CLASS, CLASS ORIGINS, REGIONAL SOCIOECONOMIC DEVELOPMENT AND THE STATUS ATTAINMENT OF BRAZILIAN MEN

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ABSTRACT

Despite the importance of ownership of the means of production and control over labor power in Marx's theory of class structure, most empirical research on the intergenerational transmission of status and/or inequality has largely ignored measures of class origin and class position. More recent work has begun to fill this gap. Using data from the 1973 PNAD survey of Brazil, we estimate models of the attainment process that include measures of class. We go beyond recent work by relating these processes to variations in regional levels of socioeconomic development and/or industrialization. By estimating our model of Brazilian regions at vastly different levels of socioeconomic development, we demonstrate the declining magnitude of direct class transmission in more developed economies. We show the increasing importance of formal schooling in placing the sons of capitalists into high occupational positions. Further, we find that having a father who is a member of the capitalist class affects one's eventual economic attainments partially in a direct way, partially through the formal schooling and occupational position such a background allows one to attain, and partially through its influence in

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enabling one to become a member of the capitalist class. These processes vary in important ways depending on level of regional socioeconomic development.

Over the past generation, we have learned a great deal about inequality and social mobility in advanced industrial societies through an impressive and cumulative research tradition stemming from the work of Blau and Duncan (1967). Beginning with their work on American men, the basic paradigm has been extended to examine differences due to race, ethnicity, sex, and labor market (e.g., Duncan, 1968; Featherman and Hauser, 1978; Treiman and Terrell, 1975; Stoltzenberg, 1975). More recently and perhaps more importantly, there have been two further extensions. First, the basic paradigm is beginning to be applied to developing societies as well as to advanced industrial societies (see Lin and Yauger, 1975; Sharda, 1979; Hansen and Haller, 1973; Holsinger, 1975). Second, the paradigm has been extended to treat class in the Marxist sense of relationship to the means of production. In the past few years a number of empirical studies have appeared which attempt to augment the Blau-Duncan model with measures of class (Wright and Perrone, 1977; Wright, 1978; Robinson, 1979; Robinson, 1984a: Robinson, 1984b; Robinson and Kelley, 1979; Koo and Hong, 1980; Lord and Falk, 1980; Kalleberg and Griffin, 1980; Kalleberg and Griffin, 1978). These studies have consistently found that an individual's relationship to the means of production has important economic, psychological, and political consequences that cannot be explained by the conventional Blau-Duncan considerations.

In this paper we seek to combine those extensions, presenting an analysis of new data from a rapidly developing society, Brazil, and explicitly taking class location and class origin into account, along with occupational status. We have four specific aims. First, we hope to add comparative breadth to conventional work in the Blau-Duncan tradition by analyzing data from Brazil, one of the most important developing societies of the modern world, and by far the largest in Latin America. The data, collected by the Brazilian census bureau and made especially available for this study, are definitive, with a representative sample size in excess of a quarter of a million persons. Second, we will show how class position in this rapidly growing capitalist economy affects income attainment, above and beyond the effects of family background, education, and occupational status. Third, we will try to unravel how class origins are implicated in the transmission of inequality from one generation to the next. Little is known about this, especially for developing societies. Indeed, much of the work in this area ignores altogether the question of class origin, in effect focusing attention on inequality in one generation and ignoring inequality of opportunity.¹ Further, by comparing more developed and less developed regions within Brazil, we will be able to draw some inferences as to how those processes differ by level of regional socioeconomic development.

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We should make clear what this paper is and is not intended to be. We are interested both in how the level of regional socioeconomic development influences the ways in which individuals are allocated to different places in the stratification system, and in exploring some previously unexamined dimensions of these processes (i.e., class). Our work is based most directly upon recent elaborations of the basic status attainment perspective, and only indirectly on that literature pertaining to the effects of development on aggregate income distributions and income inequality. While we hope that our findings are of interest to those involved in debates on transformations of economic or social structures, it should be clear that we are addressing specific issues deriving from the literature on status attainment and industrialization theory, along with pertinent criticisms of these particular theories. We are less concerned in this paper with how macro features of societies change with industrialization than we are with changes in the processes by which individuals are sorted throughout stratification systems.

OCCUPATIONAL STATUS AND CLASS

Of central importance to our analysis is the conceptual and empirical distinction between occupational status and class. While the bulk of status attainment research has concentrated on the former, the concepts direct us to different aspects of social stratification. Following Wright (1978:1370), we understand classes "primarily in terms of common structural positions within the social organization of production." The three defining features of class are the ownership/nonownership of productive property, the purchase of the labor power of others, and the sale of one's own labor power (cf. Kalleberg and Griffin, 1980).

In contrast, the concept of occupational status rests on the assumption that occupations (those clusters of job activities pertaining to the technical relations of production) can be sensibly rank-ordered along some hierarchical scale. This gradation is generally held to reflect differences in the socioeconomic status of different occupations (Hauser and Featherman, 1977:1–50), a conceptualization that we adopt here. The idea of gradation is an important one, since occupational status (unlike class) assumes no sharp disjunctures in the stratification system. Previous researchers in this area (Wright and Perrone, 1977; Robinson and Kelley, 1979; Koo and Hong, 1980; Kalleberg and Griffin, 1978) have demonstrated that class and occupational status are only moderately correlated, and have observed both substantial occupational differences within classes and substantial class differences within occupations. (We present similar evidence below.)

The concept of class has often been used quite loosely by analysts of Brazilian social stratification (Smith, 1972; Pinto, 1956; Rios, 1964; 1970; Beals, 1953; Soares, 1966), often referring to more manual/nonmanual, estate, or status group distinctions than to distinctions based on property relations. Some writing on

Brazil's system of social stratification, though, has conceptualized class in terms of the Marxist emphasis on production relations (Stavenhagen, 1966; lanni, 1967; Aguiar, 1979). This is the usage of class that we will follow in this analysis. Within the limits of our data, we will conceptualize class in terms of relations of property and labor power, and ask how differential access to these resources influences the life chances of Brazilian men. We will also investigate the causes and consequences of one's place in the occupational hierarchy.

BRAZILIAN SOCIOECONOMIC DEVELOPMENT, THE INTERGENERATIONAL TRANSMISSION OF CLASS AND STATUS, AND INCOME ATTAINMENT

The empirical analysis reported in this paper is guided by three general questions. Specifically, we ask:

1. How does level of socioeconomic development affect the intergenerational transmission of class and status? This pertains to the effects of family background on one's educational, occupational, and class attainments.

2. How do one's class and status positions affect one's economic attainments and how does this vary by level of socioeconomic development? This question chiefly concerns the returns to class position and occupational and educational status.

3. Assuming an effect of class background on one's subsequent income, by what mechanisms does it operate? What intervening variables mediate the effects of class background, and what effect does the level of development have on these processes?

The Transmission of Class and Status

The ways in which socioeconomic development or industrialization influence the processes of social stratification has been a long-standing concern of adherents to the "thesis of industrialization" (Treiman, 1970; Kerr et al., 1960). In perhaps its simplest form, this view holds that:

"As a consequence of technological and bureaucratic rationalization, industrial societies experience a decline in inheritable positions. In sociological terms, fewer positions are 'ascribed,' more and more must be 'achieved,' and this is the essential quality of a more mobile society" (Berger, 1971:127).

This suggests that socioeconomic development weakens the effects of status and class of origin on attained status and class position. While some research on status has supported these claims (Tominaga, 1969), most analysts have found them to be only partially true (Cummings and Naoi, 1974; Blau and Duncan, system (Currie, 1977) may be of more consequence. Still, the logic of the industrialization thesis is quite compelling, and we will be concerned to systematically assess it in this paper.

While the relationship between occupational stratification and socioeconomic development has received some attention, stratification researchers have not generally addressed the question of how socioeconomic development affects patterns of intergenerational class transmission (Hazelrigg and Garnier, 1976:499; Robinson, 1984a). This is quite surprising, given the long-standing awareness of both the analytic utility of class concepts (Marshall, 1956; Runciman, 1968) and the relationship between property institutions and societal change (Lenski, 1966; Pryor, 1972). While industrialization theorists would presumably make the same prediction regarding class as they make for occupational status (i.e., a trend from ascription to achievement), recent work by Kelley (1978) offers a different perspective. Kelley draws on a distinction made by Bernard and Renaud (1976) between inclusive goods ("those a father can give to his son without depriving himself") and exclusive goods ("those that can be held by only one person at a time, so a father deprives himself if he gives them away"). The former include such things as linguistic skills, education, and personal contacts, while the latter consist primarily of capital, land, and other economic goods (see also Kelley et al., 1981). To the degree that exclusive goods can be seen as a proxy for class origin (or to the degree that their effects are nested within those of class origin), the hypothesis advanced and largely confirmed by Kelley (1978:98) would be relevant here: "There is greater inheritance of status in less-developed capitalist societies, in agrarian societies where land is privately owned, and in societies where wealth and income are more unequally distributed." Notice that Kelley's hypothesis says nothing direct about the relationship between socioeconomic development and mobility rates, since lesser developed societies characterized by low levels of inequality would be expected to show low intergenerational correlations.

