

**State-Sponsored Racial Segregation:
Paradoxical Outcomes in South Africa**

Claudia Buchmann
Ohio State University

Troy A. Powell
Duke University

Running Head: Racial Segregation and Economic Standing in South Africa

* Direct correspondence to Claudia Buchmann, Dept. of Sociology, The Ohio State University, 391 Bricker Hall, 190 N. Oval Mall, Columbus, OH 43210, USA, Buchmann.4@sociology.osu.edu. Claudia Buchmann acknowledges support from a Spencer Foundation /National Academy of Education Postdoctoral Fellowship for this research.

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Abstract

This paper examines how the territorial segregation of Blacks in homelands – a cornerstone of apartheid policy – impacted the economic standing of Black and White South Africans shortly after the end of apartheid. We investigate how the employment, occupational status and income of Blacks and Whites differ according to their residence in former homeland areas, as well as their individual assets, such as education and labor force experience. Segregation in homelands was detrimental for many blacks but beneficial for others. Employed Blacks enjoy higher occupational prestige and higher incomes in former homeland districts than Blacks in other areas of the country. At the same time, far more Blacks are unemployed in former homeland areas. These outcomes are largely attributable to the structure of labor markets in homelands. The segregation of Blacks in homelands created a large class divide between employed and unemployed Blacks. In contrast to most prior research which finds either wholly beneficial or wholly detrimental effects of segregation for subordinate groups, the results underscore the multiple and varied impacts of segregation on the economic outcomes of disadvantaged groups in multiracial societies.

State-Sponsored Racial Segregation: Paradoxical Outcomes in South Africa

Among societies characterized by deep racial and ethnic divisions, South African apartheid stands out as the most comprehensive blueprint to entrench racial domination economically, politically, and ideologically (Adam and Moodley 1993:23). Under the guise of “Separate Development,” the apartheid state ensured a high degree of segregation between Blacks and Whites by forcibly relocating many Blacks to impoverished and remote “homelands.” A complex system of legislation further enforced the separation of racial groups in all aspects of life. The “success” of apartheid to entrench racial inequality is startling: among middle-income countries, South Africa has the highest level of racial inequality in the world: the poorest 50% of the population is predominantly Black and holds less than 10% of total income; the richest 6% of the population, largely White, holds more than 40% of the country’s total income (Leibbrandt, Woolard, and Bhorat 2001).¹ South Africa is also different from most multiethnic countries in that its most subordinated group constitutes the majority of the population. In 1996, two years after the end of apartheid, Blacks comprised 77% of the population while Whites comprised only 11%; Coloureds and Asians comprised the remaining 9% and 3% of the population respectively (Statistics South Africa 1998a).² As a result, Blacks tend to live in regions with predominantly Black populations, but the average White also lives in districts where two-thirds of the population is Black. This demographic reality, coupled with the country’s apartheid history and its aftermath, makes South Africa important as a distinctive

¹ According to Leibbrandt et al.’s (2001) calculations, South Africa’s GINI coefficient of .60 is second only to Brazil’s (.63). Evidence suggests that income inequality is growing within racial groups, as the gap between the richest and poorest Blacks is widening (Whiteford and McGrath 1998).

² Under apartheid, South Africans were classified as White, Coloured, or Native (later Black). The term “Coloured” referred to people of mixed race. Indians were classified as Asians. We have little choice but to adopt these racial categories and use capitalized and Anglicized spelling to register this use.

segregation regime but also as a comparative case for addressing broad questions about how spatial segregation shapes racial inequalities in multiracial societies.

Despite its infamous history of racial subordination and segregation, South Africa has garnered little attention in the broad sociological literature on segregation and racial inequality. Perhaps this is because the United States has been such a fruitful seedbed for research on the consequences of segregation for subordinate groups. An extensive literature details the negative outcomes of segregation for blacks in the United States (Massey and Denton 1993; Charles 2003) and underscores the importance of minority concentration and local labor market structures as determinants of racial inequalities in the labor market (Blalock 1956, 1957; Frisbie and Niedert 1977; Burr, Galle, and Fossett 1991; Tigges and Tootle 1993; Cohen 1998; Tolnay 2001). But the history and contours of segregation in the U.S. are quite different from those of other multiethnic societies. Racial segregation in the United States largely has been *de facto* segregation. Except for the period of Jim Crow in the South, U.S segregation has not been rooted in the legal structures of society, nor has it entailed the extreme territorial segregation found in other deeply divided societies (Fredrickson 1981; Marx 1998). Putting aside the question of whether racial segregation in the United States is more or less pernicious than segregation in other multiethnic societies, it is clear that the consequences of segregation may be *different* in societies like apartheid South Africa, where one ethnic group had exclusive legitimacy to dominate the rest of society and different ethnic groups were legally allocated differential rights and privileges (Byrne 1999:233; Conversi 2002).

This paper examines how the territorial segregation of Blacks in homelands – a cornerstone of apartheid policy – impacted the economic standing of Blacks and Whites shortly after the end of apartheid. Using data from the 1996 South African Census, we investigate how

the employment, occupational status and income of Blacks and Whites differ according to their residence in former homeland areas, as well as their individual assets, such as education and labor force experience.³ We find that segregation in homelands was detrimental for many blacks but beneficial for others. Employed Black men and women enjoy higher occupational prestige and higher incomes in former homeland districts than Blacks in other areas of the country. At the same time, far more Blacks are unemployed in former homeland areas. These outcomes are largely attributable to the structure of labor markets in homelands. The segregation of Blacks in homelands created a large class divide between employed and unemployed Blacks.

RACIAL SEGREGATION IN SOUTH AFRICA

The underpinnings of South Africa's distinctive system of racial inequality were forged in the early 1900s when, in an attempt to come to a compromise with the Afrikaners,⁴ the British enacted laws that excluded Blacks from meaningful economic and political participation. Legislation restricted Blacks' movement and land ownership and served to segregate residential areas of towns and cities (Worden 1995). One outcome was a racially-divided labor market where Blacks had to seek low-paying jobs from White employers, especially in farms and mines (Crankshaw 1997). Without the right to vote, Blacks could do little to change the laws relegating them to the bottom of the economy (Federal Research Division 1997).

When the Afrikaners' Nationalist Party gained control of the government in 1948, it instituted the formal system of apartheid with the goal of creating separate states for Whites and Blacks. The Group Areas Act (1950) and Bantu Authorities Act (1951) gave the government the

³ The analysis of Asians and Coloreds is beyond the scope of this paper but an important task for future research.

