Formalizing milk production in Johannesburg: the dissolution of white petty milk-producers, 1908-1920*

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At the turn of the century the urban area of Johannesbu g was peppered with small-scale milk producers who kept cows and operated dairies from their residential addresses. Yet by the 1920s many of the small-scale milk producers had been forced out of business.

The single major reason for the decline of the petty producers of milk in Johannesburg was the result of the establishment of large-scale dairy firms which appears to have prompted the local authorities to institute legislation that effectively destroyed the smaller industry. Attempted justification for the elimination of petty producers was by way of anxiety for public health and safety. Notwithstanding recourse to a 'sanitation syndrome', actions by the local authorities against smallscale producers were usually based on technical infringements of the law, particularly after the establishment of the Johannesburg dairy by-laws in 1915. Despite the calls for an end to 'informal' milk production, ostensibly to safeguard the health of the city's 'European' citizens, available documentation surprisingly reveals that no outbreaks of epidemic disease could be linked directly to the small-scale milk production in Johannesburg.

Although a number of large dairies were operating in Johannesburg at the beginning of the twentieth century, their markets were to an extent continually undermined by the provision of 'informal milk' deliveries in those neighbourhoods where the small 'backyard' dairies were located. The dairy industry, both on a small and a large scale, was not strictly controlled and records show that malpractices in the industry by both sets of producers were rife. The health inspectors' accounts of the circumstances under which milk was produced demonstrated the grim reality. Descriptions of filthy stables and fly-infested milk-rooms, where even diseased employees worked, were not exceptional in the documented accounts of conditions.²

Despite the fact that it was the small-scale dairymen who were to fall victim to the health regulations, it was the larger dairies which initially felt the heavy hand. The large dairies, however, were easier targets for official-dom. The small-scale producers were at that time free to do pretty much as they pleased. High operating costs, as a result of mechanization, and the continual harassment by authorities eventually prompted large-scale dairy operators to institute moves against the local authorities as well as against the small-scale operators, both of whom were envisaged as thorns in their flesh. The crea-

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tion of a 'health panic' by the large-scale dairies, related to a letter campaign in the press, put pressure on the local authorities to take decisive action against the small-scale producers.

Set out below is a more detailed presentation of the argument and of empirical detail sketched in the foregoing introductory outline. A discussion of the legislative controls will also be presented, and thereafter the recourse by the authorities to legislative action will be discussed with particular reference to the small-scale milk producer. The formalization of milk production reflects in varying degrees some common threads with the 'trials' of those who at various periods in the urban and social history of Johannesburg have tried to eke out a living through taking in washing, selling food and beverages, and by operating in the murky world of illicit liquor.

FORMALIZATION AND ARTICULATION

The petty commodity production framework³ has proved useful in understanding the formalization of milk production in Johannesburg over the first twenty years of this century, and in the process provides another example of conservation and dissolution among the battalions of petty commodity producers. The examination presented here complements studies of similar processes that have previously affected the livelihood of

¹ M.W. Swanson, 'The sanitation syndrome: bubonic plague and urban native policy in the Cape Colony, 1900-1909', *Journal of African History* 18(3), 1977, pp. 397-410.

³ C. van Onselen, Studies in the social and economic history of the Witwatersrand 1886-1914, Vol. 2: New Nineveh (Johannesburg, 1982).

R. Bromley and C. Gerry, 'Who are the casual poor?', in R. Bromley and C. Gerry (eds), Casual work and poverty in Third World cities (Chichester, 1979); C. Gerry, 'Petty production and capitalist production in Dakar: the crisis of the self-employed', World Development 6, 1978, pp. 1147-1160; C. Gerry, 'Poverty in employment: a political economy of petty commodity production in Dakar, Senegal' (Ph.D., Leeds, 1979); O. LeBrun and C. Gerry, 'Petty producers and capitalism', Review of African Political Economy 3, 1975, pp. 20-32; T.G. McGee, 'An invitation to the "ball": dress formal or informal?', in P.J. Rimmer, D.W. Drakakis-Smith and T.G. McGee (eds), Food, shelter and transport in Southeast Asia and the Pacific (Canberra, 1978); T.G. McGee, 'Conservation and dissolution in the Third World city: the "shanty town" as an element of conservation', Development and Change 10, 1979, pp. 1-22; C. Moser, 'Informal sector or petty commodity production: dualism or dependence in urban development', World Development 6, 1978, pp. 1041-1064; D.K. Forbes, 'Petty commodity production and underdevelopment: the case of peddlers and trishaw riders in Ujung Pandang, Indonesia', Progress in Planning 16, 1981, pp. 105-178; D.K. Forbes, 'Beyond the geography of development', Singapore Journal of Tropical Geography 2, 1981, pp. 68-80; D.K. Forbes, 'Production, reproduction and underdevelopment: petty commodity producers in Ujung Pandang, Indonesia', Environment and Planning A 13, 1981, pp. 841-856.

