jehus 1890-1914" in v. 1 of Studies and "The Main Reef Road into the Working Class: Proletarianisation, Unemployment and Class Consciousness among Johannesburg's Afrikaner Poor 1890-1914" in v. 2.
45. UG 12/1914, 41.
46. Lewis, 4,38.
47. Davies; Elaine Katz, A Trade Union Aristocracy, (University of the Witwatersrand, 1976); David Ticktin, "The Origins of the South African Labour Party 1888-1910", Ph.D, University of Cape Town, 1973. See Humphriss on Walter Madeley's electoral struggle in Benoni, 52-54.

48. See evidence of the labour movement militants Bain and Waterston in SC 9/1913. The state, moreover, sometimes, accepted this assessment, Transvaal Indigency Commission, 148.
49. Ticktin, 140.
50. See Webster, who follows this line of enquiry carefully in the case of engineering.
51. Proctor, p. 56; Ticktin, passim.
52. Stanley Greenberg, Race and State in Capitalist Development, (Yale University Press, 1980).
53. Koch, 196-198; Hansi P Pollak, "Women in Witwatersrand Industry; an Economic and Sociological Study", M.A., University of the Witwatersrand, 1932, 78.
54. E L P Stals, ed., Afrikaners in die Goudstad, I, (HAUM, 1978). See also Carnegie Commission Report, The Poor White Problem in South Africa, (Pro-Ecclesia, 1932), I, 220-24). On urban geography, see Pauw, 133. The pattern is even more accentuated in Cape Town Afrikaners.
55. SC 9/1913, 380; Carnegie Commission, II, 86; Davies, 78.
56. Van Onselen, I, xvii.
57. Pollak, 143, 148.
58. Leslie Witz, "Servant of the Workers: Solly Sachs and the Garment Workers' Union 1928-52", M.A., University of the Witwatersrand, 1984.
59. Humphriss, 47-50.
60. A point made by the Carnegie Commission.
61. Carnegie Commission, II, 130.
62. Industrial South Africa, XIX (24), November 1924, 447. See also Webster, 62-63.
63. Pollak, 28. E S Sachs, Rebel Daughters (MacGibbon & Kee) is also an important source.
64. Pollak, 258.
65. Ibid., 251-53.
66. Report of the Committee on Industrial Education, 1916 (P Coleman & Rev. A D Luckhoff, chairmen), UG 9/1917, 7.

67. Pollak, 277.
68. Ibid., 188.
69. Ibid., 153-54. For a complacent state assessment, see Report of the Industrial Legislation Committee, UG 37/1935, 23.
70. Pollak, 119, 130-33, 140; Golding, 244.
71. Pollak, 29, 78, 98; Sachs, 58, 114; Nicol, 392-93.
72. For a somewhat contrasting analysis, see Davies, 206-07. Also Lewis, 52, 56.
73. UG 14/1926, 159.
74. See, however, Ian Phillips, "The 'Civilised Labour Policy' and the Private Sector: The Operation of the South African Wage Act 1925-37", Ph.D, Rhodes University, 1984, 309 ff.
75. Van Onselen, "The Main Reef Road".
76. Brick, tile and earthenware manufacture had a 1:13 employee ratio of white to black in 1922/23, UG 14/1926, 82-83. See also Carnegie Commission, I, 174.
77. Report of the Select Committee on the subject of the Wage Bill (and of the Industrial Conciliation Bill), SC 5/1937, 91-92.
78. Social and Industrial Review, II (6), June, 1926, 440. See also Kaplan, "Politics", 89.
79. Phillips, 353.
80. Lewis raises the figure by 25% in an attempt to account for the change but without explaining his method, 47.
81. An important and dramatic exception lies in the new American-owned car assembly plants in Port Elizabeth, where an all-white workforce was used. Port Elizabeth, close to the heartland of "poor whiteism" in the Cape Midlands, was exceptional in the scale of dependence on unskilled and semi-skilled white male workers in its important boot and shoe industry. Its economic history remains to be written.
82. UG 22/1932, 13.
83. See Nicol, 214, for an attempt at an explanation.
84. For engineering, see Webster, 89.
85. Golding, 316.