⁴ Afrikaners, decedents of the Dutch colonists, came to South Africa in the 1600s. When they were defeated by the British in the Boer War (1902), the British took control of the government until the Afrikaner Nationalist Party won the election of 1948.

power to forcibly move people from areas not designated for their racial group into eight (ultimately ten) distinct “Bantu Homelands.” Homeland boundaries were drawn to ensure White control over the country’s best farmland, mineral deposits, and major urban centers. These homelands (also called Bantustans) comprised 13% of the South African landmass; Whites, Coloureds and Asians were to live in separate group areas on the remaining 87% of the land. Between 1960 and 1983 more than 3.5 million Blacks were relocated to homelands (Platzky and Walker 1985:11). One goal of the homeland strategy was to thwart the nationalist goals of the Black majority by dividing it into ethnic segments and subjecting it to indirect rule. As historian Nigel Worden explains, “Ethnic homeland loyalty was to replace national political aspirations in a move which the state hoped would diffuse calls for the moral necessity of African self-government (e.g. the right to vote) within South Africa itself” (1995:110-11).

Initially, the apartheid government conceived of a highly-circumscribed form of self rule for the homelands. But in the 1960s a new wave of internal resistance, punctuated by the Sharpeville riots, along with growing international condemnation of apartheid created a dilemma for the apartheid state: on the one hand, homeland independence could not be allowed to pose a real challenge to apartheid rule; at the same time it “had to be sufficiently meaningful to confound the critics and to provide an outlet for black frustration bred of [apartheid] repression” (Southall 1983:103). In 1961, after Britain voted for the first time with the United Nations to condemn apartheid, Prime Minister Verwoerd announced to Parliament that “in light of external pressure South Africa would reluctantly, but out of necessity, have to develop Bantu states which might eventually go on to achieve full independence” (Southall 1983:114). Thus began a strategy on behalf of the apartheid government to cede some political power to homeland leaders and provided funds for homeland development while it simultaneously ensured the homelands’

dependence on South African capital (Worden 1995:111; Christopher 2001; Giliomee and Schlemmer 1985).

The provision of self-governance and the infusion of capital enabled homeland leaders to improve infrastructures and expand the public sector. This brought attendant growth in public sector jobs for Blacks, especially in health and educational services (van der Berg 1985). For example, in Transkei between 1963 and 1979 the public sector grew from 2,446 to 19,800 posts, with the explicit goal of replacing white officials with local Blacks (Southall 1983:177). In conjunction with public sector expansion, the development of a few universities and technical institutes in homelands provided Blacks opportunities to improve their educational and technical qualifications (Southall 1983:178). A small number of Whites continued to fill administrative roles in the homelands, serving as intermediaries between the new homeland governments and the Republic of South Africa (Butler et al. 1977).

While the state restricted Black entrepreneurship in the Republic of South Africa, it officially encouraged it in the homelands. The Bantu Investment Corporation (BIC) facilitated the devolution of white-owned homeland enterprises to Blacks and provided business training and loans to Black entrepreneurs. This served to develop a stratum of Black petty capitalists in homelands, though most of them remained in commercial and service sector enterprises that required low levels of finance and technology (Southall 1983:188). The Corporation also developed small industrial parks in homelands to serve as sites for factories and water and power facilities. In these areas, Black workers were freed from the *de jure* job discrimination of apartheid; they could apprentice in crafts normally closed to them and advance into skilled positions (Butler et al. 1977:212).

These developments in the homelands clearly served the interests of the apartheid

government. By creating employment opportunities for educated Blacks in the rapidly expanding homeland public sector, the apartheid state provided the segment of the Black population most likely to be disaffected by the injustices of apartheid with a material stake in the structures of separate development (Southall 1983). This strategy may have served to prolong the system of White rule and impart some legitimacy to the policy of separate development. At the same time, these developments allowed the emergence of a Black middle class of civil servants and entrepreneurs in the homelands that enjoyed greater prosperity and political privilege than Blacks in other areas. The development of modern sectors in the homelands – industry and construction, transport and communication, electricity, gas, and water supply – also may have provided some Blacks with higher status, better paid jobs than elsewhere.

At the same time, the segregation of Blacks in homelands deprived many Blacks of economic opportunities. Homeland labor markets were too small to support the large population of Blacks residing within them and economic sectors that might pose a threat to White interests remained undeveloped. In 1955, the Tomlinson Commission, which was to provide a blueprint for the future of the homelands, urged the government to expand the size of the homelands and launch a massive employment creation program for homeland Blacks. But the fear that these programs might threaten White interests led the government to discard these recommendations (Southall 1983). Because mining and agriculture were central to the White economy and the best farmland and mineral deposits were located outside of the homelands, these sectors remained undeveloped in homeland regions. By restricting the size of the homelands and ensuring that they were not economically viable, the government ensured that homelands were dependent on the Republic. For the majority homeland residents who had little education and few job skills, unemployment and poverty were the markers of homeland life (Platzky and Walker 1985).

Blacks who had survived previously as sharecroppers on White-owned farms were relocated to homelands with few employment prospects; even subsistence agriculture was impossible in most of the arid and densely-populated homelands. Others homeland Blacks were forced to travel long distances to work in farms and mines in White areas, only returning to their families once or twice a year and at the end of their working lives. Not surprisingly, apartheid's critics claimed that the homelands constituted "rural dumping grounds" for millions of people (Worden 2000:126).

In 1970, all Blacks lost their South African citizenship and became "citizens" of the homelands. They were allowed to re-enter the Republic of South Africa only as temporary migrant workers, usually in unskilled positions in the White economy.

Self-governance was granted to the homelands in 1971. Nominal independence was granted to the Transkei (1976), Bophuthatswana (1977), Venda (1979), and Ciskei (1981).⁵ Six other homelands – KwaZulu, KwaNdebele, Gazankulu, Lebowa, KaNgwane, and QwaQwa – remained self-governing territories until the end of apartheid in 1994, when the interim constitution dissolved the homeland boundaries and restructured the country into nine provinces and 354 magisterial districts (Christopher 2001). All residential restrictions were lifted, but the racial composition of homeland areas changed little. While 53% of all Blacks were living in homelands in 1980 (Education Foundation 1994), census data indicate that in 1996, 48% of Blacks were still living in former homeland areas and these areas remained highly segregated with populations that were on average 98% Black. The map in Figure 1 indicates the distribution of Blacks across magisterial districts with former homeland boundaries overlaid.

