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PROGRESSIVISM FOR MIDDLE-CLASS WHITES ONLY:
THE DISTRIBUTION OF TAXATION AND EXPENDITURES
FOR EDUCATION IN NORTH CAROLINA, 1880-1910

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"The problem that the South now presents," asserted Walter Hines Page in an Atlantic Monthly article in 1902, "has at last become so plain that thoughtful men no longer differ about it. It is no longer obscured by race differences nor by political differences. It is simply the training of the untrained masses." Education, Page was sure, would build a new "democratic order of society" in the South, would, as he had asserted in a famous 1897 speech, "develop the forgotten man. . . The neglected people will rise," he went on, "and with them will rise all the people."¹

What are we to make of Page's glorious hopes? Were they merely the pious pronouncements of a "progressive" phrasemonger, or did his predictions reflect reality? There was, to be sure, a massive increase in educational expenditures in the South during the so-called "Progressive Era." But how equitably were the funds distributed and what explains the pattern of distribution? Did the new monies go primarily to the "forgotten men and women," black and white, mainly to the upper and middle classes, or were they divided equally among all classes? Was the creed of the southern educational crusade "equality of opportunity in the school for all, black and white," as the chief historian of the movement, Charles W. Dabney, put it? Or did the campaigns for education lead to greater inequality, to discrimination in the distribution of funds which was, in Louis R. Harlan's phrase, "almost universal, flagrant, and increasing?"²

If such historians as Harlan and Horace Mann Bond have concerned themselves with the distribution of expenditures, rarely if ever have students of the past taken up the question of the distribution of taxes. Yet it is obvious that the incidence of the burdens is no less important

than the incidence of the benefits of government; government guarantees of equal opportunity or redistribution of society's resources involve taxing as well as spending. Surely we need to know more about past state tax policies: How progressive or regressive was the state tax structure, and how did it change over time? How did tax rates vary by race and class? Did the combination of taxing and spending for education redistribute the society's resources upward, downward, or not at all? How did the amount of redistribution change over the years?

If there were systematic variations in the distribution of taxes and governmental services across time and geographical areas, then the question of the causes of these variations becomes crucial. Scholars have proposed three basic hypotheses to explain such differences. The first or "progressive" model focuses on differences in the demand for education. According to this view, before the "educational awakening" of the early 20th century, poor whites were indifferent to public education and rich whites, while seeking education for their own children, often opposed increases in school taxes because some of the benefits would have to go to blacks. Only when the "progressive" elites pushed the recalcitrant masses to increase school taxes did the sentiment for public education become widespread. This induced demand and the beneficence of "educational statesmen" produced an expanded and democratized educational system which offered increasingly equal opportunity to all whites, and, some scholars claimed, even to blacks.³

The second hypothesis focuses on changes in the structure of politics. What effect did the disfranchisement of large numbers of poor whites, as well as practically all the blacks, and the contemporaneous precipitant decline in party competition have on the level and distribution

of educational benefits?⁴ Was politics, in Charles W. Dabney's words, "the curse of our public education system," the removal of which would, he presumed, lead to educational progress? Or, on the other hand, was V. O. Key correct in asserting that, at least "over the long run, the have-nots lose" in a political system without organized parties?⁵

Adopting the same general view which Key espoused, Horace Mann Bond and Louis R. Harlan connected the large increases which they found in discrimination against Negroes in educational benefits after 1900 to the disfranchisement of blacks. They also believed that blacks had been losing ground steadily since the end of Reconstruction. Despite the thoroughness of their impressionistic research on racial discrimination, however, Bond and Harlan did not investigate changes in taxation practices, employed unsophisticated statistical methods, and largely ignored the possibility that the decline of the Populist and Republican parties and the restrictions placed on the suffrage of poor whites might have led to increases in discrimination against lower class whites, as well as the blacks, after 1900. Was progressivism "for whites only," or was it for only some whites?⁶

Critics of Key, most notably Thomas R. Dye, have advanced as a third general hypothesis a socioeconomically deterministic explanation of variations in such political "outputs" as public education. Simply stated, Dye's view is that the socioeconomic structure directly or indirectly determines the levels and perhaps the distribution (he is not so categorical on this point) of public services. Permutations of such characteristics of the political structure as turnout and party competition, according to proponents of this hypothesis, have no independent influence upon public policy.⁷

These hypotheses will be tested in this article through an analysis based on approximately 40,000 pieces of county-level economic, social, political, educational, and tax data for every year from 1880 to 1910 for North Carolina. The birthplace of Page, Dabney, and such other famous educational reformers as Edwin A. Alderman and Charles D. McIver, and the home of the foremost southern progressive "educational governor," Charles Brantley Aycock, North Carolina has also been perhaps the favorite state of southern historians. Developments in education in North Carolina in the early twentieth century were broadcast throughout the region and even the nation at the time, and have since been studied intensively by Edgar W. Knight and Charles W. Dabney, both of whose conclusions were revised by Louis R. Harlan. Many other works of biography and political and educational history also treat the evolution of education in North Carolina.⁸

Most important for a cliometric study, North Carolinians kept the best educational and tax statistics during this period.⁹ Consequently, although the research of which this article is a part has not yet progressed far enough to establish conclusively that North Carolina was typical of the South as a whole, the experience of that state will remain crucial to any interpretation of the politics of southern education in the late nineteenth century and early twentieth century. The politics of education, in turn, is central to any discussion of the distribution of government services in the South in this period, for state and local governments there provided no other services, except possibly the courts, which directly affected large numbers of people or which could possibly have redistributed societal resources from race to race, or class to class.

North Carolina's manner of raising and spending monies for education after 1871 assured that taxes would be regressive and expenditures would correlate closely with wealth. The Radical Reconstructionists, a coalition of whites from poor mountainous counties and lowland ex-slaves, led in educational matters by carpetbagger Samuel S. Ashley, had envisaged education as a device for transforming an inegalitarian social and class system into one of equal opportunity. The Radical program set up a uniform property tax collected by the state and distributed to each county in proportion to its school-age population, and guaranteed by law that equal amounts would be spent on each child, regardless of race. These devices would insure, the Radicals hoped, a four-month school term for all the state's children.¹⁰

Before this system could firmly be established, however, the violent revolution of 1870-1871 by the Klan-led Conservatives upset the Republican legislative majority, impeached Radical Governor William W. Holden and forced Ashley to resign, gerrymandered legislative districts to prevent a successful counterrevolution, and rewrote the law apportioning educational funds. The 1871 law, which formed the basis of the distribution of school funds in North Carolina for fifty years, kept the school property tax uniform across the state, but allowed each county to keep the monies it raised.¹¹ For the Radical mandate of equal expenditures on each child (or what might be called "one kid, one buck"), in other words, the Democrats substituted a mode of distribution of funds which favored children living in wealthy counties at the expense of those residing in poor areas ("to each according to his county's means"). Expenditures per capita were therefore necessarily directly proportional to each county's wealth except for five sources of variation: differences in the number of

children per family; a few local taxes specially authorized by the legislature from time to time before 1905, and a large number thereafter; the collection rate of the poll tax ("indigents" were legally exempted from paying it, but the definition of indigence was vague);¹² racial discrimination in apportionments; and the school revenue accruing from sources other than direct taxes, much of which came from tuition fees.¹³

By pegging statewide poll tax to statewide property tax rates, the Conservatives who dominated the 1875 constitutional convention guaranteed a regressive tax structure, since the poll tax was equal for each adult male regardless of wealth.¹⁴ Table 1 summarizes trends at the state level and indicates the effect of the regressivity of the tax system for schools on the almost universally poor blacks.¹⁵ In this paper, the "tax rate" is defined as the proportion of assessed property paid in property and poll taxes, and "regressivity" means that people with little or no property were taxed at higher rates than those with more property.