the AmaWasha, the 'liquor distillers', 4 and later the coffee-cart operators. 5

The dissolution of petty commodity producers who operated in the hurly-burly of the mining camp, and later in the early apartheid days of the city, demonstrates concerted and ruthless efforts by the authorities, at a local and national scale, to rid the economic system of small-scale industry prompted by the interests of emergent capitalism and an increasingly formalized racism. Studies of the 'disappearance' of the 'informal' income producers already alluded to above have revealed for Johannesburg the dissolution processes of the articulation model at work on the livelihoods of petty producers. The complex interplay between local authorities and the coffee-cart traders, which culminated in a protracted period of court actions resulting in the demise of some 2 000 cart operators in the late 1950s, has been detailed elsewhere, as have the later cases of the Indian flower sellers, and the fruit and vegetable sellers.8 Another example of the economic disintegration of small entrepreneurs in Johannesburg in a period that overlaps that focussed upon here is provided by the decline of the independent Zulu washermen between 1906 and 1914. The position of the AmaWasha was threatened as a result of the requirements by the local authorities that they move their washing operations to a peripheral site which reduced their ability to provide cheap and ready access to their clientele in the centre of the urban area. The most obvious similarity in the above examples is that the victims of the dissolution processes were not white people.

In the formalization process of milk, however, the dissolution occurred among the small-scale white producers in the interests of capital, whereas small-scale black producers continued to operate. 10 In contrast to the former cases which saw the promotion of the white sector at the expense of black sectors of the petty commodity producers, efforts on the part of large-scale dairies caused a reversal of the precedented procedure. Although it would be untrue to claim that black distributors were not affected by the dissolution process, the small-scale black producers of milk did remain relatively unscathed by those destructive forces that attacked the 'poor white' sector of production. To appreciate the implications of the dissolution process, a distinction between black producers and black distributors must be drawn. The black distributors were mere pawns on the formalization chessboard: in many instances dependent wage-workers. The delivery 'boys' were employed by both the black and white petty producers, and so their loss of employment in the white sector of production parallels the decline of white smallscale milk production. An examination of the empirical detail of the formalization of milk production in Johannesburg can now proceed.

MILK PRODUCTION IN JOHANNESBURG, 1905-1908

A population of 160 000¹¹ and the British occupation of the Transvaal at the beginning of the century brought about changes in attitute toward the development of Johannesburg's infrastructure. Under Republican rule, mining activities had not enjoyed the degree of promotion the British rule came to afford the industry. A changing population structure also brought about a new set of demands. The days of a male-dominated society, where beer and whisky were of more importance

than other 'life sustaining' beverages were almost over. A semblance of 'respectable living' began to settle the dust of the riotous life the gold rush had initiated some ten years earlier. By the early 1900s a clerical and administrative strata in society had emerged, and with it a more noticeable 'family way of life'; an existence which among the whites attempted to emulate the 'grandeur' of the late Victorian Empire. Such pretentions, regardless of the climate and conditions, demanded services that would replicate 'the Victorian way of life'. One such example was the provision of fresh milk, a popular constituent of the English institutions of 'elevenses' and 'high tea' as well as an essential ingredient in baking, cookery, infant nutrition, and family consumption. The introduction of European city life to Johannesburg, a city which had experienced a very different birth when compared to the centres of 'civilization' on the European continent, was fraught with obstacles. One such difficulty was a lack of authoritative legislation relating to standards of hygiene.