FIGURE 1 ABOUT HERE

In sum, the historical evidence suggests that the segregation of Blacks in homelands, along

with the irregular development of homeland labor markets, created a class divide among homeland Blacks. A middle class, comprised largely of civil servants, entrepreneurs and skill tradesmen, coexisted with a large unemployed underclass. Before turning to the empirical analysis of the effects of segregation on the economic standing of Blacks and Whites, it is valuable to consider how the specifics of the South African case accord with theoretical perspectives regarding the effects of segregation on the economic standing of subordinate groups in multiethnic societies.

PERSPECTIVES ON SEGREGATION AND RACIAL INEQUALITIES

Spatial Mismatch and Minority Threat

Most scholars of race relations view spatial segregation as a mechanism whereby subordinate groups are deprived of economic opportunities. In the United States, a well-developed literature details the negative aspects of life in highly-segregated areas with large concentrations of blacks (Wilson 1987; Lichter 1988; Massey and Denton 1993). Some scholars argue that segregation creates a “spatial mismatch” between black workers residing in inner cities and job opportunities, which are found increasingly in suburban areas (Kain 1968, 1992; Lichter 1988; Mouw 2000). The substantial costs of finding and commuting to more distance jobs in the suburbs serve to increase the unemployment rate and decrease the wages of urban blacks. While this perspective offers a clear mechanism to explain the link between segregation and economic outcomes, the empirical evidence for this argument remains widely debated (Mouw 2000:730).

Other research finds that as their concentration in the labor market increases, minority groups, especially blacks, experience lower occupational status (Beggs, Villemez, and Arnold 1997; Burr et al. 1991; Semyonov, Hoyt, and Scott 1984; Tolnay 2001), depressed incomes

⁵ Also known as the TBVC states, their independence was not recognized by any country outside of South Africa.

(Cohen 1998; Cassirer 1996; Frisbie and Niedert 1977; Grant and Parcel 1990; Tienda and Lii 1987), and higher unemployment (McCreary, England, and Farkas 1989; Tigges and Tootle 1993). These studies support the minority threat theory developed by Blalock (1956, 1967) which posits that the increasing relative size of a subordinate group evokes a discriminatory response from the superordinate group as it strives to ensure its continued dominance.

Enclaves and Queuing

In contrast to spatial mismatch and minority threat arguments, enclave and queuing theories predict beneficial economic outcomes of segregation for subordinate groups. The literature on ethnic enclaves finds that segregation can improve the economic status of immigrants in the U.S. (Bonacich 1973; Waldinger 1996; Wilson and Portes 1980; Zhou and Logan 1989; Logan and Alba 1999) and some subordinate groups in other multiethnic societies (Hout 1986; Semyonov 1988; Lewin-Epstein and Semyonov 1994; Kraus and Yonay 2000). While research on ethnic enclaves tends in the United States tends to emphasize entrepreneurial activity as the primary mechanism linking segregation to beneficial economic outcomes, international studies adopt a more general notion of the ethnic enclave as a “sheltered labor market” where subordinate groups are free from competition with dominant ethnic groups in all sectors of the economy (Lewin-Epstein and Semyonov 1994). Because a single ethnic group dominates the enclave, workers can find jobs despite poor language skills or lack of education and well-educated individuals may get higher returns to human capital investments in terms of income and occupational status (Wilson and Portes 1980; Wilson 1999). In Israel, for example, Arabs living in highly-segregated areas have higher occupational status than those in more integrated areas because they are insulated from competition with Jews (Semyonov 1988; Lewin-Epstein and Semyonov 1993, 1994; Yonay and Kraus 2001). Segregation enabled Arabs (the

subordinate minority) to build an enclave economy that even gives them an advantage over Jews of Eastern origin, who must compete with dominant Western Jews in the labor market (Kraus and Yonay 2000).

Queuing theory maintains that, in any given labor market, the number of good, average, and bad jobs is relatively fixed. If employers assume that a subordinate group lacks desired attributes, that group is relegated to the bottom of the job queue (Liebersohn 1980; Thurow 1975). But in communities with a sizable subordinate population, that population should have opportunities higher in the occupational hierarchy because highly-ranked groups are not pushing as far down (Liebersohn 1980: 297). Segregated black communities in the U.S. at the turn of the century may have benefited from their high population concentration and relative distance from whites: “if the black population base is large enough, there will be support for black doctors, black clergy, and so on, even if they remain totally unacceptable to others” (Liebersohn 1980:297-8; see also Wilson 1978:124-25). Whites should also enjoy higher mean occupational outcomes in areas with higher proportions of blacks. Because they comprise a smaller share of the population, they hold a smaller share of the best jobs at the top of the job queue.⁶ Thus according to queuing theory, in areas with high population concentrations of blacks, both blacks and whites should have better average occupational outcomes, because they both overflow into higher status jobs.

Labor Markets

Whether or not segregation serves to benefit subordinate groups also depends on the size and structure of local labor markets. If local labor markets are small and offer few job

⁶ Cassirer explains, “if blacks were 20% of the labor market, whites would hold jobs in the top 80% of the job queue, while blacks would obtain the least attractive 20%. If, however, the proportion of blacks was 40%, blacks would still hold the bottom 20% but would “overflow” into the next 20% of the jobs, leaving whites with the top 60%” (1996:377). This would lead to higher mean occupational status for both blacks and whites.

opportunities, the segregation of subordinate groups in these areas only serves to exacerbate their economic deprivation. The high unemployment and poverty rates of blacks in many inner-city areas of the U.S. underscore this point (Wilson 1987; Massey and Denton 1993). In terms of the structure of labor markets, prior research finds that some types of economic sectors provide fruitful mobility channels for subordinate groups. Self-employment has been one route to mobility for some immigrants in the U.S. (Aldrich and Waldinger 1990). For blacks in the U.S. and ethnic minorities in other countries, self-employment has sometimes served this purpose (e.g., Boyd 1991; Yonay and Kraus 2001), but the public sector may also be an important mobility channel. With the expansion of U.S. government programs that began during Roosevelt's New Deal and continued into the 1960s, public sector job opportunities for educated blacks grew substantially (Wilson 1978; Hout 1986). Research finds that African Americans employed in the public sector enjoy higher occupational status and earnings than their private sector counterparts (Maume 1985; Eisinger 1986; Collins 1983). Likewise, Israeli Arabs in ethnic enclaves who have jobs in the public sector enjoy higher occupational status and earnings than their private sector counterparts (Lewin-Epstein and Semyonov 1993; Yonay and Kraus 2001). In contrast, other economic sectors, such as the agriculture and service sectors, that offer mostly low-skill, low-wage employment should serve to suppress average occupational status and earnings and offer few mobility prospects for subordinate groups.