White tax rates rose steadily until 1900, after which the largest increases in the assessed value of property since the Civil War allowed expenditures to rise even though tax rates stabilized. Black tax rates showed no clear trend until after 1900, when the poll tax became a suffrage requirement, and many tax collectors appear to have foregone revenue rather than take the chance of expanding the black electorate. Despite the reduction in the ratio of tax rate discrimination from 6.5 to 2.6 over the years, the basic fact is that throughout the period, poor blacks paid taxes at much higher rates than the comparatively wealthy whites. To determine whether the tax system was regressive for whites separately, and whether the degree of regressivity for blacks varied in counties with different white social structures, we must look at the county-level data.

Since the state supreme court and the legislature prohibited most local property taxes for schools until after the turn of the century, variations in tax rates from county to county chiefly reflected differences in the willingness to support schools through considerable variations in poll tax collection rates and small deviations in the amount of the local poll tax, and disparities in the ratios of poll taxpayers to property taxpayers.¹⁶ The significant coefficients in all rows of the first two columns of part A of table 2 confirm the regressivity of the North Carolina tax system for blacks and whites.¹⁷ That the tax rates became less regressive with the increase in local property levies, stimulated by extensive and repeated "educational campaigns" after 1900, should not draw attention away from the fact that the tax system remained markedly regressive. At the beginning of the period, the white tax rate in a typical poor county was 1.7 times as high as that in a typical rich county; by the end, the ratio had fallen to 1.3, but it was still greater than unity.¹⁸ This disparity in rates reflected a combination of what appears to have been a greater desire for schools in poor white areas and the political decisions made in 1871 and 1875, which were disproportionately supported by legislators from wealthy counties, to harness the state with a taxing system which discriminated against those with little property.¹⁹

[Table 2 here]

The negative correlations between black tax rates and the percentage Negro in each county before 1905, given in part B of table 2, imply that, before disfranchisement, blacks who controlled enough votes could keep their taxes relatively low. That that correlation was highest (-.36) and that the negative correlation between the ratio of black to white taxes reached statistical significance only during the 1896-1900 period, when North Carolina was controlled by the Populist-Republican

fusion movement suggests that the increased puissance of the blacks in the heavily Negro counties during those years translated itself into comparatively lower tax rates for blacks. Conversely, the positive correlations between the ratio of black to white taxes rates and the proportion Negro in the years from 1906 to 1910 indicate that after disfranchisement, black tax rates declined less in counties controlled by rich black-belt whites than in the poor white counties. Since Negroes everywhere had very little wealth, whites in areas where there were few blacks probably thought it not worth the trouble and expense of collecting taxes from blacks. In areas where there were large numbers of Negroes, however, their collective pittances amounted to large sums. Furthermore, racism was probably more virulent in counties where blacks made up enough of the population to appear socially, economically, and, before disfranchisement, politically threatening. Thus the black belt whites probably had more desire and certainly more incentive to exploit blacks by raising their taxes, and, after disfranchisement, they had the ability to ignore the contrary desires of black voters.²⁰

The positive correlation between the percentage Negro and the black/white tax ratio is especially striking since the black tax rate was so largely a function of the proportion paying poll taxes, and it was precisely in the heavily black rich counties that whites had most to fear from an increase in black political participation.²¹ This correlation implies that the black-belt whites were so sure of their ability to hold down black voting through literacy tests and extra-legal means that they did not hesitate to create potential black voters by collecting their poll taxes.²²

If the tax structure was regressive, the quality of education these taxes bought was also malapportioned. Inequality in wealth combined with North Carolina's method of distributing school funds to insure that high tax rates did not guarantee large expenditures. As Table 3 shows, tax rates for both blacks and whites correlated negatively with expenditures per child in the age group in eleven of the twelve periods, and all nine of the statistically significant correlations were negative.

[Table 3 here]

The statewide trends in expenditure per child for blacks, whites, and the ratio between them given in Table 4 are clear enough.²³ Whites and blacks shared scholastic poverty relatively equally until 1900. During the period of fusion rule (1896-1900), the proportion of funds going to blacks increased by six percent, but after the restriction of the suffrage, the ratio of black to white expenditures per schoolage child dropped by 53% in ten years.

[Table 4 here]

Although the statewide figures demonstrate the sudden jump in racial discrimination after 1900, they mask variations in the fortunes of black schools in different counties and reveal little about the patterns of school support among whites. Investigation of these topics requires multiple regression analyses of county-level data. Table 5 presents the results of three sets of multiple regressions, where the independent variables were white wealth per white adult male and the percentage Negro, and the dependent variables were expenditures per white child (part A) and per black child (part B), and the ratio of those expenditures (part C).²⁴ Given the system of distributing school funds, it is not surprising that the most important predictor of expenditures

was wealth, which had significant positive coefficients at the .05 level in each of the equations in parts A and B. With wealth, in effect, controlled for by the regression procedure, the percentage Negro had a significant coefficient in three of the six cases in part A.

But note that the time trend of the percentage Negro for the white expenditure section of the table was from coefficients very close to zero to large and significantly positive coefficients, and that there was a considerable jump in the value of the coefficients for white wealth and the percentage Negro in the last period. As table 6, which is based on the results in table 5, shows, a white child who lived in a poor county which was 90 percent white would have received, on the average, 77¢ per year in 1880-84, while his counterpart in a rich county which was only 50 percent white would have gotten \$1.15, a disparity of 38¢. By 1896-1900, the disparity had grown to \$1.01, but the gap widened to an enormous \$3.57 ten years later.

[Table 6 here]

The figures for blacks in tables 5 and 6 contrast sharply with those for whites. Even after taking into account divergences in wealth, whites in heavily Negro counties benefited from greater expenditures than whites in poor white counties, but black expenditures were negatively associated with the percent Negro. More important, consider the combination of the effects of the two variables. In the years before 1900, both whites and blacks who lived in rich, heavily Negro counties received more money for education than their confrères in poor white counties; but after disfranchisement, the whites in rich counties increased their lead over those in poor counties, while the blacks in rich counties actually fell behind their fellows who were fortunate

enough to live in counties which had small amounts of wealth and few Negroes. As part C of both tables demonstrates, the relative amounts which went to blacks shifted much more dramatically against the Negro children in the black belt than in hill country areas after disfranchisement.