The role of education in the intergenerational transmission of class and status is also important here. Industrialization theory predicts that direct occupational inheritance will decline with development, while the mediating role of education will increase. This is generally held to be due to the increased rationalization of work, a component of the trend toward universalism. This same reasoning would suggest that both direct class inheritance and the effect of class origin on education would also decline, for essentially the same reasons. It is less clear what predictions would be made by industrialization theory regarding changes in the effect of education on class position. To the extent that upper class positions are assumed to be regulated by rational and universalistic principles, the effect would

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be expected to increase; to the extent that they are held to be regulated by power and particularistic criteria, the effect might well decline.

Recent theoretical work by Robinson (1984a) significantly revises the industrialization position. Robinson builds on the argument of Bourdieu and Boltanski (1978; see also Bourdieu, 1973) that because it has become increasingly difficult (at least in France) to transmit class position directly via more or less repressive means, upper classes have turned to using the educational system as a "strategy of reproduction." Robinson clarifies this argument by looking at different aspects of class. He argues that there is no reason to expect the direct transmission of ownership of production property to either grow or decline with development, and that "there is no need for formal education to play a mediating role in the transfer of ownership'' (1984a:183). He makes a similar argument regarding the transmission of the ability to purchase labor power. On the other hand, Robinson contends that the mediating role of education does matter in the transfer of control over labor power (i.e., authority in the workplace), since this involves the sorts of positions in which modern bureaucratic criteria come into play. Thus, Robinson's argument suggests that even though the effect of class background on educational attainment may rise with development, the mediating role of education for class reproduction is unlikely to change.

The Effects of Class and Status

A second general question involves the relationship between attained educational, occupational, and class positions and subsequent economic attainments (specifically income), and the ways in which these relationships are affected by level of development. Again, industrialization theory has addressed the relationships dealing with education and occupation in some detail, and those pertaining to class not at all. In the most systematic treatment of the subject, Treiman (1970) hypothesized that the direct effect of education on income would decline with industrialization, owing mainly to the decreasing scarcity of educated people.² At the same time, the increasing bureaucratization and rationalization of work should serve to increase the effect of occupational status on income.

We would anticipate that in the more developed regions of Brazil, the economic returns to capitalist class position will be higher than those in less developed regions, although for different reasons than those offered by Treiman for occupational status. Specifically, Brazil's recent rapid economic development has been distinctively capitalist (Fox, 1980; Baer et al., 1976). Enterprises have been growing larger (Tendler, 1968) and industries more concentrated (Leff, 1967), both of which might make returns to capitalists greater. Numerous analysts have noted the unequal benefits of unequal growth (Evans, 1979; Hewlett, 1980; Soares, 1978). Since the evidence suggests that capitalist economic development in Brazil has in fact been redistributive upward, we might well expect larger Status Attainment of Brazilian Men

economic returns to class position in more developed regions than in less developed enes.

The Intergenerational Effects of Class and Status Origin

While Treiman does not discuss the point directly, the logic of his argument implies that the direct effect of father's occupational status on son's income will decrease with development, even if the gross association is unchanged. This is primarily because education and occupation are held to increasingly mediate the effects of socioeconomic background. Presumably the same reasoning would apply to the effect of class origin.

For the reason given above, however, we find it more likely that the direct effects of class origin on one's own income will probably not decline in any systematic fashion with Brazilian development. There is little evidence that development in Brazil has eroded the position of the propertied upper classes (Evans, 1979), and at least one analysis (Beals, 1953), though rather dated, has contended that the "new" upper class based in industry, banking, and commerce is generally drawn from the same families that comprised the "old" upper class based in agriculture and landholding.

Still, the Brazilian educational system has assumed increased social importance over the past few decades (Haussman and Haar, 1978), and McDonough (1980) has demonstrated the key role of education in the creation of the Brazilian elite. Thus, the likelihood that capitalist fathers increasingly send their sons to school as societies develop (a trend which we regard, following Robinson (1984a), as substantively unimportant in the process of class transmission) means that they can provide their sons with the resources to achieve high occupational statuses and subsequently higher incomes. That is, education may not mediate the transmission of class position per se, but it may mediate the benefits of class origin. Even given the frequently stark character of Brazilian capitalist growth, the enormous expansion of its educational system and the concomitant bureaucratic development of its occupational structure has very likely transferred to the educational system some part of the advantages of class origin.

Regions in Brazil

To test the relationship between level of socioeconomic development and the processes of social stratification, we compared different regions of Brazil at vastly different levels of development. The extreme regional inequality of Brazil is well-known (Baer, 1965; Furtado, 1963; Leff, 1972), and this presents us with a useful research strategy. That is, by examining the same process across a variety of regional socioeconomic contexts within the same nation, we are in a position to make some logical inferences about the effect of development and/ or industrialization on the intergenerational transmission of inequality (see Linz

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and De Miguel, 1966 for a defense of using intra-national regional contrasts rather than cross-national contrasts as a basis for comparative research).

Numerous analysts have developed regionalization schemes for Brazil (Henshall and Momsen, 1976; Faissol, 1978a; Dickenson, 1978). These classifications generally overlap to some extent, yet all of them subdivide Brazil into three to eight groups of contiguous states, often for planning or administrative purposes. Since we were interested in a more detailed classification that took into account differences in regional socioeconomic development within as well as between states, we assembled data collected by Faissol (1978b) and Yoder and Fuguitt (1979) on 361 Brazilian microregions. Microregions are composed of groups of contiguous municipios, which are analogous to United States counties, and are constructed to be a internally homogeneous as possible.

Using a range of indicators of socioeconomic development (see Haller, 1982 for details), we constructed a scale of regional socioeconomic development using a principal components analysis. On the basis of this scale, we subdivided Brazil into five major socioeconomic regions: the South, the Developing Periphery, the Old Northeast, and New Northeast, and the Amazon. These merit further description.

The South

In the South of Brazil we include the states of Guanabara, Rio Grande do Sul, Santa Caterina, Paraná, São Paulo, most of Rio de Janeiro, and the southern portions of Minas Gerais. While certainly not free of proverty, the bulk of Brazil's population and wealth is concentrated in this area. The region also assumes national leadership in industry, technology, and communications. By any definition, this region is the heartland of Brazil.

Developing Periphery

The Developing Periphery consists of Rondónia and Espírito Santo, plus parts of the states of Rio de Janeiro, Acre, Minas Gerais, and Mato Grosso. We also include the capital city of Brasília in this region. Much of this region corresponds with what Henshall and Momsen (1976) call the "Rimland" of Brazil, which they describe as industrially dynamic yet extremely heterogeneous in terms of industrial development.

The Old Northeast

This densely populated region is located on the northeastern coast of Brazil, commonly called the zona da mata (forest zone). It is comprised of all or parts of the states of Minas Gerais, Rio Grande de Norte, Paraiba, Ceará, Pernambuco, Alagoas, Sergipe, and Bahia. This region constitutes the older part of Brazil's

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legendarily poverty-striken Northeast, and can best be thought of as preindustrial. For the most part the region "retains a very high dependence on consumer industries linked to the processing of the agricultural and forest resources of the region" (Dickinson, 1978:187). The region contains a number of large cities and state capitals, but is badly overpopulated given its present economy (Mitchell, 1981:2).

The New Northest

This region is further inland than is the Old Northeast, and is even more economically depressed and industrially underdeveloped. It includes all or parts of the states of Pernambuco, Maranhão, Piaui, Ceará, Minas Gerais, Goiás, Pará, and Bahia. Population density is less here than in the three previously described regions.