With modifications, some of the above theories may prove useful to understanding impact of racial segregation on the economic standing of blacks and whites in South Africa. Blacks in homelands may have experienced a type of spatial mismatch, as agricultural, mining, and service sector jobs were located far outside of homelands in White areas of the Republic. It is plausible that the high rates of unemployment in homelands were due, in part, to the absence of low-skill,

low-wage jobs in agricultural, domestic service and manufacturing sectors; if so, such evidence would be consistent with the spatial mismatch perspective. We expect that the minority threat perspective, which has received much empirical support in the U.S., is less applicable to the case of South Africa. Previous research finds that the Public sector can offer significant occupational opportunities for disadvantaged populations, and this may be particularly applicable to Blacks in homelands where the public sector is the largest employer for Black women and the second largest (after the infrastructure and development sector) for Black men that Self employment may have been one route to higher occupational status and incomes for Blacks in homelands. At the same time, the infusion of funds from the apartheid state into infrastructure and development sectors of homelands may have served as an important avenue to skilled jobs and higher incomes for Blacks in homelands.

Because the domestic service and agricultural sectors, where jobs tend to be unskilled and poorly paid, provide lower average occupational status and earnings, local labor markets with a predominance of such jobs should have lower mean black earnings. Following spatial mismatch theories, however, the absence of such jobs may lead to high unemployment among workers at the bottom of the occupational hierarchy. In sum, it is possible the segregation of Blacks in homelands served to benefit middle class Blacks who had the skills and education to fill leadership roles and jobs in the public and development sectors while at the same time it created a large underclass of a Blacks who, in the absence of low-wage low skill positions in agriculture or domestic service, were worse off in homelands.

As a first step in assessing these hypotheses empirically, we investigate the distribution of each race/gender group in the various labor market sectors in homeland and non-homeland areas. Using 1996 census data, Table 1 presents these statistics. The domestic service and agriculture

sectors for Blacks are substantially smaller in homeland districts than non-homeland districts, as is the mining and manufacturing sector for Black males. In non-homelands, the domestic service sector is the largest employer of Black females while the mining/manufacturing and agricultural sectors are the second and third largest employers of Black males. In homeland districts however, the public sector is the largest employer for Black women and the second largest (after the infrastructure and development sector) for Black men.⁷ Rates of self-employment for Blacks, though relatively low, are higher in homeland districts.

TABLE 1 ABOUT HERE

For Whites in homeland districts, the public sector comprises a smaller share and the agricultural sector comprises a larger share of the labor market compared to non-homeland districts. Otherwise there are fewer marked differences in the labor market sectors for Whites across types of districts. Also note the high rates of unemployment in homeland areas for all groups. A staggering 58 percent of Black men and 67 percent of Black women in homelands are unemployed, indicating that labor markets in homelands were too small to provide jobs to the majority of residents and that this has remained the case even after the demise of apartheid.

DATA AND METHODS

We conduct analyses of the individual and contextual determinants of employment status, occupational status, and income for Black and White males and females ages 18-64 with non-missing data from the 1996 South African Population Census. The census is a representative national sample of all respondents drawn from ten percent samples of households, special institutions and hostels, totaling 3.62 million people. (See tables for sample sizes specific to each analysis). Weight variables that are adjustment factors for the undercount multiplied by ten were

⁷ Within the public sector in homeland districts, 44% of Black men are in administration. In contrast, only 12% percent of Black women are in administration, 88% are in public education and health/social work, indicating a strong degree of

used to inflate the individual sample to the population (Statistics South Africa 1998b) and are applied in all analyses. As there are two levels of data, we use Hierarchical Linear Modeling methods and software (Raudenbush and Bryk 2002) to correct for correlation error and determine, for each race/gender group, whether: 1) individual variations in human capital account for variations in labor market outcomes within districts, 2) the racial composition, homeland status, and labor market structure of districts *directly* relate to the mean labor market outcomes within districts, and 3) the characteristics of districts affect individuals' labor market status *indirectly* through their effects on other individual factors (see Appendix A for details). Moreover, results of one-way ANOVA models (not shown) indicate that multi-level analyses are warranted as there is substantial variation between districts in the labor market outcomes for all groups except White females.⁸ Employment status is a binary outcome so we use generalized linear modeling (HGLM) with a logistic transformation to estimate the employment models; income and occupational status are estimated with standard hierarchical linear models.⁹ Because models are estimated separately for each race/gender group, we test for the equality of the coefficients in order to determine whether differences in effects are significant or are due merely to sample variability; all significant differences are noted in the tables.¹⁰

Since the magisterial district is the contextual unit of measurement, data for all respondents residing in a district were aggregated to construct district-level indicators.

Magisterial districts in South Africa are roughly equivalent to counties in the United States; the

gender segregation within this sector.

⁸ Fourteen percent of the variance in income for Black males is between districts; the figures are 12% for Black females and White males, and 5% for White females. That the contextual-level variance constitutes a small percent of the overall variance is standard for multi-level models.

⁹ HLM 6.0 software allows for the application of sample weights in two-level HGLM models for employment status; all other models were estimated using HLM 5.04.

¹⁰ T-statistics are calculated for each test using the following formula:
$$\frac{X_1 - X_2}{\left[\frac{(N_1 - 1)(s_1^2) + (N_2 - 1)(s_2^2)}{N_1 + N_2} \right]^{1/2}} \left[\left(\frac{1}{N_1} \right) + \left(\frac{1}{N_2} \right) \right]^{1/2}$$

354 magisterial districts in 1996 vary in geographic size but contain on average about 100,000 people. Previous research has used a range of geographic units, including metropolitan areas and counties to define labor market areas. The choice of districts as labor market areas in South Africa is reasonable, given that they are the smallest geographic unit for which comparable data are available. Moreover, while it is not uncommon for workers, especially Black men, to work far from their family home, residence for these respondents was reported as the hostel near the worksite, thus it is rarely the case that workers live in one region and report residence in another.¹¹

Dependent Variables

Employment Status indicates whether or not a respondent was employed at the time of the survey (employed=1). Employment is defined as working for pay, profit, or family gain in formal, informal, and farm work. Persons not working but actively seeking employment are considered unemployed. All others are defined as not economically active and are excluded from the sample.