[Table 7 here]

While results from the expenditure regressions reveal changes in the patterns of expenditures, they rest, in effect, on a particular notion of justice -- that each child, regardless of race or environs or shifts in political structure, has a right to the same education any other child receives. That Radical Republican notion is not the only possible criterion for justice in the distribution of public services. Many North Carolina Democrats, especially after 1900, espoused another, which, because of the richness of the data the state collected, is also quantifiable. Contending that one should receive in proportion to what one pays, these Democrats sought, by constitutional amendments or more informal means, to force black schools to operate on the taxes raised from blacks, and by increasing the proportion of funds for schools raised at the local level, to allow whites living in rich areas to better themselves without sharing their largess with whites who lived in areas where almost everyone was comparatively poor.²⁵

In an attempt to quantify at least part of this principle, I have calculated what might be called the "black balance of payments," which is computed by subtracting the proportion of direct taxes blacks paid from the percentage of expenditures in each county which went to black schools.²⁶ The statewide trend, given in table 8, shows that while blacks had the ballot,

their schools were, in effect, substantially subsidized by the whites. As in the case of other measures of their welfare, blacks seem to have done somewhat better under the 1896-1900 fusionist regime than in the years immediately preceding. After 1900, however, the decrease in the proportion of expenditures which went to blacks was so sharp that despite a decline in the proportion of taxes they paid (from 16 percent in 1898 to 11 percent in 1908, for instance), their balance of payments dropped by more than two-thirds in a decade. By 1910 the whites were barely subsidizing black schools at all.

[Table 8 here]

Most interestingly, blacks were able to claim a favorable balance of payments despite the passage of a law in 1885, vigorously resisted by black legislators, which openly invited local school boards to discriminate against Negro children, and despite a salary grading system for teachers which local boards might also have used to transfer funds from black to white schools.²⁷ The pre- and post-1885 figures imply that school boards feared to take much advantage of the opportunity to discriminate until the disfranchisement law changed the shade of the electorate.

This conclusion is strengthened even more by the results of a set of regressions of the black balance of payments on the percentage Negro, the square of the percentage Negro, and white wealth. By far the most important predictor of the black balance was the percentage Negro, which had highly significant F ratios until 1906. From 1885 to 1900, the coefficients for the percentage Negro and its square indicate that a variation across counties of 10 percent in the percentage Negro was associated with a change in the black balance of payments of 8 or 9 percent.²⁸ That is to say, the

higher the proportion of blacks in the county -- and in the electorate -- the greater the surplus blacks won. In the period from 1901-1905, the change in the surplus dropped to 3 percent for every 10 percent change in the percentage Negro; and in the final period, the change in the balance was negatively related to variations in the Negro proportion. The relation between white wealth and the black balance, controlling for the percentage Negro, was very weakly positive, and it was statistically significant in only the first period.

[Table 9 here]

Viewing the results in another way, the subsidies for blacks who lived in poor, heavily white counties were small from the beginning, but did not change much after disfranchisement (table 9). There was never very much tax money in such counties, and blacks never enjoyed enough political power there to appropriate it to themselves. On the other hand, the balance of payments in rich black-belt counties was strongly positive before the restriction of the suffrage, and dropped markedly afterwards. These figures show that, contrary to the claims of some historians, black political power was real and effective long after Reconstruction ended, and that the crucial turning point came only after the passage of the suffrage amendment.²⁹

The analysis of the black balance of payments, furthermore, reinforces some little-known impressionistic evidence on the intentions of the "progressives" toward the blacks. Some scholars have made a great deal of the opposition of "progressive" Governor Charles B. Aycock and state school superintendent James Y. Joyner to the movement for a constitutional amendment in North Carolina to limit black school expenditures to the amount paid by Negroes in taxes.³⁰ It is true that Aycock threatened resignation if such a law passed, and that, speaking to

the legislature in 1903, he condemned the proposed measure as "unjust, unwise and unconstitutional." Yet in the same address, he put greater stress on his view that the act was impolitic than he did on its injustice. The law would invite a challenge in federal court, he believed, and "if it should be made to appear to the Court that in connection with our disfranchisement of the negro we had taken pains for providing to keep him in ignorance, then both amendments [the literacy test and racial separation of taxes] would fall together." In other words, the disfranchisement of the almost unanimously Republican blacks, which was virtually priceless to the Democrats, would be bartered for the temporary gain of a few extra dollars of the school fund.

Besides, as Aycock went on, under the constitution as he construed it, "both races can be reasonably educated without excessive cost to the white people. . . ." Aycock's ally, Joyner, in numerous letters to local superintendents, explained how to save the appearance of equality while discriminating: "The negro schools can be run for much less expense and should be. In most places it does not take more than one-fourth as much to run the negro schools as it does to run the white schools for about the same number of children. The salaries paid teachers are very properly much smaller, the houses are cheaper, the number of teachers smaller. . . . [I]f quietly managed, the negroes will give no trouble about [the discrimination.]" Another superintendent, bluntly questioning Joyner, "can we discriminate vs. the negro?" received assurance that they could. "As a rule," the "progressive" responded, "the funds can be so divided as to give to the negro school practically what the negroes pay [in taxes.]"³¹ As tables 7 through 9 demonstrate, some superintendents took a few years after the restriction of the suffrage to master the technique of "quiet management," but by 1910, the "progressives"

had achieved their public aim of avoiding bad publicity, while in many counties exceeding their private goal of balancing white payments.

A third notion of justice, somewhat more comprehensive than the two already treated, is that government ought to foster social mobility by distributing its services in a fashion more egalitarian than the contemporaneous societal distribution of resources. This principle can be operationalized by a device now familiar to historians, the Lorentz curve. Usually employed to compare income distributions, the curve is formed by plotting on Cartesian coordinates the cumulative distribution of, say, income, ordered from lowest to highest, against the correspondingly ordered cumulative distribution of population. If everyone had the same income, the curve would lie on a line which formed a 45 degree angle with each axis; the extent of inequality is therefore proportionate to the area between the actual curve and the 45 degree line, an area which can be measured by the Gini coefficient.

Table 10 gives Gini coefficients for the distribution of wealth in North Carolina during the period. Among whites, the amount of inequality in property holdings by county declined slightly, but fairly steadily from 1880 to 1910.³² In the whole population, with the figures segregated by race in each county, there was of course much more inequality than there was for whites alone, but the tendency was toward a markedly more egalitarian distribution. The Gini coefficient declined from 0.475 in the first period to 0.380 in the last. Had the trend in the distribution of public services reflected that of wealth, as the socioeconomically deterministic theory would seem to require, one would expect to find a more equal distribution of expenditures in 1910 than in 1880. But the Gini coefficients on educational spending,

not presented here, show much less equality at the end than at the beginning of the thirty-year period.³³ [Table 10 here]

To determine whether the rich, middle class, or poor benefited most from this decrease in educational equality, cumulative population can be replaced by cumulative wealth on the X axis of the graph. The resulting curves, original with this paper, measure the degree to which government benefits were distributed more or less equitably than the contemporaneous distribution of wealth, and how that relation changed over time. In the Lorentz curves in figure 1, the lines for the years 1880 to 1900 were rather similar, the drop from 1880 to 1900 reflecting a decline in the redistributiveness of the system mostly among whites. For the last two periods, however, the curves shifted strikingly downwards, especially at the lower end of the wealth spectrum, confirming the fact that the poor received a much smaller proportion of the expenditures after than before the turn of the century.