The calls for hygienic milk production in the urban areas were made within a wider concern for 'sanitation' in the city. What has been commonly called the 'sanitation syndrome' also assists in understanding the set of actions that are related to the changing pattern of milk production in Johannesburg. The same supposedly 'sanitary based' excuses that had previously been used to eradicate black urban residential areas in the Cape Colony and elsewhere, including the demolition of the Brickfields location in Johannesburg, re-emerged in the milk battle of the growing metropolis. The difference is to be found in the motivation behind the excuses. Instead of an objective by government to move black settlements, what emerged was an attempt by large-scale dairies to dissolve small-scale competition under the disguise of a 'concern for public safety'. The issue soon developed into a general 'paranoia' that found expression in various forms and which was also fuelled by some very real health scares. For example a bout of

⁵ Rogerson, 'Feeding the common people of Johannesburg', pp.

Van Onselen, Studies: New Nineveh.

Health (MOH), 25.4.1962.

⁴ C.M. Rogerson, 'Feeding the common people of Johannesburg, 1930-1962', Journal of Historical Geography 12, 1986, pp. 56-73; C.M. Rogerson, "Shisha Nyama": the rise and fall of the Native eating house trade in Johannesburg' (Unpublished paper presented at the History Workshop, University of the Witwatersrand, Johannesburg, 9-13 February 1987); C.M. Rogerson, 'From coffee cart to industrial canteen: feeding Johannesburg's Black workers, 1945-1965', in A.S. Mabin (ed.), Organisation and economic change: Southern African studies, 5 (Johannesburg, 1988).

^{56-73;} Rogerson, 'From coffee cart to industrial canteen'.

R. Tomaselli, 'Indian flower sellers of Johannesburg: a history of people on the street', in B. Bozzoli (ed.), Town and countryside in the Transvaal (Johannesburg, 1983); R. Tomaselli and K.S.O. Beavon, 'Johannesburg's Indian flower sellers: class and circumstance', Geo-Journal 10, 1986, pp. 181-189.

K.S.O. Beavon and C.M. Rogerson, 'The changing role of women in the urban informal sector of Johannesburg', in D.W. Drakakis-Smith (ed.), Urbanization in the Developing World (Beckenham, 1986); C.M. Rogerson and K.S.O. Beavon, 'A tradition of repression: the street traders of Johannesburg', in R. Bromley (ed.), Planning for small enterprises in Third World cities (Oxford, 1985).

⁹ Intermediate Archives Depot, Johannesburg (IADJ), Johannesburg City Health Department Records (JCHD), Box 29 (File 6355): Report of District Health Inspector, 12.6.1913.

10 IADJ, JCHD 302 (1/16): Town Clerk — Medical Officer of

Johannesburg Town Council, Minutes, 7.2.1906, p. 172.

¹² Swanson, 'The sanitation syndrome'.

typhoid fever on the East Rand which was the result of contaminated milk¹³ was followed by a leprosy scare related to Sacks' Dairy in Johannesburg. In the latter instance the large-scale dairy had in their employ a worker, one Diamond, who was responsible for the cleaning of bottles. It appears that unwittingly the employer had overlooked the fact that Diamond had two fingers missing, the result of an advanced case of leprosy.¹⁴

These aforementioned instances, and others, begged questions of hygiene and the role the municipal authorities played in the maintenance of the desired 'safe' standards. The concern soon took the form of public expression in the newspapers but apparently it was only the small-scale producers who were accused of actions detrimental to sound health management. In the municipality it was the medical officer of health in particular who became the focus of the critical comment from the public: 'Anyone who takes the trouble to find out the conditions under which some of the milk sold in Johannesburg is handled, will quickly be convinced of the need for reform.' 15

In other instances public outrage, initiated by the large-scale dairies, was directed more specifically at the health authorities. Based on information apparently gleaned from dairymen, 'Lux', the anonymous author of the letter below, referred to irregularities among the small-scale producers, stating:

I refer to the sampling of milk, which I am informed by several dairymen of my acquaintance is pitifully slack ... they inform me that for something like two years they had had no samples taken from them, one reason being that the method of sampling causes too much expense to the Municipality. Considering that there are undoubtedly a number of dairymen, so called, who are not exacting in retailing pure milk, it must follow that a large quantity of this commodity is daily sold to the public vastly below the authorised standard.