The occupational status of employed individuals is measured using the International Socioeconomic Index of Occupations (ISEI). We mapped International Standard Classification of Occupational (ISCO-88) categories available in the South African census to ISEI scores using the appendix of Ganzeboom and Treiman (1996). To facilitate interpretation, we subtracted the lowest ISEI score (16) from all ISEI scores to create a variable that ranges from 0 to 69.

The income of employed individuals is self-reported personal monthly income, in South African Rand, from all sources. The census asked respondents to report their income in one of fourteen categories. Each category was recoded to its mid-point with the top category (R30,000

¹¹ Models using district of employment produced nearly identical results. Since more data are missing for the employment district responses, we use residential district.

or higher) recoded to R45,000. The resulting variable was logged to create a normally-distributed dependent variable.¹²

Individual-level Independent Variables

In 1996, the South African education system consisted of seven years of primary school (grades 1-2 and standards 1-5) and five years of secondary school (standards 6-10). Years of education ranges from 0 (no schooling) to 19 (doctoral degree). We include Diploma/Degree as a dichotomous variable coded 1 if the respondent has a secondary school diploma or post-secondary degree to see whether there are additional returns to such credentials. To attain a diploma, students must pass a matriculation exam at the end of secondary school. Historically, very small percentages of Blacks attained diplomas and even fewer attained post-secondary degrees.

English and Afrikaans were South Africa's two official languages until 1994, when the new government designated the eleven most common languages official languages. Despite this change, English proficiency should be related to higher economic standing, as it is the main language used among professionals in both private and public sectors. The census has no measure of English proficiency, so we created a dummy variable coded 1 if respondents report English as their first or second language spoken at home. This measure likely underreports English proficiency among Blacks and Afrikaaner Whites since many may be competent in English but do not speak it at home.

Since census data do not contain a direct measure of labor force experience (LFE), we follow general conventions and measure potential experience as $LFE = age - years\ of\ education$

¹² In May 1996, R4.33 = US\$1.00 (Federal Research Division 1997). Income is highly skewed to the right with a skewness statistic of 6.30. The poorest 25% of the sample have incomes of R100-R350 while the richest 1% have incomes of R13,500 or more. Taking the natural log of income results in a nearly normal distribution with a skewness statistic of .09. We do not log ISEI since it has a nearly normal distribution in its natural metric and logging ISEI does not appreciably increase the normality of its distribution.

- 6. Given high levels of unemployment and low levels of education for Blacks, it likely overstates their labor force experience. For example, it is unlikely that Blacks with no education have been working since the age of six, as this variable assumes. A squared term examines whether returns to experience change across the lifespan.

Following prior research, the income analyses include three additional control variables. To control for the relationship between hours worked and subsequent income, employed part-time indicates whether a respondent works part-time. Marital status is coded one for married; number of children ever born was only asked of females. Both are proxies for home responsibilities that may affect income earning opportunities, especially for women.

Contextual-Level Independent Variables

In order to test whether the population concentration of Blacks is related to their labor market outcomes, the variable Percent Black measures the percent of the population in a magisterial district that is Black. A squared term tests for a non-linear relationship. Percent urban, the percent of a district's population living within a proclaimed municipal/urban area, is a control variable to capture variations in employment opportunities between urban and rural areas.

In order to examine how the segregation of Blacks in homelands impacts the economic standing of Blacks and Whites in these areas, the dummy variable Former homeland indicates whether a current magisterial district is comprised predominately of former homelands. In 1994, the administrative boundaries in the country, including homelands, were redrawn. A district is coded one if the majority of its geographic area falls within the boundaries of a former homeland.

Finally, in order to test hypotheses regarding the impact of the labor market structure of

districts on the occupational status and income Blacks and Whites, we created measures of the percentage of the employed population in each magisterial district working in specific economic sectors based on the 1993 International Standard Industrial Classification of all Economic Activities (ISIC). These variables indicate the percent employed in the domestic service sector, the agriculture sector, the infrastructure and development sector, and the public sector.¹³ While self-employment is often measured at the individual level, we are interested in whether occupational status and incomes are higher in districts offering more opportunities for self-employment and thus include a measure of the percentage of the population in a district that is self-employed.

RESULTS

Table 2 presents descriptive statistics for the dependent variables and individual-level independent variables for each race/gender group in homeland and non-homeland districts. Blacks have lower employment rates, occupational status, and income than Whites in all areas. Blacks in homeland districts have lower employment rates, as seen in Table 1, but employed Blacks also have higher mean occupational status and income, relative to their counterparts in non-homeland districts. Among employed Blacks, males' mean occupational status is 4 points higher and their mean monthly income is 144 Rand higher; the mean occupational status of Black females is more than 6 points higher and their mean income is 225 Rand higher than in non-homeland districts. Blacks in homelands also have more education. For example, 16% of Blacks in homelands have diplomas/degrees compared to only 7% of Blacks in non-homelands.

¹³ The excluded sectors consist of mining, manufacturing, finance/business services, other community services, and undefined activities. Alternative model specifications confirm that domestic service, agriculture, infrastructure/development and public sectors explain larger amounts of variation in the dependent variables than other combinations of industrial sectors.

Also note that while White women have the highest mean occupational status, their mean income is almost half that of White men, indicating that White women do not earn incomes commensurate with their occupational status. Black women have lower mean occupational status and incomes than men. The lower incomes of women correspond to the fact that labor markets in South Africa are highly gender-segregated and women tend to be concentrated in a few occupational sectors, notably professional, clerical, and unskilled elementary labor (Lalthapersad 2001). Not surprisingly, Black women tend to be concentrated in the domestic sector, White women in the professional and clerical sectors (Posel and Todes 1995).

TABLE 2 ABOUT HERE

Descriptive statistics for the contextual variables are presented in table 3. These statistics are calculated based on the characteristics of *all* residents of a district. On average, homeland districts are nearly 99% Black and only 12% urban while non-homeland districts are 62% Black and 66% urban. Larger segments of the population in homeland districts are self-employed. The mean size of the agricultural sector in homeland districts is roughly one-third that of non-homelands. On the other hand, the mean size of infrastructure/development sector is a little larger and that of the public sector is substantially larger in homelands, relative to non-homelands.