The extent of the changes in these Lorentz curves can be measured by what might be called the "redistribution index." Just as the usual Lorentz curves relating income to population can be summarized in Gini indexes, the curves of figure 1 can be related to Gini-like indexes which measure the area between the wealth and expenditure curves and the 45 degree line. If the curve lies wholly above the 45 degree line, government expenditures redistribute the society's resources from top to bottom and the redistribution index is negative; if it lies wholly below the 45 degree line, resources are redistributed from bottom to top and the index is positive; if it lies partly below and partly above the 45 degree line, resources may be shifted in several ways, and the sign of the index is indeterminate.

The index values in column three of table 11, which correspond to

the curves in figure 1, reveal a slight drop between the earliest and the next three periods, and substantial decreases in the last two periods. From a value of -0.353 in 1896-1900, the index for both races dropped to -0.160 ten years later. For whites alone, the change was not so substantial (a drop from -0.125 in 1896-1900 to -0.044 in 1906-1910), but it still represented a quite perceptible movement toward a distribution of services which merely reflected the distribution of wealth, rather than moving toward a less inegalitarian one.

[Table 11 here]

We may also use the technique of the Lorentz curve to determine changes in the degree to which the system of educational taxation and expenditure as a whole redistributed society's resources. Table 12 presents a set of what might be called "burden and benefit" indexes, which are proportional to the area between the 45 degree line and a Lorentz curve computed by arraying cumulative expenditures, by county, on the Y axis and cumulative taxes on the X axis, both ordered from the poorest to the richest units. The separate figures for whites jump around a bit from 1880 to 1900, but the main feature of that column, is the change from a mildly redistributive system with an index of -0.065 during the fusion era to a system which did not redistribute resources at all in the period from 1906-10. The column containing figures for both races traces a pattern similar to those in earlier tables. The combination of taxes and spending was highly redistributive at the outset, dropped off slightly, rebounded somewhat during the time of fusion control, and plunged precipitously after 1900.

[Table 12 here]

There is one other idea related to equality and justice which deserves examination here. Those who emphasize what might be termed intergenerational progress might concede increasing inequality in services,

but focus on the fact that absolute levels of expenditures were growing for all groups in the population. A system in which every child would have a chance to get a better education than his parents might be inegalitarian, but, according to this view, not unprogressive. Despite its appeal to many North Carolinians during the early years of the century and to some scholars since, this notion fundamentally mistakes the nature and function of education in a competitive society. In the struggle for jobs, or, more broadly, for increased economic welfare, it is relative, not absolute levels of education which count. It mattered less to the white mountaineer's or the black belt Negro's son that he had been to school longer and received instruction from a better teacher than his father than that his white competitors from the towns and lowlands had gotten a considerably better education than he had. Increasing inequality in services, then, inevitably spawned increasing inequality in income and wealth -- a peculiar definition of progress.

In 1937 the North Carolina Education Association, disregarding the fact that there was no real free statewide public school system in the state until Reconstruction, presented "an historical pageant and masque commemorating the centennial of public education in North Carolina" on the football field of Duke University. In their sketch of the early 20th century "educational campaigns," the pageant's authors picture Aycock and Joyner addressing a group, one of whose members, an "illiterate and indignant farmer" comments before hearing the "progressives" that "I'm agin' this so-called Education Campaign. . . . There's enough money being spent on l'arning all ready." Cajoled into listening by "a well dressed man" who condescendingly encourages the farmer "to see this subject in a broader light," the farmer, along with the rest of the

crowd is converted to the cause. The play ends with an original verse:

"One hundred years the state's courageous leaders
 Have carried on their fight for better schools.
 One hundred years the Old North State has kept
 Her sacred pledge to offer every child
 The right to learn at state expense."³⁴

Reality differed from the state-fostered "progressive" myth. Because state Democratic leaders established a system of regressive taxation, and because the poor, both black and white, seem to have been willing to pay more for public education than the wealthy, school taxes for whites were higher in poor than in relatively rich counties, and much higher among blacks than whites. Moreover, the increased demand for education, fostered by the "progressive" educational campaigns, did not, under their aegis, lead to a more democratized and egalitarian educational system in any but the fourth sense of justice mentioned above. Whether the criterion is service equality, services in proportion to payment, or service redistribution, the fact is that for Negroes overwhelmingly, and for poor whites to a lesser, but still an important extent, equality declined after 1900. The rhetorical "progressive" description and explanation of changes in the distribution of educational taxation and expenditures is simply not in accord with the statistics.

Contrary to the socioeconomic determinist model, the distribution of taxes and expenditures and changes in those distributions appear to have reflected political conditions directly. The levels of taxes and expenditures varied systematically with wealth and race, but the direction of that variation changed during the period, and the changes mirrored

political, not economic conditions. Whereas, wealth was distributed in an increasingly egalitarian fashion, educational equality diminished considerably. Most strikingly, blacks suffered much more discrimination after than before disfranchisement and the establishment of the one-party system, particularly in the heavily Negro areas where before 1900 their votes had bought a disproportionately high level of services.

Finally, the distribution of white educational expenditures did not remain roughly constant over the period, nor was there a marked decline in the black-white expenditures ratio before 1900, as the Bond-Harlan "progressivism for whites only" hypothesis stated. Though the post-1900 discrimination against whites in poorer areas was less than that against blacks, which probably reflected the fact that fewer whites than blacks were disfranchised, there was a clear change in the distribution of white expenditures from a relatively equitable pattern before to an increasingly inequitable one after the passage of suffrage restriction laws. And, bearing out C. Vann Woodward's picture of a dramatic increase in racial discrimination around the turn of the century, the major part of the drop-off in relative expenditures for blacks was concentrated in the period immediately following the passage of those laws.³⁵ In North Carolina education at least, "progressivism" was, as a consequence of disfranchisement, for middle-class whites only.

FOOTNOTES

¹ Page, "The Rebuilding of Old Commonwealths," Atlantic Monthly, LXXXIX (May 1902), 651-661; and his book of the same title containing his "forgotten man" speech, (New York, 1902).

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² Charles W. Dabney, Universal Education in the South, (2 vols., reprint ed., New York, 1969), I, vii-ix; Louis R. Harlan, Separate and Unequal: Public School Campaigns and Racism in the Southern Seaboard States, 1901-1915 (reprint ed., New York, 1969), 269. See also Horace Mann Bond, The Education of the Negro in the American Social Order (reprint ed., New York, 1966). By 1910, even Page realized that in schooling, Negroes were either "forgotten" or "deliberately swindled." See George-Ann Willard, "Charles Lee Coon (1868-1927): North Carolina Crusader for Educational Reform" (unpublished Ph.D. dissertation, University of North Carolina, 1974), 248.