The Amazon

The Amazon is composed of all or parts of the states of Acre, Amazonas, Pará, Amapá, Mato Grosso, and Goiás, and the federal territory of Roraima. While the first four of our five regions fit neatly into a hierarchy of socioeconomic development, this region does not. The region is characterized by a very low population density and very little industrialization. On the other hand, its extreme labor shortage seems to make wages in the region atypically high. The region displays many of the characteristics generally associated with frontiers (Katzman, 1977; Velho, 1979; Moog, 1965). In the region's two largest states (Amazonas and Para), PNAD only sampled respondents in the large and important port cities of Manaus and Belem. Since the population density of most of the area of these two states in less than one person per square kilometer, much of our data pertains mainly to the urbanized areas of the Amazon. Because of the extreme atypicality of the Amazon region, we drop it from all analyses in this paper. Extensive unpublished analyses have convinced us that the Brazilian Amazon qua Frontier region merits treatment as a separate topic in its own right.

Table 1 presents a few descriptive statistics on our regionalization scheme. The proportion of the male working population engaged in both white-collar and blue-collar work increases steadily with socioeconomic development, while the proportion of those engaged in agriculture drops sharply. Clearly, the regions form a hierarchy of socioeconomic development.

SAMPLE

The data for the present analysis come from the 1973 Pesquisa Nacional por Amostra de Domicílios (National Sample Survey of Households) survey of Bra-

Table 1. Comparative Descriptive Statistics on Brazilian Regio	ns
(all figures pertain to working men aged 20-64)	

	New Northeast	Old Northeast	Developed periphery	South
N	6,165	15,390	7,952	41,728
Percent White Collar	9.3	17.7	24.4	27.1
Percent Blue Collar	16.7	30.3	38.6	42.4
Percent Farm	73.7	52.0	36.9	30.4

zil, hereafter referred to as PNAD. This survey was conducted in the third trimester of 1973 by Instituto Brasileiro de Estatistica (IBGE), the Brazilian census bureau, and consists of a representative national sample of all members of the Brazilian population ten years of age and over. The basic sampling unit was the household, and respondents were asked a wide range of questions per-taining to their demographic and socioeconomic characteristics. The total N is 279,212.³ The quality of the data seems to be on a par with comparable data collected anywhere. The PNAD survey covers the resident population of Brazil, and excludes institutionalized individuals. To achieve comparability with other analyses, we examine the experience of men aged 20–64 who were part of the economically active population during the survey week.

We wish to emphasize that our findings are limited to the experience of Brazilian men. Recent research has found that the processes of class attainment differ for men and women (Grusky, 1983; Robinson and Garnier, 1985). The patterns of labor force participation of Brazilian women are complex, and the processes of property transmission are almost certainly different in form for men and women (Madeira and Singer, 1975; Safa, n.d., 1977). An examination of class transmission among Brazilian women would require an analysis beyond a straightforward extension of our analysis of men. For these reasons, we reserve a separate treatment of women for a later analysis.

CONCEPTUALIZATION AND MEASUREMENT

Occupational Status

Occupational status was measured as follows: PNAD asked respondents who were working what kind of an occupation they held and how much income they made, in addition to asking about their level of educational attainment. We classified the responses to the occupation question into the 82 second-level categories of the International Labor Office's International Standard Classification of Occupations (ISCO) scale. We further disaggregated a number of these categories to obtain even more homogeneous categories, eventually resulting in 94 categories. We then performed a multiple discriminant analysis to derive occupational status scores (see Bills et al., 1985 for more details on our procedures).

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This procedure serves to maximize the ordinary product-moment correlation between the series of 94 occupational dummies with a composite of the respondents level of income and education. The resulting scores were then standardized into a 0-100 metric. This standardization has no effect on the scale's relationship with other variables, but merely facilitates their interpretation. Unpublished analyses have convinced us that these scores yield results consistent with those produced by other plausible scaling procedures, and that they faithfully represent the kinds of things that sociologists generally think of when they deal with occupational status.

At the top of our scale are engineers, architects, geologists, judges, legal officers in the government service, and lawyers. At the bottom are cigar and cigarette makers, gatherers, pickers, peelers, hoemen, and charcoal makers. An inspection of our scale shows that occupations gradually shade from white-collar to blue-collar to agricultural as one descends the scale---economists score 85.0, high school teachers 56.4, blacksmiths 21.2, and gardeners 6.6.

Class

In this paper we adopt a three-class model of Brazil, based upon the criteria of ownership of productive property and the purchase or sale of labor power. *Capitalists* are those who report their employment status as "self-employed" *and* who employ other people. The *Petit Bourgeoisie* are those who are self-employed, but who have no employees. All others (i.e., all those who sell their labor power) are considered *Workers*. For the purpose of regression analysis, we constructed a set of two dummy variables, with workers comprising the omitted category.

Unfortunately, we do not have data on whether or not non-employers supervised other workers as part of their jobs, and we are unable to draw the Dahrendorfian distinction between social classes based on authority differentials (Dahrendorf, 1959), a distinction found to be important in previous research (Wright and Perrone, 1977; Robinson and Kelley, 1979; Kalleberg and Griffin, 1980). Koo and Hong (1980) have argued, however, that 'the utility of the Dahrendorfian scheme is particularly questionable in developing economies where legal ownership and actual control of the means of production are usually in the same hands'' (1980:617). Robinson (1984a:183–186) provides additional evidence of this point. Further, it is not clear that supervisory responsibilities constitute a defining characteristic of class so much as an aspect of occupation (Spaeth, 1979). Ideally, of course, we would have liked a measure of authority, but there is no conceptual problem in classifying our non-propertied managers and administrators as employees.

The only further distinction our data would have permitted us to make would

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be that between public and private employees. Brazilian capitalism is, however, in large part state capitalism (Fox, 1980), and many of those in the public sector are working in profit-making enterprises presumably governed by capitalistic criteria. Further, Kalleberg and Griffin (1980:731-732) have argued quite persussively that profit-making and nonprofit-making organizations in capitalist societies will be tightly enough linked so that each will reflect to some degree the normative structure of the society. For these reasons, we treat all those who sell their labor power as workers.

While we do adopt Marxist terminology in describing our class categories. few of our capitalists are likely to be the powerful and wealthy individuals portrayed either by Marx or by various accounts of Brazil (Evans, 1979; McDonough, 1980). The scarcity of such people means that few of them will be observed in nationally representative surveys. Since we can determine only if self-employed people did or did not have employees and not how many they had, we are unable to separate "big" capitalists from "small" capitalists, a distinction found to be important in U.S. samples (Aldrich and Weiss, 1981). Since our concern is with the conceptual distinction being created from relations of property and labor power, the obvious heterogeneity of our capitalist category is not a problem. We note it only so that we do not leave the impression that our capitalists are a cross-section of Sao Paulo industrialists and Rio de Janeiro bankers.

Similarly, while our petit bourgeoisie comprise a theoretically distinct class position, it need not be assumed that this position is either homogeneous or advantageous. Most of the men in the category (63 percent) are engaged in agricultural occupations, and many others are in relatively unprosperous urban occupations (e.g., street vendors). Finally, many of those we classify as workers hold very prestigious or rewarding occupations; this is less important to our concerns that the characteristics they share in terms of property and labor power.

Table 2 presents the class composition of each of eight broad categories of occupations. We look at both the fathers' and sons' generation (i.e., the sons' class origin and class location).

Clearly, class and occupation are empirically distinct, as both capitalists and the petit bourgeoisie are distributed throughout the Brazilian occupational structure.⁴ In both generations, about 9 percent of the total sample consists of selfemployed employers. The percentage of men who are self-employed but without employees is nearly twice as high in the fathers' generation as in that of the sons. This, of course, reflects a number of features of Brazilian development (the growth of large-scale work organizations, the expansion of public sector employment, the decreasing proportion of agricultural occupations, etc.)

With few exceptions, capitalists are distributed similarly across occupations in both generations. Very few men in clerical, production, or service occupations are able to own property and purchase labor power. Farmers (as opposed to the

Fathers Old Developin § New Northeast Northeast Periphery South Total Professional Capitalist 6.0 4.7 3.4 12.0 9.7 22.3 24.2 24.3 22.6 22.9 Petit Bourgeoisie 21 136 113 673 943 Ν Managerial С 53.0 36.2 29.4 41.9 40.5 Р 12.7 17.7 8.6 7.9 8.4 Ν 91 15 114 966 1186 Clerical С 5.1 0.9 2.8 1.3 1.4 ₽ 0.0 2.7 0.5 2.2 2.1 Ν 16 143 62 629 850 Sales С 12.5 13.3 21.9 22.5 20.3 Р 83.9 77.9 69.9 60.1 65.2 Ν 143 741 430 2687 4003 Production С 5.2 2.0 4.0 2.9 3.0 Р 62.4 39.5 45.2 28.8 32.8 Ν 243 1396 802 6622 9063 Service С 0.0 2.8 6.0 2.1 2.4 Ρ 22.9 20.3 25.4 12.0 14.2 Ν 20 228 93 1197 1538 Farmer 98.9 92.4 С 91.3 75.8 84.1 P 0.2 3.1 4.2 12.8 8.1 Ν 452 908 696 2300 4355 Farm Worker С 0.0 0.0 0.0 0.0 0.0 Р 94.0 76.1 76.7 72.6 76.1 Ν 4272 9474 4304 20448 38498 Total С 9.4 7.8 12.1 8.6 8.9 Р 83.0 64.4 61.5 53.6 59.2 Ν

Class Composition of Broad Occupational Groups

Table 2.