86. South African Federated Chamber of Industries Annual Report, 1934, 47.
87. Cole, 408.
88. Idem.
89. See Webster.
90. Norval, 24.
91. Cole, 401.
92. Engineering played an insignificant role in the Federated Chamber of Industries through the inter-war years. Kaplan notes the need to reconsider the economic impact of protection in his article, thus somewhat revising his own Ph.D thesis view. To what extent protectionism was vital in the growth of such consumer-orientated manufacturing as the Cape garment trade has never been systematically explored but A. Lumby, from a different perspective than Kaplan, also questions the stereotype view: "Tariffs and the Printing Industry", South African Journal of Economics, XLV (1977). On engineering and tariffs, see Engineer and Foundryman, II (November, 1937), 187 and May, 1937, 375; Richards, op. cit.
93. South African Industry and Trade, XXXIX (July, 1943), 71.
94. For instance, in Martin Fransman, "Capital Accumulation in South Africa" in Industry and Accumulation in Africa, (Heinemann, 1982).
95. BTI 282; Humphriss, 282-83.
96. BTI 282, 99.
97. Industria, the first such site, dated back to the 1920s, Pollak, 15.
98. Duncan Innes, Anglo; Anglo American and the Rise of Modern South Africa, (Ravan, 1984). Kaplan, "Class Conflict ..." is very good on this line of analysis.
99. Innes, 131; Kaplan, "Class Conflict"; Webster, 85; BTI 282, 19.
100. UG 37/1935, 69; South African Industry and Trade, XXXVI (2), February, 1941, 21.
101. BTI 282, 44-45.
102. Lewis, 104.
103. White wage rates were increasingly paced by engineering and the building trades rather than gold mining, Golding, 366.

104. Engineer and Foundryman, V (2), July 1941, 5.
105. Nicol, 269. The South African Federated Chamber of Industries Annual Report, 1941, particularly praises women's skills in engineering factories and deplores the shortfall in their recruitment. For numbers employed, see South African Industry and Trade, XXXVII (3), March, 1942.
106. Mike Morris & Dave Kaplan, "Labour Policy in a State Corporation: A Case Study of the South African Iron and Steel Industry", South African Labour Bulletin, II/6 (1976); Phillips, 295; Committee Appointed to Investigate the Employment of Unskilled European Workers in the Railway Service, UG 27/1947, 4.
107. UG 27/1947.
108. Idem., p. 16.
109. Ibid., 28-29.
110. Kaplan, "Class Conflict", 76. See also Davies 206-07.
111. XVI (November, 1921), 473.
112. "The Trade Possibilities of Africa", South African Journal of Industries, VI (5), May, 1923.
113. Belinda Bozzoli, The Political Nature of a Ruling Class; Capital and Ideology in South Africa 1890-1933, (Routledge Kegan Paul, 1981). Bozzoli's fascinating study blazed the path for studies of capitalist ideology in South Africa.
114. Van Onselen, I, 38.
115. This is a strong theme in the report of the Transvaal Indigency Commission.
116. Van Onselen, "The Witches of Suburbia", II, 15-16; Carnegie Commission, III, 157; Pollak, 23; SC 9/1913, 160.
117. W J Laite in the Social and Industrial Review, V (January, 1929), 61; UG 14/1926, 159.
118. See for example H J Choles, "The South African Boot and Shoe Industry", South African Journal of Industries, IV (3), March-April, 1921; Leubuscher, 151 but, surprisingly, also the contrary report of the General Manager of Railways, 1925.
119. Carnegie Commission, V, 216.
120. Pollak, 153-54.

121. SC 9/1913, 160; Van Onselen, II, 144; 1937 Annual Summary in Race Relations, V (1), 1938, 14.
122. See Robert Davies et. al., "Class Struggle and the Periodisation of the State in South Africa", Review of African Political Economy, 7, 1976, 4-30.
123. Kaplan, "Politics" and Belinda Bozzoli, "Capital and the State in South Africa", Review of African Political Economy, 11, 1978, 40-51.
124. Yudelman, p. 242.
125. Yudelman's work, even more than Davies', is almost exclusively focussed on gold mining.
126. Kaplan, "Politics".
127. From the drift of state publications, the industry best understood by Pact politicians was export-orientated agriculture processing. See the Commercial and Industrial Gazette, passim. Also Phillips, 41-42.
128. Phillips, 121-22. For the views of Smuts, see Davies, 202.
129. UG 14/1926, 253.
130. For views of cabinet members such as General Kemp (Agriculture) and Oswald Pirow (Justice) that secondary industry could be an exclusive field for white labour while black workers could be strictly confined to agriculture and mining, see Industrial and Commercial Africa, XXVI (October, 1931, supplement, 429; November, 1931, 443; December 1932, 359). Pirow opposed state support for what he called "Kaffir industries". Boydell is discussed in Phillips, 248.
131. Nil.
132. SC 9/1913, p. 56; House of Assembly Debates, 14/6/22, 282. I am thankful to Alan Mabin for the last reference.
133. For continuity, see Phillips, 112.
134. Select Committee on the Wage Bill Report, SC 14/1925, 25.
135. UG 14/1926, 158. See as well the minority submission of the Native Economic Commission, UG 22/1932, 150.
136. Yudelman, 190-213. Davies, whom Yudelman takes to task on this matter, actually recognizes the importance of this period but contextualises it less successfully, 162 ff.