Whether attempts at market domination which were expressed at the time are discernable or not, real problems faced the Health Department in ensuring the controlling of dairying in Johannesburg.

PROBLEMS THAT BESET THE AUTHORITIES

The plight of the local authorities as regards the production of milk received little sympathy from the general public. Increased publicity of the issue by the largescale dairy producers brought into question both the integrity and credibility of the office of the medical officer of health. Due to the huge area covered by the formal and informal dairy industry of the city, the only means of maintaining a semblance of hygienic and quality controls was by a system of sampling the milk the industry produced. Problems related to the lack of quality control that the inspection and testing system had encountered up to 1909 were, in many instances, the result of an inefficient group of inspectors. Although samples were supposedly taken on a random basis certain distributors were regularly sampled on a weekly basis because their specific location fell within easy reach of specific centres of jurisdiction and of inspectors who did their duty at the same time every week from such locations. Producers in more remote areas were seldom if ever sampled or inspected. The procedure of sampling described above meant that wilful evasion of the municipal authorities was an easy task with possible dangerous effects for the health of the public.¹⁷

In the early part of the period it was relatively easy for producers to evade the few existing by-laws that governed the keeping of cows, either through not bothering to obtain a licence for the cows, or through bribery of district inspectors. Corruption of health inspectors made the task that beset the medical officer of health more difficult. On one occasion after a producer had been caught distributing milk illegally, a magistrate told the court that more justice would be done if the city's health committee were brought before the court themselves.¹⁸

A significant criticism levelled at the formal production and distribution of milk was the lack of standardized bottles, 19 and thus the necessarily 'unstandard' washing of bottles that took place, using 'native' bottlewashers, among whom was the 'famous' Diamond! In 1907 the Johannesburg medical officer of health had approached the Witwatersrand Dairy Farmer's Association (WDFA) with a view to designing a standardized milk bottle.20 The reason was that if a standard bottle was introduced, the system of bottling, and sterilizing before filling them again, could be accomplished more efficiently and more hygienically by standardized machines. Two years later the issue had not been resolved, and a related bill before Parliament had been dropped.²¹ As a result milk in Johannesburg was still being sold inter alia in old whisky bottles.²² The unhygienic system raised further questions concerning public hygiene. During the period under discussion the so called 'Kafir Carrier'23 was a common sight on the streets of the urbanized Witwatersrand.24 These 'milk boys' were employed by both large and small dairies, to distribute milk in ways that were often unsatisfactory for the now supposedly more discerning and genteel white population of Johannesburg. Milk was transferred from the milk-cans on the back of the 'carrier' by way of a ladle into a container provided by the client. 'Lux', the anonymous public health 'Superman' of Johannesburg, had earlier written that he had heard of an instance where a hygiene-conscious voyeur had seen 'a

- ¹³ IADJ, JCHD 29 (6355): Report by district inspector to the MOH, 16.4.1909.
- ¹⁴ IADJ, JCHD 86 (356): Investigation by the MOH into a complaint about unsatisfactory conditions at Sacks Dairy, June 1907.

¹⁵ Transvaal Leader, 29.7.1909.

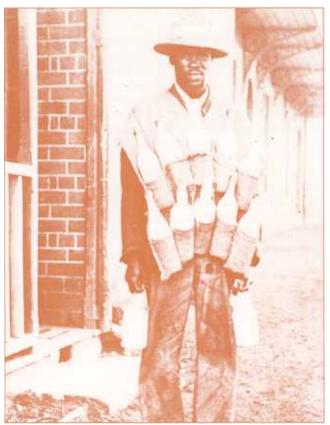
- ¹⁶ *Ibid.*, 23.7.1909.
- ¹⁷ *Ibid.*, 29.7.1909.
- ¹⁸ Ibid., 3.8.1909; Rand Daily Mail, 24.9.1913.
- ¹⁹ Transvaal Leader, 24.9.1913.
- ²⁰ *Ibid.*, 3.8.1909.
- As a result of general debate concerning the Weights and Measures Bill introduced into Parliament, there existed a considerable diversity of opinion as to whether the imperial measure or metric system should be adopted as the standard. Union of South Africa, Weights and Measures Bill No. 13, Votes and Proceedings of the House of Assembly, 11.3.1912.