TABLE 3 ABOUT HERE

Determinants of Employment Status

Table 4 presents results of the multi-level model of employment status by race/gender group. The average intercept represents the value of the dependent variable when continuous variables are set at the population mean and dichotomous variables are set to zero. The other coefficients listed under *Mean Employment Status* represent the direct effect of each contextual

variable on the district-level mean likelihood of being employed. The coefficient for the average slope of each individual-level variable indicates its direct effect on the dependent variable. The coefficients listed under *Education*, *Diploma/Degree*, and *English Proficiency* are equivalent to interactions between the contextual- and individual-level variables. They indicate the indirect effect of a contextual-level variable via its impact on the effect of an individual-level variable, independent of the direct effect of either variable. For each model, we first discuss the effects of individual-level variables, then the direct and indirect effects of the contextual variables.

TABLE 4 ABOUT HERE

The average intercept coefficients indicate that the odds of employment are significantly lower for Blacks than for Whites. The average slope coefficients indicate that years of education and possession of a diploma/degree significantly improve the likelihood of being employed for all race/gender groups. English proficiency also significantly boosts the odds for employment for all, except White females. Potential labor force experience increases the likelihood of being employed for all groups; the squared term indicates that increases are slightly larger at higher levels of experience.

In terms of contextual variables, the main interest is to examine effects of former homeland residence on employment status. Net of other variables, residing in a former homeland significantly decreases the odds of being employed for all groups: Black males in homelands are 64% less likely to be employed; Black females are 56% less likely to be employed in homelands. White males and females in homelands are 42% and 44% less likely to be employed, respectively. Residence in a former homeland also indirectly impacts Blacks' likelihood of employment through its effects on several individual-level variables. The increased likelihood of employment associated with each year of education is larger for Blacks in

homelands than non-homelands, increasing the odds of employment by 3.4% and 6.3% for Black males and females in non-homelands and 12.7% and 15.5% for Black males and females in homelands. While a degree increases the odds of employment for all groups, Black males residing in homelands receive an additional increase, such that a diploma or degree increases the odds of Black males' employment by 247% in non-homeland districts and by 387% in former homeland districts.

Determinants of Occupational Status

Table 5 presents the results of the multi-level model of occupational status for Black males and females. In model 1, the average intercept indicates that females have significantly lower mean occupational status than males after controlling for all other variables. The average slope coefficients indicate that years of education, a diploma/degree, and English proficiency significantly boost the occupational status of Black men and women. Females have significantly higher returns to diplomas and degrees; males have significantly higher returns to English proficiency. For males, potential labor force experience increases occupational status as expected and the increases are slightly greater at higher levels of experience; for females, potential labor force experience only increases occupational status at higher levels.

TABLE 5 ABOUT HERE

Of the contextual variables, the homeland status of a magisterial district has the largest direct effect on Blacks' occupational status; mean occupational status is 4.8 points higher for males and 2.8 points higher for females in former homelands, net of other variables.¹⁴ Residence in a former homeland also indirectly impacts Blacks' occupational status through its effects on

¹⁴ The percent urban population in a district also has a significant, direct effect on mean occupational status for Black males, but not females. Percent Black and former homeland are correlated at .51 and when former homeland is excluded from model 1, percent Black and percent Black squared are statistically significant. The high correlation (-.71) between percent urban and former homeland is not cause for concern; when we excluded percent urban and then former homeland from each model, neither coefficient differed substantially in the absence of the other variable.

several individual-level variables. Returns to each year of education are higher in homelands for males and females. While Blacks with diplomas or degrees in homelands still get a boost relative to other Blacks in those regions, the occupational status returns to diplomas/degrees are smaller in homelands, likely because diploma and degree-holding Blacks are not as scarce in former homeland areas (see table 2). In homeland districts, the beneficial effect of English proficiency is much smaller for males, indicating that it is less important for acquiring higher occupational prestige in these regions. For females, returns to English proficiency are no different in homelands than in non-homeland areas.

Are the beneficial effects of homeland residence due, in part, to differences in the labor market structures of homeland versus non-homeland districts? The descriptive statistics in Tables 1 and 3 suggest that economic sectors in homelands may offer more high status and fewer low status jobs to employed Blacks. Table 1 shows that homeland districts have more Blacks employed in the high status infrastructure/development and public sectors, more self-employed Blacks, and fewer Blacks employed in agriculture and domestic service sectors. To explore the possibility that Blacks' higher mean occupational status in homelands is due to differences in the composition of economic sectors, model 2 in table 5 includes the four economic sector measures as well as the percent self-employed as independent variables.

The direct effect of former homeland ceases to be significant with the addition of these variables. The size of self employment and the public sector increase occupational status for males and females, while the size of the infrastructure and development sector also significantly increases occupational status for males. The size of the domestic service and agriculture sectors negatively impacts occupational status (the effect of the domestic service sector is significantly larger for females, and that of the agriculture sector significantly larger for males). The indirect

effects of the homeland variable generally diminish with the inclusion of these labor market structure variables. In sum, the effect of former homeland residence on Blacks' occupational status appears to be due primarily to the larger size of the infrastructure/development and public sectors and self employment and the smaller domestic and agricultural sectors in these areas.

Table 6 reports results of the same models for White males and females. The average intercept indicates that White females have significantly higher mean occupational status than their male counterparts. Just as for Blacks, individual-level measures of human capital (years of education, diploma/degree, English proficiency, potential experience) significantly boost mean occupational status for Whites. Returns to years of education are higher for males; returns to degrees are higher for females.

TABLE 6 ABOUT HERE

Comparing these individual-level results for Whites to those for Blacks in table 5, it appears that *total returns* to education ($\beta_{education}(12) + \beta_{diploma}$) are quite similar for Blacks and Whites. The comparable returns to education for Blacks and Whites, combined with the much higher baseline occupational status of Whites, suggests that the observed racial gaps in occupational status are mainly due to the lower levels of education for Blacks as opposed to outright discrimination in the labor market. Moreover, the similarity of these results to those of Treiman, McKeever, and Fodor (1996) who examined racial inequalities in occupational status with 1980 and 1991 census data, suggests that the process of status attainment in South Africa changed little between the 1980s and mid 1990s.