137. Jeff Lever, "Labour and Capital in South Africa: The Passage of the Industrial Conciliation Act of 1924", ms., 1974. See the comparisons with Fascist Italy, SC 5/1937, 127 ff. Lewis points out that the corporatism became less central as union strength recovered, allowing for a more laissez-faire interpretation of the Act, 58. See also Robert Davies, "The Class Character of South Africa's Industrial Conciliation Legislation", South African Labour Bulletin, II (6), 1976, 6-20.
138. This point is widely made. For capitalists' antagonism to race definitions, see Industrial South Africa, XIX (212), December, 1924, 486; XX (216), April, 1925, 142; for the history of state reactions, also generally hostile, UG 14/1926, 122-24.
139. SC 9/1913, 521. On the Apprenticeship Act, see Lewis, 24-28.
140. Social and Industrial Review, V, January 1929, 68.
141. UG 14/1926, 59.
142. UG 14/1926, 292. The following pages on the Wage Act are very dependent on the valuable recent thesis by Ian Phillips, already cited.
143. UG 14/1926, 126.
144. Apart from Phillips, see Sachs, especially 132 ff; Nicol; Davies, 213. The assessment of Wage Board chairman F A W Lucas, Social and Industrial Review, V (2) 1929, 137, is interesting. The Wage Board was said to intensify but simplify wage differentials, SC 5/1937, 62.
145. Phillips, 179-80.
146. UG 37/1935; Industrial and Commercial South Africa, XXX (October, 1935), 305.
147. Industrial and Commercial South Africa, XXX, January, 1935; March, 1935; April, 1935; November, 1935.
148. Evidence of Solly Sachs in SC 5/1937, 112; Sachs, 28; Nicol, 254.
149. Phillips, 342 ff.
150. However, if they had any problems with the Board over rulings, they would pounce on it. Industrial and Commercial South Africa, XXI (235), November 1926, 527-28; XXII (244) August 1927; 437-38; July 1929, 379. South African Industry and Trade, XXXV (5), May 1940, 11; South African Federated Chamber of Industries Annual Report 1927, 44.
151. Kaplan, "Class Conflict", 97; Nicol, 184; Witz, 94; Sachs, 63.

152. SC 5/1937, 57-59.
153. Sachs, 29; Witz, 142.
154. The furniture trade tended to concentrate increasingly on the Rand. Industrial and Commercial South Africa, XXV (January 1930, 23). Both of these are little-studied enterprises, not as weighty as the garment trade or engineering, but worth much more attention than they have received.
155. For varied evidence, see Social and Industrial Review, V (February, 1929, 134; March, 1929, 203); Industrial and Commercial South Africa, XXV, November, 1930, 535; UG 32/1932, 151; Kirk, 1-15; Phillips, 348; Lewis, 56.
156. Phillips, 286.
157. Pollak, 192.
158. For the hostility of both business and the state to such a move, see the majority position in UG 22/1932, ff.
159. Phillips, 42-43, 303, 386-87.
160. Ibid., chapter six.
161. See details in the supplement to Social and Industrial Review, 16 November 1928, for the officially reported situation.
162. UG 22/1932, 223.
163. Phillips, 388, 409 ff.
164. The remarks above follow from discussions with Helen Bradford whose forthcoming University of the Witwatersrand Ph.D thesis on the ICU will be of great importance.
165. See van Onselen, "The Main Reef Road"; Golding, 137-38; SC 9/1913 for many references; Carnegie Commission, I, 173. The use of white labour in road-building went back to the 1890s in the Transvaal.
166. Botha, 173-74.
167. Carnegie Commission, III, 77. See UG 29/1947 for a short history.
168. Social and Industrial Review, III (2), November 1927, 430-31; Davies, 225, 257. Interestingly, Rand towns were quite remiss about hiring "poor whites" in any numbers.
169. Carnegie Commission, I, 194; Macmillan 58-59.