 22 When the MOH approached the WDFA on the issue of using a

When the MOH approached the WDFA on the issue of using a standard bottle, they expressed reservations about the system as they had previously lost a great deal of money on the issue as the Weight and Measures Bill had not been instituted. *Transvaal Leader*, 3.8.1909.

²³ IADJ, JCHD 193 (440): Memorandum to MOH from inspector concerning 'Kafir Carriers', 29.7.1909.

- ²⁴ Transvaal Leader, 29.7.1909; Rand Daily Mail, 31.7.1909.
- ²⁵ Although the 'dipper' system whereby milk was drawn out of a can by a ladle was made illegal in terms of the 1915 by-laws, the practice continued until 1925 when the Transvaal Milk Union forced the Johannesburg municipality to enforce the removal of 'Kafir Carriers' from the street. IADJ, JCHD 29 (6333): Letter of complaint to the MOH from the Transvaal Milk Union, no date.



A derogatorily styled 'Kafir Carrier' wearing the distinctive milk-jacket.

PHOTOGRAPH: AFRICANA MUSEUM, JOHANNESBURG

friendly Kafir approach his "brother's" back ... take a "pull" and return the bottle ... and this before the eyes of a policeman!'26

Although the report rings with a racist sense of disgust and outrage, it is the indignation at the policeman's apparent inertia that helps isolate the barb directed at the local authority for a lack of control over the situation. The preoccupation with hygiene, which is also suggested here, is but one example of the numerous demands by the public for a formalization and standardization of milk production.

The pleas for improved sanitary conditions and the regulation thereof were not entirely uncalled for. The conditions cited above demonstrate some of the problems that faced the medical officer of health. Although a reformulation of the city's position on the issue of milk production was needed, the 'bad' publicity generated by the large milk-producing bodies acted as a catalyst in the process. The result was a set of by-laws which were largely responsible for the elimination of the small-scale milk producers altogether. The implementation of the by-laws did not grant any kind of immunity to those who had practised their trade in an acceptable way. The process that willy-nilly ensured the steady dissolution of small-scale milk producers, regardless of any personal adherence to dairy hygiene, became more clearly evident in the implementation of the by-laws. The municipal by-laws themselves, however, did not emerge from a legal vacuum. The issue of an emerging national dairy industry had also found expression in the corridors of power at the legislative level of central government.

FORMS OF INSTITUTIONALIZATION

The Dairy Produce Bill (1908)²⁷ was the first major indication of the legislative institutionalization of the milk

industry. All other legislation up until the institution of the bill had been piecemeal.²⁸ The conditions of milk production had not been laid down in any comprehensive form whatsoever. The principles of the bill dealt with the possession, barter, exposure and sale of milk. The adulteration of milk (by adding water) was made a punishable offence, should the milk be offered for sale. Also stipulated in the bill was the minimum percentage of fat necessary in milk (3%). This measure provided not only a basis for ensuring that the milk was not adulterated but allowed the quality to be policed. An attempt was also made to bring about a standardization in the size of milk containers (1/8) of a gallon, the imperial pint). As mentioned earlier, the standardization of bottles was planned to ensure a more efficient method of distribution and sterilization. Although the Dairy Produce Bill was fairly detailed and did not affect the production of milk in any marked way, its implications are interesting. The bill denotes recognition by the central state of an emerging industry that was, and still is, a sensitive issue among the public at large. Dairy produce had become a part of everyday existence, and issues that dealt with the quality of the product were bound to have a ripple effect.

Further recognition of the growth of dairying in the Union appeared in 1912 with the publication of the report of the commission appointed to enquire into the conditions of trade and industries.²⁹ The inclusion of dairying in a commission that was instituted to look at industry, confirms dairying as an important form of production in the Union.³⁰ The commission stated that dairying in the Orange Free State and Natal had advanced greatly in recent years.³¹ The institutionalization of the industry in the Transvaal on a local level through by-laws can be viewed as an attempt by the province to move into line with the emerging dairy market elsewhere.