Turning to the effects of contextual factors, we see that former homeland residence increases mean occupational status for White males; the average occupational status of White males in homelands is 9.9 points higher than that of their non-homeland counterparts. White

females get no status boost in former homeland districts. Whites in urban areas also enjoy slightly higher occupational status. Otherwise, few contextual variables have significant direct or indirect effects for Whites.

Model 2 in table 6 includes the labor market structure variables. The large positive effect of homeland district observed in model 1 is reduced to non-significance. While a slightly more White males are self-employed in homelands (see table 1), the percent engaged in self-employment has no direct impact on their occupational status. Increases in the size of the domestic service and agriculture sectors significantly reduce White males' mean occupational status; increases in the size of the infrastructure/ development and public sectors significantly raise their mean occupational status. The size of the public sector also slightly boosts females' occupational status.

SUMMARY

Summarize findings then reflect on theories

Higher unemployment among homeland residents; education, English proficiency and experience distinguish employed from unemployed.

Among the employed, Blacks in homelands enjoy higher occ. Status than non-homeland counterparts. High unemployment coupled with higher occ. Status in homelands suggests an interesting class divide, Individual human capital factors distinguish the haves from the have nots. But structure of labor markets also important, whereby homeland labor markets offered high status jobs to some blacks by left out many others.

Little support for minority threat arguments, some support for enclave and queuing. Strong support for labor market theories.

This finding, along with their higher returns to years of education and the lower returns to English proficiency, are consistent with the predictions of enclave theories. The positive effect of homeland residence for Whites is consistent with queuing explanations. Moreover, as predicted, the beneficial effects of homeland residence on the occupational status of Blacks and White men are primarily due to the larger size of the infrastructure/development and public sector and the smaller agricultural and domestic sectors in former homeland districts. The larger self-employment sector in homelands also boosts Blacks' occupational status.

Determinants of Income

Residing in former homelands occupationally advantages employed Blacks as well as White males, but whether these workers receive the higher incomes usually commensurate with higher-status occupations remains an important question. If Blacks hold more prestigious jobs in homelands but do not reap higher incomes, it could be argued that residence in former homeland districts does not really enhance their economic standing. Therefore, we investigated whether workers in districts comprised of former homelands enjoy higher incomes than those elsewhere and if so, whether such differences are due, in part, to the features of local labor markets.

First, for each race/gender group, we regressed logged monthly income on the same individual- and contextual-level variables used in Model 1 for occupational status in table 5, as well as control variables for part-time employment, marital status, and (for females only) number of children. In these models, former homeland residence significantly boosts mean monthly income for Blacks and has no significant effect on Whites' incomes (not shown). In homelands, Black males earn an average of R336 more and Black females earn R167 more than their non-homeland counterparts.

Then we added the labor market structure variables to this baseline model for each race/gender group. These results are displayed in table 7. The effects of the individual-level human capital measures are generally in line with expectations. Years of education, diploma/degree, and English proficiency significantly increase the mean income of all race/gender groups, but especially the income of Blacks. Those employed part-time earn less income; labor force experience has the expected effect of decreasing returns at higher values across all groups. Marriage has no significant effect for White females and increases income for males and Black females. Women suffer significant reductions in income for each additional child.

TABLE 7 ABOUT HERE

With the addition of labor market sectors, the direct effect of former homeland residence on Blacks' incomes is reduced but remains significant, indicating that income gains to Blacks in homelands are not completely explained by the structure of economic sectors in these areas. The size of both domestic service and agriculture sectors negatively impacts income for all race/gender groups. The size of the infrastructure/development sector increases income for Blacks and White females. Surprisingly, the size of the public sector has a negative effect on Black males' income and no effect for other groups, indicating that the occupational status boosts to Blacks in the public sector do not yield higher incomes. Likewise, while self employment raises occupational status (see table 5), it does not provide higher earnings to Blacks. Thus, in contrast to expectations, the larger self employment and public sectors in homelands are not particularly valuable routes to higher earnings.

To what other mechanisms might the higher mean incomes of Blacks in homelands be attributed? The high rates of unemployment in homeland districts may well contribute to the

higher earnings of the employed population in these areas. If those who hold low-status, low-wage jobs at the bottom of the job queue are, instead, unemployed in homeland districts, their absence from the sample of employed workers serves to boost average earnings of employed Blacks. In other words the higher the unemployment, the more it is the case that only those with the best earnings prospects are employed. This idea is consistent with results from analyses of occupational status and income that we conducted for the combined sample of employed and unemployed respondents, where unemployed respondents were assigned an ISEI score of zero and kept their natural income response. In these analyses, the positive effects of former homeland residence on Blacks' occupational status and income were reduced to non-significance suggesting that, when no distinction in employment status is considered, the average Black residing in a homeland is no better or worse off than the average Black residing in non-homelands (analyses available from authors). These findings also suggest that the beneficial effects of homeland residence for employed Blacks are due in part to the absence of low-wage, low-status workers from the job queue and underscore the point that segregation in homelands worked to create a large class divided between blacks. Rather than homeland status being beneficial to all Blacks, as enclave theory would predict, or detrimental to all Blacks as conventional wisdom regarding territorial segregation suggests,

These analyses focus on the effects of homeland status on mean economic standing; they say little about degree to which income benefits accrue to workers across the occupational status distribution. Perhaps income gains in homelands only apply to a small number of workers near the top of the distribution who are able to spillover into higher status, higher wage jobs normally occupied by Whites. To investigate this issue, we regressed logged monthly income for Black

males and females in the top, middle, and bottom third of the occupational status distribution¹⁵ on all individual and contextual level independent variables except for labor market sectors and report these results in table 8. The significant positive coefficients for homeland status for Blacks at all levels of the occupational status distribution clearly indicate that employed Blacks in homeland districts enjoy higher incomes across the full range of the occupational status hierarchy.

TABLE 8 ABOUT HERE

Summary

In light of these findings, let us assess the various hypotheses regarding the effects of population concentration, segregation, and the structure of local labor markets advanced earlier in the paper.