6592

35522

60436

13139

Table 2. (cont.) Class Composition of Broad Occupational Groups

Sons New Old Developing Northeast Northeast Periphery South Total Professional Capitalist 8.3 5.8 8.2 9.9 9.1 Petit Bourgeoisie 16.9 12.2 17.4 13.5 13.9 Ν 68 391 371 2081 2930 Managerial С 37.8 19.6 20.2 20.9 20.9 Ρ 4.2 1.3 I.3 1.7 1.6 Ν 45 358 289 2311 3004 Clerical С 3.3 0.3 0.5 0.5 0.6 Ρ 3.6 0.3 1.3 0.7 0.8 Ν 74 479 423 3780 2804 Sales С 14.9 13.1 21.3 22.2 19.7 Р 72.4 63.9 49.2 38.7 47.3 N 386 1468 851 6804 4100 Production С 4.7 3.0 6.8 3.2 3.7 Р 36.3 21.5 21.3 15.8 18.3 Ν 891 4031 2692 14952 22567 Service С 0.0 0.2 0.6 1.1 0.9 Ρ 12.4 8.2 10.4 4.2 5.7 Ν 131 601 368 2662 3762 Farmer С 93.0 74.5 81.0 63.7 72.0 Р 2.6 4.7 5.7 9.2 6.9 Ν 513 1010 598 2269 4390 Farm Worker С 0.00.0 0.0 0.0 0.0 Р 80.7 56.1 52.5 61.1 62.1 N 3768 6523 2174 9082 21547 Total С 10.2 7.8 12.1 8.9 9.1 Ρ 62.8 37.8 29.4 31.6 25.2 Ν 5877 14862 7765 40260 68763

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far more numerous farm workers) are very likely to be classified as capitalists, while men in professional and sales occupations are considerably less so.

The most notable difference in the distribution of capitalists in the two generations is that pertaining to men in managerial and administrative occupations⁵, where fathers are twice as likely to be capitalists as are sons. Again, this reflects the kinds of organizational changes that accompany development.

In all occupational categories, the proportion of petit bourgeoisie is higher for fathers than for sons. This is consistent with cross-national results reported by Robinson (1984b) and results from the United States reported by Wright and Singelmann (1982). Marx, of course, predicted the demise of the petit bourgeosie in *The Communist Manifesto*. Self-employed men without employees are most common among farm workers and those in sales occupations, and least common among clerical occupations.

There are some important regional differences in the class composition of occupational groups. Men in managerial and administrative occupations are almost twice as likely to be capitalists in the underdeveloped New Northeast as are men elsewhere in Brazil. In general, more developed regions have a higher proportion of capitalists in sales occupations, and a lower proportion in farm occupations than do less developed regions, although neither trend is perfectly linear. In a number of occupational categories, the proportion of men who are petit bourgeoisie declines in more developed regions.

A different perspective on regional differences can be obtained by percentaging Table 2 in the other direction, that is, by examining the occupational composition of each of the class categories. Table 3 presents this information.

For Brazil as a whole, half of the men that we have classified as capitalists are farmers. This percentage varies greatly by region, from nearly 80 percent in the New Northeast to about half that in the South.

The proportion of capitalists who are in production occupations presents an unusual pattern. About one-fifth of the capitalist class in the Developing Periphery are in production occupations, compared to far lower proportions elsewhere.

Farm workers comprise the majority of the petit bourgeoisie class throughout Brazil, although again the proportion varies greatly by region. Practically all of the rest of the petit bourgeoisie are in sales or production occupations.

Finally, the proportion of those who sell their labor power becomes increasingly composed of both white-collar and blue-collar workers with development, and decreasingly agricultural.

Another important perspective on regional differences in the relationship between class and status can be seen in Table 4, which gives occupational status scores for those employed by others in private enterprises, in the public sector, as capitalists, and as petit bourgeoisie, for each of the four regions. Three points are worth emphasizing. First, self-employed people without employees are of generally modest occupational status, and resemble those who sell their labor power more than they resemble capitalists. Second, we gain further evidence

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Table 3. Occupational Composition of Class Categories.

Table 3. (cont.) Occupational Composition of Class Categories

			Fathers						Sons		
	New Northeast	Old Northeast	Developing Periphery	South	Total		New Northeast	Old Northeast	Developing Periphery	South	Total
Professional	03	0.6	0.5	2.6	1.7	Professional	0.9	2.0	3.2	5.8	4.2
Managerial	1.6	4.0	3.3	13.2	8.9	Managerial	2.8	6.0	6.2	13.5	10.0
Clerical	0.2	0.1	0.2	0.3	0.2	Clerical	0.4	0.1	0.2	0.4	0.3
Sales	3.7	9.7	11.8	19.7	15.2	Sales	9.6	16.6	19.2	25.5	21.4
Production	2.6	2.8	4.0	6.4	5.0	Production	6.9	10.4	19.5	13.4	13.2
Service	0.0	0.6	0.7	0.8	0.7	Service	0.0	0.1	0.2	0.8	0.5
Farmers	91.7	82.1	79.4	57.0	68.2	Farmers	79.3	64.8	51.4	40.5	50.3
Farm Workers	0.0	0.0	0.0	0.0	0.0	Farm Workers	0.0	0.0	0.0	0.0	0.0
N	488	1021	800	3062	5371	N	602	1162	943	3570	6277
	100	1021				Petit Bourgeoisie					
Petit Rourgeoisie						Professional	0.3	0.8	2.8	2.8	1.9
Professional	0.1	0.4	0.7	0.8	0.6	Managerial	0.1	0.1	0.2	0.4	0.2
Managerial	0.1	0.1	0.3	0.4	0.3	Clerical	0.1	0.0	0.2	0.2	0.1
Clerical	0.0	0.0	0.0	0.1	0.1	Sales	7.6	16.7	18.4	15.6	14.8
Sales	2.8	6.8	7.4	8.5	7.3	Production	8.8	15.5	25.1	23.3	19.0
Production	3.5	6.5	8.9	10.0	8.3	Service	0.4	0.9	1.7	1.1	1.0
Service	0.1	0.5	0.6	0.8	0.6	Farmers	0.4	0.8	1.5	2.1	1.4
Farmers	0.0	0.3	0.7	1.5	1.0	Farm Workers	82.4	65.2	50.1	54.6	61.6
Farm Workers	93.4	85.2	81.4	77.9	81.9	N	3688	5617	2279	10155	21739
N	4300	8460	4057	19054	35870	Workers					
						Professional	3.2	4.0	6.1	6.0	5.5
Workers						Managerial	1.6	3.5	5.0	6.7	5.7
Professional	3.8	2.6	4.7	3.3	3.3	Clerical	4.4	5.9	9.1	10.4	9.2
Managerial	1.3	1.7	3.1	3.6	3.2	Sales	3.1	4.2	5.5	6.0	5.5
Clerical	3.8	3.8	3.5	4.5	4.3	Production	33.2	37.6	42.6	45.6	43 2
Sales	1.5	1.8	2.0	3.5	3.0	Service	7.2	6.8	7.2	95	8.6
Production	20.0	22.3	23.5	33.7	30.3	, Farmers	15	2.6	1.8	23	23
Service	3.8	4.8	3.7	7.7	6.7	Farm Workers	45.9	35.4	22.7	13.3	2.0 0
Farmers	1.0	1.1	1.8	2.0	1.8	N	1586	8083	4543	26535	40747
Farm Workers	65.1	61.9	57.8	41.8	47.5	<u></u>	1500	0005			
N	395	3658	1735	13406	19193	90 State					

that capitalist class location does not necessarily entail high occupational status. Finally, the table reinforces our claim of a hierarchical ranking of regions. The 10.5 = second cycle incomplete; 12 = second cycle complete; 14 = university only slight anomoly, that pertaining to the status of public employees in the Developing Periphery and South, is simply because the national capital city of Brasilia is located in the Developing Periphery.

were assigned: 0 = no formal schooling; 2.5 = elementary incomplete; 5 = elementary complete; 7 = first cycle incomplete; 9 = first cycle complete; incomplete; 16.3 = university complete (Aparaceda Joly Gouveia, Personal Communication, 1977).