The Transvaal's attempt at a standard set of by-laws was demonstrated by the close co-operation that occurred in the establishment of by-laws in various centres. Some two years before the gazetting of Johannesburg's by-laws, Pretoria had set a series of by-laws in place that had affected milk production in that city.³² In an attempt to standardize the industry, close co-operation between the health authorities in Pretoria and Johannesburg³³ brought forth a set of by-laws in Johannesburg, which in many instances was identical to those in Pretoria. Similarly, after Johannesburg had passed its dairy by-laws, Germiston³⁴ followed suit in 1916. In the same gazette in which Johannesburg's by-laws were

CONTREE 30/1991 13

²⁶ Transvaal Leader, 23.7.1909.

²⁷ IADJ, JCHD 29 (969): Documentation concerning the pending Dairy Produce Bill, 1908.

The by-laws were usually instituted under the public health by-laws. For an example see *Transvaal (Colony) Government Gazette*, 10.1.1908; IADJ, JCHD 144 (8332): List of applications for licences to keep one cow on private residential premises, 1908-1923.

²⁹ U.G.10-12 Commission on the Conditions of Trade and Industries. 1912.

The commission recommended to the House of Assembly that protection be given to the growing milk industry by raising the duty on imported dairy substitutes, demonstrating the state's recognition of the importance of the dairy industry (*Hansard*, 28.5.1914, col. 2905).

³¹ Ū.G.10-12, p. 35.

³² Transvaal (Colony) Government Gazette, 8.11.1912.

³³ IADJ, JCHD 28 (6333): Johannesburg MOH — Pretoria MOH, 5.3.1913.

³⁴ *Ibid.*: Germiston MOH — Johannesburg MOH, 14.5.1915.

published,³⁵ Innesdale, part of Pretoria, also published their dairy by-laws. The provincial institutionalization that took place was also prompted by the large-scale dairy producers in different ways. The motivating body, the Witwatersrand Dairy Farmer's Association, as its name suggests, also exerted pressure in areas besides Johannesburg. The dairy by-laws that emerged in Johannesburg saw to the dissolution of small-scale milk producers, enforcing strict building regulations, attempting to improve the sampling system, as well as controlling the milk that entered the urban areas.

DAIRY BY-LAWS, 1915

After an eighteen month struggle to create a set of bylaws that served all interested parties,³⁶ the dairy bylaws of Johannesburg were instituted³⁷ and so began the calculated and inevitable decline of small-scale milk production.

The new by-laws changed the existing system of milk production in the following way. With respect to the purveying of milk it became immaterial whether the purveyor supplied milk for gain or otherwise. A purveyor of milk came to be defined as any person who supplied milk outside the immediate household. Whereas before milk could be 'given' away (the purveyor thereby bypassing existing legislation), the new by-law made illegal any 'distribution' of milk that did not accord with the stipulated procedures. The result was that it became impossible to circumvent the legal process by claiming to have 'given' the milk away. Article 2 of the by-laws dealt with the licensing of cows. In terms of the legislation anyone who kept a cow had to obtain a licence to do so, although a licence fee would not be charged if one cow was kept for use within the household. The object of Article 2 was clearly not a device to gain revenue³⁸ but rather one which would allow authorities to ascertain on which premises cows were kept, so that the keeping of cows under sanitary conditions could be enforced.

The overall intention of the licensing was to eliminate the practice of animal husbandry in the urban areas where it was becoming a nuisance. Keeping a large number of animals without the proper facilities is problematic under any circumstances. When the urban residents began to confuse their rural and urban roles the problem intensified. One property in Bezuidenhout Valley, for example, housed eight cows, three calves, one horse, and turkeys: a total of fifteen animals on a 50ft x 100ft (\pm 16 m x \pm 32 m) stand in addition to a family house.³⁹ The implementation of Article 2, it was hoped, would do away with the 'urban farmers', but if properly enforced Article 2 would also ensure that data were available concerning the small-scale milk producers. Article 4 prescribed in a definitive format the building of premises and particulars of their situation on the property. These very specific regulations as regards the building of premises where dairying could be practised, made the erection of satisfactory structures very expensive. In addition to the high costs once the animals were housed in accordance with the new regulations, the milk producers found themselves without enough space for their own housing on the average stands.