³ Charles W. Dabney, "The Public School Problem in the South," in William T. Harris, Report of the Commissioner of Education for the Year 1900-1901 (Washington, 1902), II, 1013, 1019-1020; Cornelius J. Heatwole, A History of Education in Virginia (New York, 1916), xiii-xiv, 321; Edgar W. Knight, Public School Education in North Carolina, (reprint ed. New York, 1969), 329, 342.

⁴ For a more extensive discussion of disfranchisement and the

decline in party competition, see my book, The Shaping of Southern Politics: Suffrage Restriction and the Establishment of the One-Party South, 1880-1910 (New Haven, Conn., 1974).

⁵ Dabney, in Harris, Report, II, 1018; Key, Southern Politics in State and Nation (New York, 1949), 307.

⁶ The phrase "progressivism for whites only" comes from C. Vann Woodward, Origins of the New South, 1877-1913 (Baton Rouge, La., 1951), Chapter 14.

⁷ Thomas R. Dye, Understanding Public Policy (Englewood Cliffs, New Jersey, 1972), conveniently summarizes Dye's point of view and much of his earlier research.

⁸ See, for example: Alan B. Bromberg, "'Pure Democracy and White Supremacy': The Redeemer Period in North Carolina, 1876-1894," (unpublished Ph.D. dissertation: University of Virginia, 1977); William D. Cotton, "Appalachian North Carolina: A Political Study, 1860-1889," (unpublished Ph.D. dissertation, University of North Carolina, 1954); William E. King, "The Era of Progressive Reform in Southern Education: The Growth of Public Schools in North Carolina, 1885-1910," (unpublished Ph.D. dissertation, Duke University, 1969); Frenise A. Logan, "The Legal Status of Public School Education for Negroes in North Carolina, 1877-1894," North Carolina Historical Review, XXXII (July 1955), 346-357; Philip R. Muller, "New South Populism: North Carolina, 1884-1900," (unpublished Ph.D. dissertation, University of North Carolina, 1972); M.C.S. Noble, A History of the Public Schools

of North Carolina (Chapel Hill, North Carolina, 1930); Oliver H. Orr, "Charles Brantley Aycock, A Biography" (unpublished Ph.D. dissertation, University of North Carolina, 1958); David H. Prince, "A History of the State Department of Public Instruction in North Carolina, 1852-1956," (unpublished Ph.D. dissertation, University of North Carolina, 1959); Richard B. Westin, "The State and Segregated Schools: Negro Public Education in North Carolina, 1863-1923," (unpublished Ph.D. dissertation, Duke University, 1966); Frank H. White, "The Economic and Social Development of Negroes in North Carolina Since 1900," (unpublished Ph.D. dissertation, New York University, 1960); Daniel J. Whitener, "Public Education in North Carolina During Reconstruction, 1865-1876," in Fletcher M. Green, ed., Essays in Southern History (Chapel Hill, North Carolina, 1949), 67-90; Whitener's "The Republican Party and Public Education in North Carolina, 1867-1900," North Carolina Historical Review, XXXVII (July 1960), 382-396; Harvey Wish, "Negro Education and the Progressive Movement," Journal of Negro History XLIX, (July 1964), 184-200.

⁹ All statistics on education, taxes and wealth during this period are drawn from the relevant published reports of the state superintendents of education and the auditors. Demographic data comes from the published U.S. census reports. For the sources of the political data, see my Ph.D. thesis, "The Shaping of Southern Politics," (Yale University, 1971), 427-429. Because a great many counties did not report fully on taxes and expenditures in every year, I have collected data for each of the 30 years and averaged all indices over five-year periods -- 1880-1884, 1885-1890, etc. -- thereby eliminating missing data from the averages.

This procedure reduced the number of missing counties to three at most in any one period. It also smoothed out the expenditure figures, which after 1900 tended to jump about somewhat because of the nonrecurring capital expenditures involved in increased school house construction. I also consolidated counties whose boundaries changed during the period, which reduced the total number of units to 88.

¹⁰ There is no adequate comprehensive history of Reconstruction or the Republican Party in North Carolina, but see the two articles by Whitener cited above, note 8; Cotton, "Appalachian North Carolina," 167-175, 215, 249, 277-278, 364, 551; Journal of the Constitutional Convention of the State of North Carolina at Its Session, 1868 (Raleigh, N.C., 1868); J. G. deRoulhac Hamilton, Reconstruction in North Carolina (New York, 1914), chapters 6, 9-14, 16.

¹¹ On the upheaval, see Hamilton, Reconstruction in North Carolina, chapters 12-15; Allen W. Trelease, White Terror, The Ku Klux Klan Conspiracy and Southern Reconstruction (New York, 1971), chapters 12, 13. On the gerrymandering, see the maps in John L. Cheney, Jr., North Carolina Government, 1585-1974 (Raleigh, N.C., 1975). On the 1871 law, Public Laws of the State of North Carolina, 1870-1871 Session (Raleigh, N.C., 1871), 387; North Carolina Senate Journal, 1870-1871 (Raleigh, N.C., 1871), 325, 361, 402, 420, 487, 545-546, 559, 610-611, 648; North Carolina House Journal, 1870-1871 (Raleigh, 1871), 62, 132, 534, 571-572; Raleigh Daily Sentinel, January 23; February 15, 20, 23; March 18, 22, 1871.

¹² Correlation and regression analyses of the percentage of

"indigent" male adults, listed separately by race, and the percentage Negro in each county failed to reveal any clear patterns. There was no consistent relationship between wealth and poll tax collection rates for blacks, nor did blacks in heavily black counties consistently pay a larger or smaller proportion of poll taxes than their counterparts in predominantly white counties. The printed figures on indigents covered the years 1880 through 1900.

¹³ This last source of variation really ought to be considered a use tax. Since there are no accurate figures on the average amount of tuition charged by schools in each county or the proportion of parents paying such charges, I am forced to treat these indirect revenue sources as if they were additional direct taxes.

¹⁴ Article V, section 1 set the capitation tax at a level "equal on each [male between 21 and 50] to the tax on property valued at \$300 in cash." For example, a property tax rate of 15 cents per \$100 would require a statewide poll tax of 45 cents. This could be supplemented by a local poll tax of up to \$1.55, since, by another constitutional provision, the total poll tax could not exceed a level proportional to a property tax of 66-2/3 cents per \$100, which was the maximum property tax allowed by the constitution.

¹⁵ Taxes for other purposes are not considered here, but the results would be very similar if they had been, since they were set and collected under the same provisions of the 1875 constitution as the school taxes were.

¹⁶ In Lane v. Stanley, 65 N.C. 153 (1870), the court prohibited local taxation for schools without a special authorizing act from the legislature, and the legislature passed relatively few such laws until after 1900.