First, economic threat predictions that Blacks in highly concentrated and segregated homelands should be worst off in terms of occupational status and income simply are not borne out. Rather, as enclave and queuing theories predict, Blacks enjoy higher mean occupational status and income in former homeland districts. While the segregation of Blacks in homelands effectively blocked their access to economic and political participation on a national level, it also allowed for the development of labor markets that provided some Blacks with access to high status jobs relatively free of competition from Whites and other racial groups. The economic advantages of homeland residence are widespread, as Blacks across the occupational distribution enjoy income gains. The higher occupational and income returns to years of education for Black males and females and lower returns to English proficiency for Black males in homelands are also consistent with enclave arguments. Educated workers are more able to find high status, high

¹⁵ We sorted the Black male and female samples by ISEI scores, split them into three equal sub-samples and replicated the HLM model 1 for income for each sub-sample. The ISEI ranges for each third are 18-69, 13-18, 0-13 for males; 16-69, 0-

wage jobs commensurate with their skills and English proficiency is less important to economic standing in homelands than in mainstream White-dominated labor markets. Queuing processes also appear to operate in homelands. Blacks overflow into higher status jobs and, as evidenced by the higher mean occupational status of White males, Whites continue to hold a smaller share of the best jobs at the top of the job queue.

The beneficial effects of homeland residence are due in part to differences between the labor market structures of homeland and non-homeland districts. In homelands, economic sectors that tend to offer more high status jobs (e.g., the public and infrastructure/development sectors) are larger and low-status, low-wage sectors (e.g., agriculture and domestic service) are smaller than elsewhere. The composition of economic sectors in homeland districts explains more of the occupational status gains than the income gains for Blacks in these districts.

The occupational status and income benefits of homeland residence are larger for Black males than females; otherwise we find few noteworthy gender differences in the size of the effects of segregation and population concentration.

DISCUSSION

In a recent discussion of the theoretical contributions of research on South Africa, Gay Seidman (1999:421) noted that, "...social scientists are beginning to reinsert South Africa into broader debates, both as a way to explore new, hitherto overlooked questions about South African society, and to use insights from South Africa to open new questions about broader social processes." This paper has been guided by both goals, as it contributes to the study of racial inequality in South Africa and, more generally, to an understanding of how segregation shapes racial disparities in multiethnic societies.

Spatial segregation has played a central role in explanations of racial inequality and

scholars have devoted substantial effort to developing robust theories of the effects of segregation and minority concentration on the economic status of racial groups. Unfortunately, much of this research has focused on the single context of the United States. This paper focuses an empirical lens on South Africa – a society long noted for its system of racial subordination and segregation but which has seldom been the site of empirical research on this topic, largely because of data limitations during the apartheid era. With extensive data from the first population census of the “new” South Africa, our analysis contributes several new insights to the study of segregation and local labor markets as they relate to the economic standing of different racial groups.

CHANGE The results underscore the importance of spatial segregation for the occupational attainment and income of Blacks and Whites in South Africa. Most notably, employed Blacks in homelands enjoy occupational and income advantages not available to Blacks in the mainstream South African economy. Homeland labor markets offer more job opportunities in the public and infrastructure/development sectors as well as opportunities for Black entrepreneurship, while low-status agriculture and domestic service jobs are not as prevalent. Perhaps ironically, these features of homeland labor markets are due, in part, to the resources and autonomy granted to homelands by the apartheid state in the name of “Separate Development.” Not all Blacks were able to reap occupational advantages in these sheltered labor markets; as high rates of unemployment indicate, these labor markets were not well developed or large enough to provide jobs to the millions of Blacks forced to reside within homeland boundaries.

The findings raise interesting questions for comparative scholars regarding the broader impacts of segregation. Governments engaging in *de jure* racial or ethnic segregation, such as

the South African apartheid state and the Israeli government, may have greater impetus to provide some resources to subordinate groups in segregated areas and grant them greater autonomy in some aspects of governance. In both cases, the state invested resources into segregated areas in an attempt to legitimate their policies and deflect international criticism. The infusion of resources into highly-segregated areas made it possible for South African Blacks and Arabs in Israel to build economic enclaves to their own benefit. These and other societal-level variations likely play a role in determining the effects of segregation on racial disparities in multiracial societies.

In light of such societal variations, perhaps economic threat and enclave/queuing should be viewed as equally valid explanations of the effects of segregation on subordinate groups at different points on a continuum of minority concentration. Each offers an accurate snapshot of the relationship in a particular context but, overall, whether the effects of segregation are beneficial (as predicted by enclave and queuing theories) or detrimental (as predicted by economic threat arguments) depends on the structural features of the society in which it operates. This point underscores the value of comparative research, in that it utilizes variations across societies in order to extend theoretical perspectives that have emerged largely from studies of a single context. Further comparative research addressing these issues could illuminate the societal conditions and processes underlying the multiple and varied effects of segregation on the economic standing of disadvantaged groups in multiracial societies.

Our results also raise several important questions about South African society for future research. First, how do the experiences of other subordinate racial groups compare to those of Blacks and Whites? For example, Coloureds comprise a much smaller proportion of the population than Blacks and tend to reside in multi-racial areas with Whites. Some research finds

that in multi-ethnic societies, integrated and culturally-favored subordinate ethnic groups are more disadvantaged than segregated subordinate ethnic groups because they are forced to compete with the dominant group in the multi-ethnic labor market (see Kraus and Yonay [2000] for the case of Eastern Jews in Israel). Future research could determine whether this is the case for Coloureds in South Africa.

Third, how will Blacks who benefited from segregated labor markets in homelands fare in the mainstream multi-racial economy of the new South Africa? There are several indications that previously advantaged Blacks will be even more advantaged. Affirmative action policies are of central importance to the post-apartheid administration and the public sector has made strides in composing a workforce that resembles the racial composition of the nation. Moreover, 95% of employers surveyed in 1998 were in the process of implementing affirmative action programs in response to the Employment Equity Act of 1998 (South African Institute of Race Relations [SAIRR] 1999:289). There is also great demand for skilled labor; in the mid-1990s, while roughly 50% of all jobs needs were in skilled and highly-skilled sectors, only 20% of economically-active South Africans were considered skilled (SAIRR 1999:284). The combination of affirmative action policies and the need for skilled labor could increase the fortunes of well-educated, experienced Black workers. On the other hand, the public sector, an important source of employment for skilled blacks, declined during the 1990s (SAIRR 1999: 266). Blacks who held high-status occupations in former homelands may also find their skills and experience discounted by employers in the mainstream economy and have difficulty obtaining positions of similar status. Thus, the future mobility prospects of previously-advantaged South African Blacks remains an open question.

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