Subsequent articles in the by-laws forbade the stabling of a cow within ± 10 m of any dwelling, in any shed erected after 1 January 1916, with a view to reducing the irritation from smells, noises and flies to

urban residents. Additional provisions were made that ensured that a pure water supply be used, proper and effective ventilation and lighting be included in all cowsheds, and that an impervious floor graded to a semicircular manure channel of specified dimensions leading to an external trapped gully also be provided. 40 In addition to these specifications suitable accommodation outside the dwelling house for the washing of all milk receptacles, and also for the housing of workers were laid down. 41 The council also required the provision of a properly constructed fly-proof milk room, with adequate lighting, a suitable apparatus for sterilizing milk containers by steam or boiling water, and an impervious and covered manure-midden, situated at least about 7 m from the milk room. 42 In addition to the controls on buildings and equipment, the new by-laws also aimed to ensure better standards of health control.

Article 19 gave health officers of the council right of entry to inspect the dairy, premises, the milk and milk receptacles kept therein, and the condition of animals. Article 20 prohibited the sale of milk which 'may' have been contaminated with tuberculosis. Under the article discretionary power was given to the medical officer of health. Persons who had recently suffered from or been in contact with cases of infectious diseases were also prohibited from taking part in any process incidental to the production, distribution or storage of milk. The article in question was drafted in response to the laissezfaire attitude that had been adopted by milk producers at the time. In the new legislation provision was made for a test⁴³ which determined whether the employee had ever had the disease. The test was administered by the Health Department at 3s. 6d. per worker. A later article regulated the methods of delivery of milk, with all receptacles of a pattern approved by the council, which had to be steam-cleaned or rinsed with boiling water before each occasion of use. 44 Article 29 was aimed at eliminating the 'Kafir Carriers' by prohibiting the 'objectionable practice' of carrying bottled or tinned milk in bags or baskets slung around or hanging from the bodies of 'milk boys'. Ensuring that milk did not spread disease also meant that importing of milk from outside the municipal area of Johannesburg had to be moni-

An amendment of the existing prohibition of 'unsuitable' milk from outside Johannesburg was introduced. In terms of Article 32, unless the introducer had first obtained, from the council, a permit to introduce milk into the district, the sale of such milk was deemed illegal. The strict control of milk imported into the city from the surrounding rural districts also gave the municipal authorities jurisdiction over the amount of

³⁵ Transvaal (Colony) Government Gazette, 16.6.1915.

 ³⁶ IADJ, JCHD 28 (6333): Minutes of meetings between delegates of the WDFA and other unaffiliated producers, January-March 1915.
 ³⁷ Transvaal (Colony) Government Gazette, 16.6.1915.

Those who had one cow for household reasons were not charged a licence fee, as long as they registered.

³⁹ IADJ, JCHD 12 (1225): Petition from neighbours to the MOH, February 1907.

Municipality of Johannesburg, Dairy By-laws (1915), Section 8(e).

Ibid., Section 8(k).
 Ibid., Section 8(i).

⁴³ IADJ, JCHD 211 (8019): Investigation into the Widal Testing System, 1916-1919.

⁴⁴ Municipality of Johannesburg, Dairy By-laws (1915), Section

milk that entered the area. The control thus gained gave the authorities 'dominion' over the market. Article 33 prescribed that any person who wished to obtain a permit had to apply to the medical officer of health, Johannesburg. The permit was granted subject to the same conditions as an ordinary licence regarding milk production. The council was empowered to refuse a licence unless the premises of a milk producer had been inspected and approved by a health officer. The new regulations, however, could not ensure that the bribery and inefficiency that had previously 'plagued' the system would not re-emerge.

EFFECTS ON THE SMALL-SCALE MILK TRADE

The impact of the enforcement of the new by-laws resulted in the decline and disappearance of the white petty milk-producer. Although the by-laws were supposedly intended for the entire Johannesburg municipal area, and beyond, it appears as if it was the white dairy farmer and the small-scale urban white dairy producer who most felt the implications of the regulations. In the black sector of the market, however, a strong petty-production milk industry continued to operate. Because of the inability of the local authorities to take action against the black petty producers, the sale of milk (and dairy farming) on the border of Dobsonville as late as 1962, for example, continued.⁴⁵ The resultant dissolution of the white petty milk-producers in the urban area was a victory for the large-scale dairy producers who fell under the auspices of the WDFA and who had played an active role in the establishment of the by-laws in Johannesburg. On several occasions their opinion was consulted before the legislation was finally gazetted, 46 demonstrating their vested interests. 47 Threatening the municipal authorities with accusations of a lack of concern for public health and welfare, the large-scale milk producing bodies started monopolizing the dairy market.