¹⁷ Pearsonian correlation coefficients are statistical measures of association between two or more variables which vary from +1.0 (strong positive correlation) to -1.0 (strong negative correlation). They are more precisely defined and further explained in any elementary statistics text, for example, Eric A. Hanushek and John E. Jackson, Statistical Methods for Social Scientists (New York, 1977), 19-21.

¹⁸ I defined poor and rich counties in 1880-1884 as ones where the white property value per white adult male were \$400 and \$1400, respectively; for 1906-1910, the figures were raised to \$600 and \$1600 because of increased prosperity.

¹⁹ Strictly speaking, these figures, and others based on data aggregated by county in the paper, do not prove that there was systematic class discrimination among whites in North Carolina, for rich and poor may have lived in the same county and all these suffered or benefitted from the same tax and expenditure rates. I would argue, however, that the aggregate totals strongly imply discrimination between most of the rich and poor in this particular case for four reasons: First, the counties were tiny, averaging only about 2500 white and 850 black male adults in 1910, and fewer in earlier years. The level of aggregation was thus not very high. Second, North Carolina was at least 86 percent rural during

this period, and income and wealth distributions are well known to be distributed in a more egalitarian fashion, at least within races, in rural areas than in large cities. See for example, Robert E. Gallman, "Trends in the Size Distribution of Wealth in the Nineteenth Century: Some Speculations," in Lee Soltow, ed., Six Papers on the Size Distribution of Income and Wealth (New York, 1969), 1-30. Third, though there may have been some indigent whites in rich counties and a few wealthy ones in poor counties, the disparities in average wealth between counties were so great that the counties could not have contained terribly many such deviants. In 1880, for instance, the mean white wealth per white male adult by county was \$875.44, but the standard deviation by county was nearly half as large, \$418.29. Thus, though, there may have been some variation within counties, particularly in towns, there was also a very large amount of variance between counties. If the ratio of between-county to within-county variance was high, and if the equations are well-specified, regression and correlation coefficients based on aggregate data will not be seriously biased estimates of individual correlations. On this matter, see Laura Irwin Langbein and Allan J. Lichtman, Ecological Inference (Beverly Hills, Calif., 1978). Fourth, I eliminated from the statistics investments in railroads, the largest single corporate property holding, inclusion of which would have no doubt perturbed the relation between individual and aggregated wealth.

²⁰ That the differences in black and white tax rates across counties did not merely reflect nonracially stiffer or looser collection policies is demonstrated by the fact that the correlations between black

and white tax rates by counties varied from +.163 to +.405 and averaged only +.294. The correlations are all positive and all but one are significant at the .05 level, but they are by no means perfect. There was a great deal of room for local deals between the often scandalously nonprofessional tax collectors and racial voting blocs.

²¹ The correlation between white wealth per white adult male and the percentage Negro in each county in the 1906-1910 period, for example, was + 0.704.

²² I also tried to fit several models by regressing the tax rates and ratios, logged tax rates, and changes in the tax rates and ratios on various combinations of the following variables: the percentage Negro, white wealth per white male adult, an index of party competition, turnout, the percentage for each political party, and changes in each of these variables. The R^2 's and F ratios were not terribly high, and their inclusion would needlessly extend the discussion in the text, which is more of an attempt to describe initial results on tax rates than to explain them fully.

²³ I used expenditure per child as a proxy for educational quality because of the unavailability of other measures such as achievement tests; because of the dependence of other measures such as illiteracy on such nonschool factors as family background; because of the variance over time and geography in such criteria as the "grades" of teachers; because variables based on attendance or enrollment were functions not only of the quality, but also the desire for education, as well as the availability of jobs for juveniles; and because various pupil-teacher ratios indicated

as much about the size of schools and the ease of transportation (there were often small schools and consequent low pupil-teacher ratios in poor, but inaccessible areas) as about the quality of education. A thorough analysis, available on request, of expenditures broken down into salary and nonsalary components, as well as an examination of other related statistics, demonstrates that trends in the discrimination against blacks in expenditures did not merely reflect school boards' nonracist responses to a dual labor market in the private sector.

²⁴ After attempting to fit several models containing political, social, and economic variables, I decided that a simple equation containing only two independent variables had the advantages of parsimony and clarity of interpretation. Addition of up to nine other independent variables (the percentages for each political party, the electoral turnout, an index of party competition, estimates of turnout among whites, the percentage living in urban areas, the value of black property per black male adult, and tax rates) either did not markedly change the values of the coefficients in Table 6 or were so highly correlated with the percentage Negro or other independent variables as to raise severe interpretative problems, or, in the case of the percentage urban, did not vary enough to explain much. (Only 7 percent of North Carolina's population lived in towns or cities containing 2500 or more people in 1890, and only 14 percent in 1910, at which time only two cities exceeded 25,000 in population. There was a similarly small variation in various measures of industrialization during the period.) Moreover, the additional variables barely raised the percentages of variance explained by the two-variable model,

and only rarely had significant F ratios. I also performed regressions involving changes over each 5-year period in the independent and dependent variables. In general, these equations did not result in as good fits as the static regressions. Especially striking was the decreased explanatory power of the wealth variable -- that is, changes in wealth over 5-year periods by county were never statistically significant predictions of changes in expenditures at the 0.05 level.

²⁵ By encouraging rich localities to raise their own expenditure levels, without having to share with poorer areas, the state Supreme Court decision in Collie v. Commissioners, 143 N.C. 124 (1905), actually increased inequality. The case was financed by the Southern Education Board and argued personally by "progressive" governor Charles B. Aycock, who realized at the time that the effect of increasing local taxation would be to benefit wealthy much more than poor areas. See Orr, "Aycock," 333-334.

²⁶ Obviously, the "white balance of payments" would be equivalent to the black balance with the sign changed, and the regression coefficients in the text would just have their signs reversed had the dependent variable been calculated for whites instead of blacks. Though school expenditures also derived partially from fines and forfeitures, and indirect taxes on liquor, railroads, merchants, etc., it is impossible to estimate what exact proportion of these taxes blacks paid in each county. In any case, the indirect taxes accounted for an average of only 12 percent of total expenditures, with a standard deviation of 5 percent, over the period.

More important, there was no clear trend to an increased or decreased reliance on indirect taxes (they amounted to 14 percent of the total in both 1885 and 1910). And such taxes as those on railroads and merchants cannot be easily allocated to particular counties, since they would have been partially passed on in the form of higher prices to wholesale or retail customers who resided in different counties from those in which the tax was levied. Because I am much more interested in the variations across time and space than in the absolute level of the black balance of payments, I have disregarded indirect taxes and fees in calculating that balance here, but see the appendix for a consideration of these matters.

²⁷ Until 1885, local boards were legally required to distribute all county school funds to sub-county districts strictly in proportion to the school age population. The 1885 act allowed one-third of the county funds to be distributed so as to equalize the average length of school terms between races. Since black teachers were generally paid somewhat less than the whites per month, black school terms before 1885 had sometimes exceeded those for whites. With the passage of the bill, one-third of the funds were discretionary, and could be used to increase white teachers' annual salaries at the expense of the blacks'. For the protest by three state senators, see North Carolina Senate Journal (1885), 520-521.