170. See the discussion concerning the resolution of the Non-European Conference of 1934, Industrial and Commercial South Africa, XXIX (February, 1934), 59.
171. UG 37/1935, 69.
172. Davies, 226.
173. Macmillan makes this point with reference to public works department and postal workers, 109.
174. See the life histories in Sachs.
175. Carnegie Commission, III, 77; SC 9/1913, 658-59.
176. Compare Sachs' stories with those of Hellman or in Koch's thesis. Wages for white males under 21, however, were well below those for adults, UG 37/1935, 30.
177. See the report of the Transvaal Indigency Commission; SC 9/1913, 457; 613-16; Humphriss, 15 ff and of course, both volumes of van Onselen.
178. Humphriss, 20.
179. Carnegie Commission, III.
180. Carnegie Commission, V, 107.
181. Ibid., II, 123. The second survey, II, 131, also showed substantial movement into the petty bourgeoisie among the town-born.
182. Macmillan, 58.
183. South African Federated Chamber of Industries Annual Report 1936, 22-23.
184. Lewis, 56.
185. Engineer and Foundryman, I (5), October, 1936.
186. South African Federated Chamber of Industries Annual Report, 1927, 46, reveals a grudging acceptance.
187. Industrial South Africa, XIX (206), June 1924.
188. See also Edgar Brookes, The History of Native Policy on South Africa from 1830 to the Present Day, (Van Schaik, 2nd edition, 1927), 404-27.
189. "The sole class of work of which the coloured man appears to have no share to speak of is the work of control and management", UG 12/1914, 40.

190. UG 14/1926, 340 for the evidence of J S Hancock of the Transvaal Chamber of Industries, the owner of an asbestos sheet factory; UG 37/1935; Kirk, 40-45.
191. For Laite see the South African Federated Chamber of Industries Annual Report, 1934, 11. His views and career are highlighted in Bozzoli, Political Nature. The same idea is puchsed by A H L Burmeister, outgoing president of the Transvaal Chamber of Industries, Industrial and Commercial South Africa, XXV (December, 1930), 583.
193. "... the most extended use of native labour is the real white labour policy", Industrial South Africa, XVIII (191), March 1923, 134, an early statement of this view but see as well Archie Crawford's evidence, UG 17/1922, Report of the Unemployment Commission, 47.
194. Industrial and Commercial South Africa, XXVII, April, 1932, 115; September, 1932, 266.
195. Industrial and Commercial South Africa, XXIX, July, 1934,
196. Industrial South Africa, XX (216), April 1925, 142.
197. South African Industry and Trade, XL (5), May 1944, 45.
198. South African Industry and Trade, XLI (5), May 1945, 73.
199. Lewis, 123 and see excellent discussion on this point.
200. See Lewis for restructuring arguments.
201. Speech of the chairman of the Board of Trade and Industries, A J Norval, South African Industry and Trade, XXXVI (8), August 1941, 19.
202. See the speech of the present of the Transvaal Chamber of Industries, Wilfrid J Kennedy, XXXIV (9), September 1939, 21; also XXXIX (10), October 1943, 17; all South African Industry and Trade.
203. South African Industry and Trade, XXXIX (11), November 1943, 21, 105. For a thorough analysis, see Hindson.
204. South African Industry and Trade, LXL (1), January 1940,.
205. Margaret Ballinger writing in South African Industry and Trade, XLIV (12), December 1944, 49 ff; Phillips, 44; Proctor 66, 71. At the same time, according to Lewis, the van Eck Commission on "industrial and agricultural labour requirements already signalled the formal state abandonment of "civilised labour", 121.

206. For CNETU unionism see A Lynn Saffery, "African Trade Unions and the Institute", Race Relations, VIII (2), 1941, 28-32; Webster, 104-05; Lewis, 66-67, 171; Mark Stein, "Max Gordon and African Trade Unionism on the Witwatersrand 1935-40", South African Labour Bulletin, III (9), 1977, 41-57; Baruch Hirson, "The Reorganisation of African Trade Unions in Johannesburg 1936-42", University of London Institute of Commonwealth Studies Collected Seminar Papers 21-Societies of Southern Africa in the 19th and 20th Centuries, 7, 1976, 182-94.
207. Proctor, 62. This despite the harassing effect of the pass laws. See Humphriss, op. cit., for Benoni, where the situation was similar.
208. South African Industry and Trade, XXXIX (6), June 1943, 63-64.
209. Engineer and Foundryman, IX (3), June 1944, 175.
210. Davies, 293.
211. Lewis, 123.
212. Engineer and Foundryman, II (4), February 1938, 303; V (3), August 1940, 75; IX (3), June 1944; South African Industry and Trade, XXXIX (10), October 1943, 17; Lewis, 99 on antidilution struggles.
213. See Webster on this but also Lewis, who emphasizes the magnitude of the earlier break, 43, 49.
214. Alfred Stadler, "Birds in the Cornfield: African Squatter Movements in Johannesburg 1944-47", Journal of Southern African Studies, VI (1979), 93-124; Koch, op. cit.; Kevin French, "James Mpanza and the Sofasonke Party in the Political History of Soweto", M.A. thesis, University of the Witwatersrand, 1983.
215. Dan O'Meara, "The 1946 African Mine Workers' Strike and the Political Economy of South Africa", Journal of Commonwealth and Comparative Politics, XII (1975), 146-73, gives a somewhat different interpretation.