Education

Log Income

Information on income was obtained from a series of questions on weekly For this variable, each of nine categories of educational attainment was assigned a plausible mid-point value in years of schooling. The following values and monthly income, which we then converted into annual income. There were BILLS, HALLER, KELLEY, OLSON and PASTORE Status Attainment of Brazilian Men

Table 4.	Mean Levels of Occupational Status for Different Categories of	
	Employment (Standard Deviations in Parentheses)	

	New Northeast	Old Northeast	Developed Periphery	South
Employees in	7.9	12.2	15.6	20.9
Private Sector	(10.8)	(15.0)	(16.6)	(17.9)
Public Employees	31.6	33.6	35.4	35.0
	(19.6)	(22.4)	(22.5)	(22.3)
Capitalists	13.4	17.1	18.3	24.0
	(7.6)	(12.4)	(13.6)	(17.3)
Petit Bourgeoisie	4.0	7.4	11.0	10.6
	(7.3)	(10.5)	(14.1)	(14.6)

self-employed. Employees were asked:

How much do (you) NORMALLY earn per week in this job?

Cr \$_____in money only

If (your) payment was in goods, please specify:-Alternatively, the question was:

How much are the net earnings from (your) business or profession? Everyone was then asked:

Do (you) have any additional income other than that just mentioned? Those who had additional income were asked how much it was per month in cruzeiros, and whether some was in goods. For each person, the resulting total of normal weekly or monthly earnings were collated and a "13th month" was added to fill out the total annual salary for employees with an official "world card" (by law workers are entitled to a "13th-month" bonus, although workers in the informal labor market without a "work card" do not usually get it).

This annualized income was then converted from cruzeiros to U.S. dollars using the 1973 exchange rate of 6.128 cruzeiros to one U.S. dollar. This was done mainly to obtain a metric that we found more interpretable. Largely because of the extreme skewness of the Brazilian income distribution, we report only the results obtained with a logarithmic transformation of income.

Attempts to measure income in less developed regions are, of course, notorious for their possible sources of error, and we have no independent estimates of the reliability of our income data. We do, however, have first-hand knowledge of the care taken by IBGE in the collection of these data, and are confident that they are generally of high quality (Faissol, 1978a).⁶

RESULTS

Table 5 presents income levels for capitalists, petit bourgeoisie, and workers in each of eight broad occupational categories. The table indicates that in every category capitalists are more well paid than are noncapitalists. Except for the comparison between capitalist managers and administrators with managers and administrators who work for someone else, the differences are consistently large. It is worth noting that non-propertied professionals and managers or administrators have larger incomes than do any of the other propertied occupational categories.

In most occupational categories, the income differences between the petit bourgoisie and those who sell their labor power are not great. In general, those in white-collar occupations are better off working for someone else than they are being self-employed, while those in blue-collar or farm occupations are better off being self-employed. The fact that workers in general make more money two different questions used, one for employees and one for employers and the than the petit bourgoisie is mainly due to the enormous number of farm workers who are self-employed.

Table 5. Mean Levels of Income for Occupational Categories (N's in Parentheses)

	Capitalist	Petit Bourgeoisie	Workers
Professional	7218	3655	4488
	(264)	(400)	(2230)
Managerial and	5035	1361	4800
Administrative	(619)	(48)	(2315)
Clerical	4197	2232	1716
	(21)	(28)	(3722)
Sales	3875	1478	1690
	(1337)	(3205)	(2224)
Production	2265	1243	1068
	(817)	(4125)	(17583)
Service	3145	885	889
	(33)	(216)	(3502)
Farmer	2318	1297	865
	(3140)	(299)	(921)
Farm Worker		620 (13176)	406 (8090)
Total	3134	939 [′]	1410
	(6231)	(21497)	(40588)

Table 6 presents the means, standard deviations, and zero-order correlations of the basic variables used in our analysis, both for the full sample and for each of our four regions. A few correlations are particularly worth highlighting Looking first at the panel of the table pertaining to the full sample confirms our claim that class location and occupational status are empirically as well as conceptually distinct. The correlation between capitalist class location and occupational status is .204 in the father's generation and .072 in the sons' generation.⁷ The magnitude of this correlation is far higher in the nation's least developed region, the New Northeast, than elsewhere in Brazil. This is largely a consequence of the relatively high correlations between status and class for those in agricultural positions. Similarly, the correlations between petit bourgeoise class position and occupational status are quite modest (-.339 and -.310 in the)fathers' and sons' generations, respectively).

Table 7 presents the results of our structural equation model for the full sample. We report metric regression coefficients, with the standard errors of estimates being reported in parentheses. The coefficients for both class dummies should be read as differences between that category and workers. Columns 8-9 present the indirect effects of class origin on earnings via different mechanisms (see substantive interest in comparing the same process across different subsamples. we will be far more interested in parameter estimation than in tests of statistical significance. We will follow the model through step by step to assess the questions raised above. We will first examine the full sample of working men (excluding, of course, those from the Amazon) in order to determine the broad outlines of the processes in which we are interested, and then examine the appropriate labor power also facilitates entry into the capitalist class.¹¹ subsamples.

Who Gets Educated? As we have measured it, a ten point difference in father's occupational status (net of class background) is worth about a year and half of schooling. Given that the mean level of education in our sample is just under four years, this is a substantial effect. Sons of capitalists in Brazil (controlling for father's occupational status) tend to get about one extra year of schooling compared to sons of workers, again a very substantial effect (since about one-quarter of our sample have no formal schooling, and only about twenty percent have gone beyond elementary school), implying that the difference in educational attainment between those of capitalist and worker origins is equal to about seven points of occupational status (1.058/.154 = 6.87).⁸ The sons of petit bourgeoisie fathers differ little from the sons of workers in their educational attainment. Put simply, both fathers' capitalist class location and fathers' occupational status have substantial effects, independent of each other, on the in Brazil can expect to earn nearly twice as much as a worker ($e^{.644} - 1 = 0.94$).¹² educational attainment of their sons.

Who Gets High Status Jobs? By far the largest determinant of occupational status in Brazil is education. Every year of schooling in Brazil is worth about

three points of occupational status.⁹ There is still some direct effect of fathers' occupational status on sons' occupational status after education is taken into account (what is generally called "occupational inheritance"), although high status fathers facilitate their sons' occupational success mainly by getting them more schooling.

Father's class location has a small negative direct effect on the occupational status of the son. Controlling for education and fathers' occupational status, sons of capitalists and workers differ by about a point and a half (b = -1.536) on achieved occupational status, while the sons of the petit bourgeoisie differ by about a point (b = -1.031). Father's capitalist class position does, though, have some indirect effect on son's occupational status, by allowing the son to bobtain more schooling. This is worth some 3.18 (1.058 \times 3.006) points of occupational status.¹⁰ Contrary to what many have assumed, then, we find little evidence that capitalists are able to help their children simply by using their capital to facilitate their entry into high-status, noncapitalist positions. Any effect of class origin on occupational attainment operates indirectly through education. while the effect of status origin operates both directly and indirectly.

The Attainment of Class Position. Men become propertied employers in Alwin and Hauser, 1975). Because of both the large size of our sample and our Brazil largely by having fathers who were propertied employers. In addition, the sons of petit bourgeoisie fathers are significantly more likely to become capitalists than are sons of workers. Neither status origin nor education has an appreciable effect on sons' class location, either directly or indirectly, Simply, the easiest way to become a capitalist in Brazil is by having a father who was a capitalist, although having a father who is propertied but does not purchase

> In like fashion, men become members of the petit bourgeoisie class in Brazil mainly by having fathers who were petit bourgeoisie. In addition, sons of captalists are more likely to become petit bourgeoisie than are the sons of workers. While it is tempting to interpret this as the downward mobility of those of capitalist class origin, it also indicates that those from capitalist backgrounds have far higher access to the shrinking resource of self-employment than do sons of workers.

> Overall, our results are broadly consistent with previous research (Robinson and Kelley, 1979; Kerckhoff et al., 1982; Robinson, 1984a). The influence of father's status on son's status is largely indirect (being mediated by educational attainment), while the influence of father's class on son's class is largely direct.