²⁸ The square of the percentage Negro was introduced into the equation because the scatterplots indicated a significant degree of non-linearity. The interpretation of the square term in this instance is that before disfranchisement, two countervailing forces underlay the relationship

between the balance of payments and the percentage Negro. The first, black political power, increased with the proportion Negro across counties. The second, white resistance to black demands, also increased as the proportion Negro rose. Since the two forces were offsetting, the coefficients on the percentage Negro and its square were of opposite signs until 1906-1910, when black political power, previously much the stronger of the two forces, had vanished and left no trace.

²⁹ See, for instance, Harlan, Separate and Unequal, 9, 40: Richard Bardolph, The Civil Rights Record: Black Americans and the Law, 1849-1970 (New York, 1970), 58. The legislature's attempts to allow towns to tax themselves and appropriate only black taxes to black schools might have led to greater racial discrimination, but the laws were declared unconstitutional by the state supreme court in Puitt v. Commissioners, 94 N.C. 709 (1886) and Riggsbee v. Durham, 94 N.C. 800 (1886). Another available means of discrimination grew out of the fact that a state law (never enforced) set different teacher salaries for first, second; and third "grade" teachers. ("Grades" referred to quality, which was usually measured by performance on written or oral tests administered by local superintendents or school boards.) Since before 1900 there was little standardization in grading criteria from county to county, (the state took over certification entirely only in 1917) white school boards could easily have redressed the black balance in their favor by downgrading the certificates of black teachers and keeping the same student-teacher ratios, thereby increasing the total funds available to the whites.

³⁰ Such proposals had been made as early as 1873. Indeed, the collection of data on the taxes paid by members of each race -- statistics very crucial to this paper -- probably reflected a desire to determine the extent to which whites subsidized black schools. But serious consideration of a general law or amendment of this nature awaited the end of black political power. For the early proposals, see Westin, "State and Segregated Schools," 46-47; Bromberg, "Pure Democracy and White Supremacy," 82-84; Cotton, "Appalachian North Carolina," 25. For a protest against the proposals by North Carolina blacks, see Indianapolis Freeman, January 28, 1899.

³¹ Aycock, in North Carolina Public Documents (1903), 9-12 of Governor's Message; Joyner to Supt. J. E. Debnam of La Grange, N.C., February 3, 1903, quoted in Westin, "State and Segregated Schools," 198; Joyner to W. M. Pearson, July 23, 1904, quoted in Willard, "Charles L. Coon," 220-221, n. 15. For similar letters and a fuller discussion of the impressionistic evidence, see Westin, 198-203, 294-295, 468. Joyner was Superintendent from 1902 until 1919. Joyner's public position, for instance in North Carolina Supt. of Schools Report (1900-1902), vii-xii, differed considerably from his private guidelines on how to discriminate. For a set of letters which, contrary to their editor's gloss, support the interpretation given herein of the "progressives'" private motives, see William E. King, "Charles McIver Fights for the Tarheel Negro's Right to an Education," North Carolina Historical Review, XLI (July, 1964), 360-369. Even Oliver H. Orr's defense of Aycock's actions on Negro education contains evidence that the governor knew that during his administration

(1901-1904) that the white subsidy to black schools was very small. See Orr, "Aycocock," 486.

³² For a discussion of measures of inequality, see Anthony B. Atkinson, "On the Measurement of Inequality," Journal of Economic Theory, II (Sept., 1970), 244-263. On algorithms for computing the Gini Index, see Joseph L. Gastwirth, "The Estimation of the Lorentz Curve and Gini Index," Review of Economics and Statistics, LIV (August 1972), 306-316.

³³ I did not collect data for the years after 1910 because, first, one has to stop somewhere, and second, financing schemes for public education became increasingly complex and finances increasingly subject to bureaucratic pressure after 1910. Nonetheless, it is clear that inequality between races and across areas continued long after 1910. On these points, see Westin, "State and Segregated Schools," 174-182, 267-276, 295-296, 326-372, 393-483; Samuel L. Smith, Builders of Goodwill: The Story of the State Agents of Negro Education in the South, 1910 to 1950 (Nashville, 1950), passim; A. T. Allen's chapter on education in Paul V. Betters, ed., State Centralization in North Carolina (Washington 1932); Samuel H. Thompson, "The Legislative Development of Public School Support in North Carolina," (unpublished Ph.D. dissertation, University of North Carolina, 1926), 390-391, 401-403, 420, 438-439; White, "Economic and Social Development," 158-159; State Educational Commission of North Carolina, Public Education in North Carolina (New York, 1921), 98-100.

³⁴ North Carolina Educational Association, A Century of Culture:

An Historical Pageant and Masque Commemorating the Centennial of Public Education in North Carolina (Durham, N.C., 1937), 55-61.

³⁵ C. Vann Woodward, The Strange Career of Jim Crow, 3rd ed. (New York, 1974), Chapters 1-3. Woodward emphasizes the part played by whites -- northern liberals, southern conservatives, and southern Populists -- in impeding Jim Crow's quick advance. I would put more weight than he does on black political power.

TABLE 1

BLACKS WERE TAXED MORE HEAVILY FOR SCHOOLS:
PROPERTY AND POLL TAXES DIVIDED BY ASSESSED PROPERTY VALUES --
WHITES AND BLACKS IN NORTH CAROLINA

Period	White Tax Rates	Black Tax Rates	Ratio of Black to White Tax Rate
1880-1884	.0019	.0120	6.53
1885-1890	.0022	.0146	6.62
1891-1895	.0025	.0128	5.03
1896-1900	.0030	.0133	4.49
1901-1905	.0027	.0080	2.97
1906-1910	.0032	.0082	2.60

TABLE 2

THE CHANGING PATTERN OF DISCRIMINATION IN TAX RATES IN
NORTH CAROLINA, 1880-1910: COUNTY-LEVEL PEARSONIAN CORRELATIONS

Period	White	Black	Black/White Ratio
A. Correlations Between Wealth Per Adult Male, Tax Rates (By Race), And The Ratio of Tax Rates by Race.			
1880-1884	- .720* ¹	- .663* ²	+ .165 ³
1885-1890	- .860*	- .649*	+ .179*
1891-1895	- .839*	- .564*	+ .085
1896-1900	- .759*	- .610*	- .058
1901-1905	- .393*	- .364*	- .202*
1906-1910	- .465*	- .335*	+ .093
B. Correlations Between Percent Negro, Tax Rates By Race, And Ratios of Tax Rates.			
1880-1884	- .638*	- .224*	+ .097
1885-1890	- .622*	- .158	+ .114
1891-1895	- .650*	- .188*	+ .101
1896-1900	- .624*	- .360*	- .187*
1901-1905	- .348*	- .205*	- .150
1906-1910	- .210*	+ .049	+ .257*

1. Correlation between white tax rate and white wealth per white adult male. Pre-1890 values of wealth and property taxes by race were estimated by multiplying the nonracially separated 1880-1889 property values by the 1890-1896 proportions of wealth held by each race in each county. Starred coefficients are significant at the .05 level.
2. Correlation between black tax rate and black wealth per black adult male. There were two counties with missing data on black taxes during the 1880s and one for the period from 1896-1905.
3. Correlation between the ratio of black to white tax rate and white wealth per adult male.