Bearing in mind the strict building regulations, the physical establishment and maintenance of dairy premises became exceedingly difficult. The result was an increase in the number of prosecutions against smallscale dairymen in terms of building regulations, and ultimately a slow withering of the small-scale milk producers in white urban Johannesburg after the implementation of the by-laws in 1916.⁴⁸ The black petty milk-producers in the 'native locations' continued to produce milk and practise animal husbandry, relatively unaffected by the new regulations. The likely reason is that the small-scale black milk producers did not threaten the market that the WDFA and later Amalgamated Dairies⁴⁹ planned to conquer. As a result of the reluctance of dairying capital to enter the black market, the authorities did not eliminate the black petty milkproducers. The enormity of the black small-scale milk production industry made any meaningful prosecutions with the available number of inspectors impos-sible. The authorities also recognized the 'illicit' milk producers as a means of distributing a necessary life sustaining product at no cost to themselves. The problem was that the unmonitored production of milk in the various black locations could, and in some instances did, result in serious threats to public health.⁵⁰ The 'poisoning' of blacks by black traders was, however, seen by the authorities as a matter that was beyond their control. With the strict policing of milk entering the 'white' city the threat to the white urban proletariat and high society was minimized. Ignoring the 'unsanitary conditions of milk production' in black urban areas undermined the earlier calls for 'general sanitary milk production practices', manifesting through omission the racist attitudes of both the authorities and the white community at the time.

CONCLUSION

The dissolution of white small-scale milk producers in Johannesburg is a further instance of the outworkings of the articulation of the modes of production during capital's formative period in Johannesburg. The social and political climate that prevailed during the formalization period of the milk industry made the process relatively easier than other instances of dissolution that occurred. The role of the local press and its possible manipulation by interested parties cannot be discounted. By accusing the Johannesburg municipality of inadequacies as regards public health generally, and in the milk industry specifically, the large-scale milk producers initiated the legal institutionalization of the industry that resulted in the demise of the small-scale milk industry. Local law-givers were prompted to implement a set of by-laws which made small-scale milk production almost impossible. The by-laws stipulated the procedure to be adopted in all the facets of milk production. By enforcing a building code, in particular, the white smallscale milk producers found it impossible to comply with the excessive standards.

The dissolution process did not occur instantaneously, but within a year of the implementation of the bylaws a large number of small-scale milk producers had been instructed to make amendments to their existing premises, alterations that were often impossible because either the producers did not have the financial means or their stands were not big enough to accommodate the necessary changes.

Notwithstanding the potential for certain diseases to be spread through milk there appears to be no strong evidence linking any epidemics of disease to unhygienic milk from the small-scale producers in white Johannesburg in the period under discussion. The power that the WDFA and other large-scale milk producers wielded in persuading the authorities to take action, caused petty milk-producers to lose their position in the dairy market. And so the mother of the milk industry in Johannesburg, the small-scale milk producer, was put out of the pasture to the advantage of the large formal dairies.

IADJ, JCHD 302 (1/16): Town Clerk — MOH, 25.4.1962.

IADJ, JCHD 193 (440): MOH — WDFA, 9.10.1914.

Prior to the implementation of the by-laws the medical officer of health was continually confronted by members of the WDFA demanding a stricter application of the existing legislation. One case dealt with the illicit sale of milk in Fordsburg, for which the guilty party was fined £3. Taking exception, the WDFA saw the 'token fine' as an encouragement of illicit milk production in Johannesburg. With the new body of legislation contained in the dairy by-laws, however, fines against such illicit milk production were stipulated, ranging from £20 to £50 depending on the severity of the infringement (Sections 24-31). IADJ, JCHD 193 (440): Letter to Magistrate complaining about fine, 17.3.1908.

IADJ, JCHD 144 (8332): Records of private cow keepers, 1908-

<sup>1923.

49</sup> IADJ, JCHD 3 (D613): Record of communications with Amalgamated Dairies, 1946-1947.

IADJ, JCHD 104 (B9583): Report of typhoid outbreak at Sophiatown Nursery School, 16.8.1938.