> The Returns to Class and Status. There is a substantial economic return to being a capitalist in Brazil. Net of all other variables in our model, a capitalist The size of the return to ownership and control is particularly striking when we

> remember that few of those classified as capitalists in our sample are likely to represent Brazil's most wealthy or powerful strata.

	Mean	S.D.	1	2	3	4	5	6	7	8
1. Father										
Capitalist	.09	.28	1.00							
2. Father Petit										
Bourgeoisie	.58	.49	367	1.00						
3. Father's Occu-										
pational Status	8.51	13.60	.204	339	1.00					
 Education 	3.86	3.80	.196	227	.571	1.00				
5. Capitalist	.09	.29	.240	031	.063	.083	1.00			
6. Petit										
Bourgeoisie	.33	.47	058	.291	195	249	224	1.00		
7. Occupational										
Status	16.19	17.67	.144	219	.528	.736	.072	310	1.00	
Ln Income	6.69	.97	.187	189	.423	.619	.255	231	.599	1.00

Table 6. Means, Standard Deviations, and Zero-Order Correlations for Major Variables.

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					Titor metasr	Delon Dia	sonar, ora	intor measure	10076 0142	501122		
	Mean	S.D.	1	2	3	4	5	б	7	8	Mean	<i>S.D</i> .
1. Father												
Capitalist	.09	.29	1.00	381	.202	.177	.292	053	.133	.204	.08	.27
Father Petit												
Bourgeoisie	.83	.38	703	1.00	- 292	170	059	.289	158	139	.63	.48
3. Father's Occu-												
pational Status	3.67	7.26	.374	454	1.00	.566	.070	172	.522	.421	6.23	11.26
Education	1.66	2.19	.157	166	.399	1.00	.077	208	.725	.584	2.36	3.28
Capitalist	.11	.31	.307	213	.121	.090	1.00	238	.098	.259	.08	.27
6. Petit												
Bourgeoisie	.63	.48	165	.270	196	201	453	1.00	251	190	.39	.49
7. Occupational												
Status	6.86	10.56	.150	173	.368	.577	.208	352	. 1.00	.596	11.79	15.12
8. Ln Income	5.90	.75	.166	157	.294	.407	.288	228	.448	1.00	6.17	.86

New Northeast Below Diagonal, Old Northeast Above Diagonal

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	Mean	S.D.	I	7	ŝ	4	Ś	6	7	×	Mean	<i>S.D</i> .	
1. Father	****												
Capitalist	.12	.32	1.00	320	206	.221	.207	043	.156	.209	60 ⁻	.28	
2. Father Petit													
Bourgeoisie	.61	.49	458	1.00	327	207	001	.264	209	140	.52	.50	
3. Father's Occu-													
pational Status	7.71	12.70	.187	300	1.00	.573	.067	172	.524	.413	10.22	14.90	
4. Education	4.08	3.70	.190	143	.487	1.00	860.	207	.726	.586	4.71	3.88	
Capitalist	.12	.33	.249	057	.038	.046	1.00	190	690.	.277	60	.29	
6. Petit													
Bourgeoisie	.30	46	065	.207	154	192	245	1.00	293	150	.26	4	
7. Occupational													
Status	16.59	17.70	.136	124	.456	.712	.022	219	1.00	.580	19.12	18.55	
8. Ln Income	6.70	.95	.205	088	.342	.531	.330	152	.537	1.00	6.99	80.	

Means, Standard Deviations, and Zero-Order Correlations for Major Variables.

Table 6. (cont.)

Status Attainment of Brazilian Men

In contrast, a year of schooling is worth about 9 percent more income per year (again, disregarding nonlinearities), and it would take over 40 points of occupational status to have about the same effect on earnings as does capitalist class location (.664/.016 = 41.50). Men from the petit bourgeoisie and working class with similar occupational status and education differ very little on income.

The Income of Sons of Capitalists. How do capitalist fathers in Brazil ransmit their advantages across generations? Why do sons of capitalists tend to make more money then sons of workers? In the first place, some part of the effect of class origin on income operates directly. The direct economic return to having a capitalist (versus a worker) father in Brazil is about four percent. This may suggest, although we do not have direct data on this point, that capitalist fathers in Brazil help their sons in part simply by directly giving them some form of economic support, which allows for non-work related income (i.e., interest payments) in addition to the son's regular earnings. Alternatively, our measure of class may be picking up the effects of other features of family background that are correlated with class origin. These may include parental wealth, father's authority in the workplace, motivation, or personal contacts.

Still, most of the advantages of class origins on income are transmitted through intervening mechanisms. One of these is the class position of the son. Capitalist fathers in Brazil give their sons a substantial direct boost by helping them to become capitalists themselves. Column 8 of Table 7 shows that the economic eturn to capitalist sons of capitalist fathers is about 19 percent ($e^{.175} - 1 = .191$), a substantial advantage. Again we lack direct evidence, but this finding is consistent with the inference that Brazilian capitalists help their sons in part by giving them businesses that they must then operate themselves.

Not all of the effects of class origin on son's income are transmitted via the son's class position. Capitalist fathers also pass along their advantages by sending their sons to school, which in turn helps in obtaining occupations which pay well. The indirect effects of class origin on one's income via this mechanism is about 16 percent ($e^{.146} - 1 = .157$). In other words, capitalists in Brazil pass along their advantages to their sons in three ways. First, class origin has a small but significant direct effect on son's income, suggesting that to some extent, advantage is passed along directly across generations. The second mechanism involves the class system—ownership and capital are directly transmitted over generations, leading to higher incomes. Third, capitalists allow their children to get more schooling, and thus higher status occupations, which in turn is worth a substantial economic return.¹³

REGIONAL COMPARISONS: SOCIOECONOMIC DEVELOPMENT AND STRATIFICATION PROCESSES

We now have a picture of the broad outlines of the intergenerational transmission of inequality in Brazil. As suggested earlier, though, we expect that this process

				·	•						
	Father Capit.	Father P.B.	Father's Occ.	Ed	Capit.	P.B.	Occ.	Via class	Via Ed. & Occ.	С	R ²
				N	= 56,691						
Education	1.058	088 (030)	.154							2.511	.333
Capitalist	.264	.045	.0003	,003 (,000)						.029	.064
Petit Bourgeoisie	.137	.261	0001	025						.261	.126
Occupation	(.007) -1.536	(.004) 1.031	(.000) ,200	3.006						3.606	.560
- I - I	(.188)	(.112)	(.005)	(.016)	664	010	016	175	146	6 007	470
Ln income	(.012)	(.007)	(.000)	(100.)	(.011)	(.007)	(.000)	.175	.140	0.002	.470
				S N	SOUTH = 33,132						
Education	1.527	.076	.144							3.061	.339
~ • •	(.066)	(.038)	(100.)	004						022	060
Capitalist	.223	.050 (003)	.0003 (000.)	.004 (000)						.022	.052
Petit Bourgeoisie	.120	.221	0003	019						.231	.099
	(.009)	(.005)	(.000)	(.001)							
Occupation	-1.879	-1.336	.191	3.041						3.720	.545
	(.262)	(.151)	(.006)	(.022)							
Ln Income	.121	.012	.004	.067	.694	.124	.016	.155	.177	6.223	.451
	(.014)	(800.)	(.000)	(.001)	(.013)	(.009)	(.000)				
				DEVELOF N	ED PERIPHER = 6,303	RΥ					
Education	1.456 (.141)	.452 (<i>.</i> 096)	.140 (.003)			·				2.547	.250
Pettr Bourgeoisie		······		-020	ZNEGOZÓCI WCENYCENIE		Lean D. Gold Carls and Status	والمجموعة فالمتبارك ومشارك والمعاط	and the second secon	.259	.073
0	(.019)	(.013)	(.001)	(.002)							
Оссиранон	579	.237	.205	3.074						2.384	.522
Ln Income	.118	.069	.005	(.046) 067	905	107	017	250	174	5 00 5	
	(.033)	(.022)	(.001)	(.004)	(.029)	(.021)	(.001)	.239	.174	5.895	.435
				OLD N	NORTHEAST $= 12,452$						
Education	.884	.134	.162		, · ·					1 200	224
	(.098)	(.056)	(.002)							1.200	.524
Capitalist	.314	.038	.0003	.002						.024	.090
Patit Paurosoicia	(.009)	(.005)	(.000)	(.001)							
Tent Dougeoisie	(.017)	(.010)	0004 (000)	025						.256	.117
Occupation	823	-,217	.222	2.919						2 705	544
•	(.373)	(.211)	(.010)	(.034)						5.705	.544
Ln Income	.135	.010	.005	.075	.601	.019	.019	189	.115	5.669	449
	(.025)	(.014)	(100.)	(.003)	(.023)	(.013)	(.001)				
				NEW N	NORTHEAST = 4,803						
Education	.275	.256	.122							.978	.161
Conitalist	(.141)	(.113)	(.004)	<u></u>							
capitalist	.552	.007	0004	.007			-			.063	.096
Petit Bourgeoisie	.109	(-017) 353	(.001) = 002	(.002) _ 034							
	(.032)	(.026)	(.001)	(.003)						.389	.101
Occupation	116		.227	2.470						2 300	356
	(.597)	(.478)	(.020)	(.061)							.550
	005	016	010	070	512	027	018	170	021		
Ln Income		.010		.070	¢10,	.027	.010	.170	.051	5.535	.284

Table 7.	Metric Regression Coefficients for Full Structural Model for Full Sample and Each of Four Regions
	(Standard Errors in Parentheses)

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will vary greatly by level of socioeconomic development. We anticipated that schooling would be more important as a mechanism of class transmission in more developed regions, and that class itself would predominate in less developed ones.

Panels 2-5 to Table 7 present the results of our model for the South, the Developing Periphery, the Old Northeast, and the New Northeast, respectively. and Table 6 presents the accompanying descriptive statistics. As before, we will analyze the model step by step.

Who Gets Educated? Regional Comparisons. As expected, the effect of capitalist class origin on educational attainment increases directly with level of regional socioeconomic development, although the difference between the two most developed regions is not great. Sons of capitalist fathers in the New Northeast get only slightly more schooling than do the sons of workers, but the effect rises to nearly a year in the Old Northeast, and about a year and a half in the Developing Periphery and the highly industrialized South. The educational difference between sons of petit bourgeoisie and sons of workers (again, sons of similar occupational status origins) is about one-half year in the Developing Periphery, and negligible elsewhere.

Level of development does not seem to affect the relationship between father's occupational status and son's education, a finding inconsistent with industrialization theory. This effect, while large, is similar in each of the four regions (b = .14 in all regions). This finding is consistent with earlier Brazilian results reported by Bills et al. (1980) and Holsinger (1975).

Who Gets High Status Jobs? Regional Comparisons. Most adherents to the thesis of industrialization hold that the direct effect of father's occupational status class position is somewhat higher in the South than in the Developing Periphery, on the occupational status of the son diminishes with industrialization, and that although it is higher yet in the less developed regions. Confounding the picture the effect of education on occupational status increases with industrialization. still further, capitalist fathers are most likely to produce petit bourgeoisie sons These propositions receive somewhat equivocal support in our data. The effects in Brazil's Old Northeast, while the effect is about the same elsewhere. of fathers' occupational status on sons' occupational status are only slightly higher in the lesser developed regions of Brazil (b = .227 and .222 in the New Northeast and Old Northeast, respectively) than they are in the more developed regions (b = .205 and .191 in the developing Periphery and the South, respectively). This provides little support for industrialization theory.

Similarly, the effect of education on occupational status does not vary much by region, except for having a somewhat smaller effect in the New Northeast. Education is in all four regions the most important determinant of occupational status, as an extra year of schooling is worth about three points of occupational petit bourgeoisie have modestly higher income returns than do workers in the status throughout most of Brazil, and about one-half year less in the impoverished South and Developing Periphery, but do not receive this return in the Northeast. New Northeast.

Finally, the class origin of men in Brazil has little direct effect on the status of occupations that they attain, except in the South. Here, the effects of both class origin variables are significantly negative. The most plausible explanation

for this seems to be that since most capitalists are of generally modest occupational status and since high-status, non-capitalist positions are most prevalent in the developed South, the attainment of capitalist class position in the South moves an individual relatively less far up (or even down) in the occupational hierarchy than it would in less developed regions.

The indirect effect of capitalist class origin transmitted via education increases with regional socioeconomic development, although again the difference between the most developed regions is minimal. This indirect effect (the product of the effect of capitalist class origin on sons' education and the effect of education on occupational status) rises from .679 in the New Northeast to 2.580 in the Old Northeast to 4.476 in the Developing Periphery to 4.644 in the South.

The Attainment of Class Position: Regional Comparisons. Direct capitalist class inheritance decreases substantially and steadily with socioeconomic development. This pattern is evident both from our regression analysis and from inspection of intergenerational class mobility tables calculated for each region (results not shown). While the class location of an individual is still largely determined by the class location of his father in the South (indeed, this remains the best predictor of one's class location), the effect is significantly smaller than in the lesser developed regions.¹⁴

Other findings relating to class inheritance are far less systematic. Men of petit bourgeoisie origins in the New Northeast (most of whom are in agricultural work) have little chance of becoming capitalists. Elsewhere in Brazil, sons of the petit bourgeoisie are somewhat more likely to become capitalists than are sons of workers. This effect varies little by region.

In some contrast, the net intergenerational transmission of petit bourgeoisie

The Returns to Class and Status: Regional Comparison. Except for an exceptionally high economic return to capitalist position in Brazil's Developing Periphery, the return to class location is linearly related to level of development.

In all regions, though, the effect is large. Capitalists in the Developing Periphery can expect to earn nearly two and one-half times what non-capitalists earn (e.905 -1 = 1.472). This return is smaller yet still substantial in the New Northeast (67 percent), the Old Northeast (82 percent), and the South (100 percent). The Occupational status and education both have significant effects on log income,

but effects that do not differ by level of development. This too fails to support the thesis of industrialization.

Why should the economic returns to capitalist class location in the Developing

Periphery of Brazil be so much higher than elsewhere in the nation? While we have no direct evidence on this point, we might offer some speculation. First, the combination of a rapidly expanding industrial base with a ready source of cheap and mobile labor close at hand in the Brazilian Northeast might make it particularly lucrative to own and operate a business in this region. The extent of out-migration from the Brazilian Northeast is well-documented (Haller et al., 1981). Obviously, labor is more expensive in Brazil's South, and the Northeast lacks a solid industrial base. This particular geographical confluence might well make capitalists in the Developing Periphery particularly well-placed. In fact, the ratio of the income of workers to that of capitalists in every nonagricultural occupational category is lower in the Developing Periphery than anywhere else in Brazil.

Alternatively, perhaps regional inequality, rather than simply regional development, affects the economic returns to class location (Kelley, 1978). To test this, we assigned a regional inequality score to each of our regions by utilizing information presented in Langoni (1973:109), in which he characterized the inequality within Brazilian states by using a measure of the variance of the logarithm of earnings (see Creedy, 1977 for a discussion of this measure). The results provide little support for this interpretation. Regional inequality is greatest in the Old Northeast and the South, less in the Developing Periphery, and less still in the New Northeast. This pattern does not disprove an "inequality effect" hypothesis, but it hardly justifies positing any simple relationship between rate of return to class location and regional inequality.

We also considered the possibility that being propertied in the national capital city of Brasilia, which is located in the Developing Periphery, might be especially advantageous in terms of income. Certainly the demand for goods and services can be expected to be relatively great in a national capital. Even though Brasilianos constitute only about 7 percent of the Developing Periphery, we wondered whether exceptionally high rates of return to ownership and control among capitalists here might be inflating the coefficient for the entire region. While plausible, this hypothesis does not hold. The return to being a capitalist (as opposed to a worker) in Brasilia is about 107 percent. To be sure, this is substantial, but well below the return for the region.

The Income of Sons of Capitalists: Regional Comparisons. Our earlier discussion suggested that the relationship between the direct effect of class origin on income with level of socioeconomic development was very problematic. Industrialization theory suggests that such processes as the increased rationalization of work, changes in inheritance laws, the larger size of the enterprise, and the separation of ownership and control should limit the ability of capitalists to simply hand capital over to their sons. Further, it would presumably contend that capitalists in developed regions help their sons less through the class system per se, and more through the educational system. Note that this says nothing

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about the gross association between capitalist class origin and income returns, which indeed is about the same in the three most developed regions (r = .204 in the Old Northeast, .205 in the Developing Periphery, and .209 in the South), and a bit less in the New Northeast (r = .166). Instead, this position holds that the mechanisms by which the effects of class origin are transmitted differ by level of socioeconomic development.

More conflict oriented theories, in contrast, would point to the uneven benefits of capitalist growth in Brazil and the reticence of newly created wealth to trickle down and presumably promote equality, and would be more likely to posit stable or increasing economic returns to class origin. Of course, many conflict theorists would argue that capitalists increasingly turn to intervening mechanisms to transmit their class positions (Bourdieu, 1973), so the criteria to choose between these opposing views are not always clear. Probably the best that can be done is to assess the relative sizes of the direct effect in order to adjudicate between these positions.

The results, however, fit no readily interpretable pattern. The direct net effect of capitalist class origin on log income is virtually nil in the New Northeast, and only about 12–14 percent elsewhere. Apparently capitalist economic development does not erode the direct advantages of those already advantaged, although these advantages do not appear to be enhanced either. As predicted by industrialization theory, the effects of fathers' occupational status decrease steadily with development.

The indirect effects of capitalist class origin on log income operating via the class system also present some apparent anomolies. This effect is highest in the Developing Periphery (30 percent) and quite similar everywhere else (17-20 percent). Again, the class system is shown to be exceptionally important in Brazil's Developing Periphery. At the same time, capitalists in developed regions do in fact seem to rely more on the educational system as a "strategy of reproduction" (Bourdieu, 1973) in placing their sons in advantaged occupational positions, although once again the most developed regions do not differ. The indirect effects of class via education and occupation go from .031 to .115 to .174 to .177.

CONCLUSIONS AND DISCUSSION

We have provided some persuasive evidence that class origin and class position are of fundamental importance to understanding social stratification in Brazil, and have added some important evidence to the stratification and development literature. Rather than posing the question in terms of the misleading "class versus status" debate, we have shown that both must be taken into account in explicating the relationship between socioeconomic development and life chances.

While we agree with Adelman and Morris (1973:178) that "there is no sta-

tistical justification for interpreting a cross-section as representative of changes over time," we contend that our results call into question any simple version of the industrialization thesis. While some of the relationships that we report provide support for this theory, others contradict it and many others are ambiguous. We find little evidence that socioeconomic development necessarily brings with it a clear progression from particularism to universalism. We suggest instead that characteristics of the social structure (for instance, reward distributions, degree of inequality, the "shape" of the stratification system) are exogenous to patterns of status attainment and mobility, and condition the relationships between status attainment variables. As one of us has elsewhere pointed out, "there is no strong relation between development and inequality" (Kelley et al., 1981:61), and their effects on processes of attainment and mobility might well differ. A fuller exploration of these exogenous factors is beyond the capabilities of our data, but we encourage further work on how the structure of stratification systems themselves affect processes of attainment and mobility (Haller, 1970; Tyree et al., 1979; Lipset and Bendix, 1967; Hazelrigg and Garnier, 1976).

Of equally pressing concern to us, however, is the role of class variables in the status attainment process. We have consistently found these to be important determinants of attainment throughout the socioeconomic life cycle. Capitalist class origin confers both direct and indirect advantages on sons, and capitalist class position has substantial economic benefits of its own. This process varies across regions at unequal levels of socioeconomic development. We would hold that these relationships deserve more detailed scrutiny than our data permit. Many of our results, particularly those pertaining to patterns found in the Developing Periphery, suggested to us that the class structures exogenous to the attainment processes we have described differ greatly across regions at different levels of development. How these structures themselves change and how these changes affect patterns of mobility and status attainment—"structuration" in Giddens' (1973) terminology—merit careful attention. We hope that this paper contributes to such efforts.

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NOTES

1. An exception is Robinson (1984a; 1984b). His analysis includes data from the United States, Great Britain, Northern Ireland, Argentina, Chile, and Bolivia. Kerckhoff et al. (1982) use British data to analyze the effects of class background on a variety of outcomes. Griffin and Kalleberg (1981) investigate the determinants of class placement using U.S. data, but lack a measure of class origin.

2. Treiman acknowledges that "this assertion is only plausible on the assumption that the demand for educated personnel remains constant or at least does not increase as rapidly as the supply" (1970:220).

3. Because of the sampling procedures used by PNAD, it was necessary to devise a statespecific weighting scheme. Other than the capital city Brasilia, whose respondents are weighted .075, our weights cluster quite closely around 1.0. Details are presented in Bills, 1980.

4. The category "farm worker," of course, is an exception. It is difficult to imagine a hoeman or a plowman being both self-employed and an employer of others.

5. Managerial and administrative occupations include: public service administrators, other administrators, officials and administrative technicians, administrators of banks and insurance companies, and owners and general managers of manufacturing plants.

6. While some readers may be troubled by our annualization of income, this procedure creates fewer problems than it might seem. First, the question asks for occupational earnings in a *normal* week, avoiding the possibility of annual income being deflated or inflated by especially lean or prosperous weeks. Second, Brazil's favorable climate and long growing seasons mean that seasonal unemployment in agriculture is less prevalent than in many other nations. Third, the lack of harsh winters means that seasonal unemployment in extractive or construction activities is minimal. In general, unemployment in Brazil is more or less randomly distributed throughout the year, and the particular survey week used by PNAD is as representative as any.

7. Robinson (1979:150-155) reports the following correlations between ownership and occupational prestige (U.S. sample only) and ownership and occupational status (using a measure quite like ours), for the sons' and fathers' generations, respectively: United States (.162, .225); Great Britain (.012, .085); Northern Ireland (-.043, -.122); Chile (.452, .308); Argentina (.431, .075); Mexico (.129, -.064); and Bolivia (.062, .209). Robinson also finds quite consistently that ownership correlates more highly with prestige than with status. With the possible exception of the Bolivian sample, none of the Latin American samples is nationally representative, but rather pertain to urban areas.

Also, it should be pointed out that all of our correlations involving class are subject to relatively low ceilings (probably about .5) due to both the skewed distribution of class origin and class position and the fact that the distributions of our other status variables all depart considerably from normality (which is to be expected in a society marked by great inequalities). This has not been generally recognized in most previous empirical work incorporating class measures into status attainment models.

8. This estimate is calculated by dividing the effect of capitalist origin by the effect of one point of father's occupation status.

9. For present purposes we do not investigate nonlinearities in the effects of education.

10. This estimate is calculated by multiplying the effect of class origin on educational attainment by the effect of a year of educational attainment on occupational status.

11. Given that the distributions of the class variables are skewed dichotomies, employing them as we do as dependent variables obviously does violence to the assumptions of regression analysis. While we may have mitigated this problem by using some form of maximum likelihood

estimation, it is unlikely that this would have led to substantively important modifications (Griffin and Kalleberg, 1981).

12. The effect of capitalist class location on log income is .644. Taking the anti-log of this and subtracting 1 yields the return to class position (Jencks et al., 1979:27–28).

13. While we are primarily interested in the conceptual distinctions produced by relations of property and labor power, it is true that most of our capitalists and petite bourgeoisie are in agricultural occupations. Even though we have no particular theoretical interest at this point in the farm-nonfarm distinction, we were concerned that our observed class effects might be spuriously picking up the effects of farm origin and farm position. We therefore ran all of the equations in Table 7 controlling for farm origin and position. While both of these dummies consistently had large effects of their own, we were more concerned with whether their exclusions biased the estimates of other variables.

Farm origin had large effects on education, occupational status, and petit bourgeoisie position (as well as farm status), but in no case did its inclusion force us to alter our interpretation of the variables already in the model. Farm origin was only minimally related to attained capitalist class position.

Farm origin had little direct effect on log income, while farm position had a large negative effect. Including these two variables increases the income returns to capitalist class location from 94 percent to 115 percent, and to petit bourgeoisie location from 2 percent to 11 percent. All other estimates are basically unchanged. Probably the most important conclusion to be reached from this exercise is that the reason for the low return to the petit boureoisie relative to workers in simply that so many of them are in farm occupations.

14. Part of the reason that capitalists have a more difficult time passing on their enterprises or capital to their sons in more developed regions may be that proportionately fewer of them are farm owners than in less developed regions (Table 3, panel 1). Robinson (1984b) found that "landed capitalists" had considerably higher rates of inheritance and self-recruitment than did industrial capitalists, and there are a number of reasons why agricultural class positions might be more inheritable than industrial class positions. Farms can be divided among sons more easily than can industrial enterprises. Sons of industrial capitalists (particularly in Brazil's more developed regions, where enterprises will generally be larger than in less developed regions) might well move into managerial positions in firms owned by their fathers or those in their fathers' networks. On the other hand, Brazil's exceptionally high rates of rural to urban migration (Tourhino, 1982) probably serve to break down the inheritance of farms.

Additional analyses (results not shown) found that little of the overall decline in direct class transmission is attributable to the decline in the proportion of landed capitalists. The ability of industrial capitalists to transfer enterprises or capital directly to their sons is lowest in the most developed regions. Our results are demonstrably not artifacts of the shift from agricultural to industrial or service jobs.

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