TABLE 3

PEARSONIAN CORRELATIONS BETWEEN TAX RATES AND EXPENDITURES
DIVIDED BY SCHOOL POPULATION, SEPARATED BY RACE

Year	White	Black
1880-1884	- .499*	- .103
1885-1890	- .607*	- .287*
1891-1895	- .575*	- .079
1896-1900	- .566*	- .382*
1901-1905	- .273*	+ .020
1906-1910	- .217*	- .246*

TABLE 4

STATEWIDE STATISTICS ON EDUCATION IN NORTH CAROLINA

Year	Expenditure/Population		
	White	Black	Black/White Ratio
1880-1885	\$0.93	\$0.98	1.05
1886-1890	1.07	0.94	0.88
1891-1895	1.17	1.02	0.87
1896-1900	1.22	1.14	0.93
1901-1905	1.98	1.17	0.59
1906-1910	3.70	1.49	0.40

TABLE 5

MULTIPLE REGRESSION ANALYSIS OF
COUNTY-BY-COUNTY VARIATIONS IN EXPENDITURES, BY RACE

Period	White Wealth Per White Adult Male (in \$1000)	Percent Negro	Constant	R ²
A. White Expenditure/Child in Population				
1880-1884	.47*	- .21	.60	.35*
1885-1890	.81*	+ .06	.23	.58*
1891-1895	.75*	+ .19	.38	.54*
1896-1900	.77*	+ .61*	.49	.54*
1901-1905	1.21*	+ .86*	.56	.74*
1906-1910	2.72*	+ 2.12*	- .05	.56*
B. Black Expenditure/Child in Population				
1880-1884	.50*	- 1.03*	.84	.09*
1885-1890	.43*	- .30	.54	.30*
1891-1895	.39*	- .45*	.71	.18*
1896-1900	.41*	- .16	.74	.29*
1901-1905	.44*	- 1.02*	1.09	.13*
1906-1910	1.09*	- 3.51*	1.41	.18*
C. Black Expenditure Per Child/White Expenditure Per Child				
1880-1884	+ .02	- .78	1.28	.07
1885-1890	- .11	- .36*	1.11	.19*
1891-1895	- .10	- .66*	1.16	.25*
1896-1900	- .03	- .53*	1.01	.29*
1901-1905	- .12	- 1.02*	1.10	.49*
1906-1910	+ .06	- 1.83*	1.01	.33*

NOTE: Starred coefficients were significantly different from zero at the 0.05 level.

TABLE 6

PREDICTED VALUES FOR EXPENDITURE PER CHILD, BY RACE,
AND RATIOS OF THOSE EXPENDITURES IN RICH, HEAVILY NEGRO,
AND POOR, HEAVILY WHITE COUNTIES

Period	Poor	Rich	Difference (Rich-Poor)
A. White			
1880-1884	\$ 0.77	\$ 1.15	\$ 0.38
1896-1900	\$ 0.86	\$ 1.87	\$ 1.01
1906-1910	\$ 1.79	\$ 5.36	\$ 3.57
B. Black			
1880-1884	\$ 0.94	\$ 1.03	\$ 0.09
1896-1900	\$ 0.89	\$ 1.23	\$ 0.34
1906-1910	\$ 1.71	\$ 1.40	- \$ 0.31
C. Ratio (Black/White)			
1880-1884	121%	92%	26%
1896-1900	95%	70%	25%
1906-1910	86%	19%	67%

NOTE: Poor Counties are defined as those where the average white property value per white male adult was \$400 in the first two periods, and \$600 in the last, and where the percentage of Negroes in the population was 10%. Rich counties are those where white wealth was \$1400 in the first two periods and \$1600 in the last, and where the percentage Negro was 50%. The estimates here are based on the relevant regression results from table 5.

TABLE 7

STATEWIDE TRENDS IN THE "BLACK BALANCE OF PAYMENTS," 1880-1910

Period	Balance*	Period	Balance*
1880-1884	.205	1896-1900	.189
1886-1890	.177	1901-1905	.097
1891-1895	.174	1906-1900	.057

*Black proportion of expenditures minus black proportion of property and poll taxes.

TABLE 8

THE SHIFTING CORRELATES OF THE BLACK BALANCE
OF PAYMENTS -- MULTIPLE REGRESSION STATISTICS

Period	Percent Negro	Percent Negro ²	White Wealth (in \$1000)	Constant	R ²
1880-1884	+ 0.54*	- 0.33*	+ 0.05*	- .02	.86*
1885-1890	+ 1.02*	- 1.15*	+ 0.02	- .04	.75*
1891-1895	+ 0.85*	- 0.87*	+ 0.02	- .02	.74*
1896-1900	+ 0.85*	- 0.85*	+ 0.01	- .02	.69*
1901-1905	+ 0.32*	- 0.40*	+ 0.09	- .04	.53*
1906-1910	- 0.08	- 0.01	+ 0.06	+ .01	.11

TABLE 9

PREDICTED VALUES FOR THE BLACK BALANCE OF
PAYMENTS IN RICH, HEAVILY NEGRO AND POOR, HEAVILY WHITE COUNTIES

	Poor, 10% Negro	Rich, 50% Negro
1880-1884	.051	.238
1896-1900	.061	.207
1906-1910	.038	.064

NOTE: Definitions of counties are the same as in table 6.

TABLE 10

GINI COEFFICIENTS FOR THE DISTRIBUTION OF
REAL AND PERSONAL PROPERTY FOR WHITES ONLY,
AND FOR BOTH RACES SEPARATELY

Period	Whites Only	Both Races
1880-1884	.243 (86)	.475 (169)
1885-1890	.217 (88)	.442 (174)
1891-1895	.208 (88)	.422 (176)
1896-1900	.223 (88)	.422 (175)
1901-1905	.208 (88)	.402 (175)
1906-1910	.189 (88)	.380 (175)

NOTE: The number of counties without missing data is in parenthesis. For both races, the number is, in effect, doubled.

TABLE 11

REDISTRIBUTION INDEXES FOR WHITES ALONE AND BOTH RACES SEPARATELY

Period	Whites Only	Both Races
1880-1884	- .174	- .435
1885-1890	- .091	- .373
1891-1895	- .114	- .369
1896-1900	- .126	- .353
1901-1905	- .120	- .280
1906-1910	- .044	- .160

NOTE: The redistribution index is proportional to the area between the 45 degree line and a Lorentz curve in which cumulative expenditures by county are plotted on the Y axis and cumulative wealth on the X axis. Both are ordered from the poorest to the richest unit. The numbers of observations are the same as in table 10.

TABLE 12

BURDEN AND BENEFIT INDEXES FOR
WHITES ALONE, AND BOTH RACES SEPARATELY

Period	Whites Only	Both Races
1880-1884	- .080	- .225
1885-1890	+ .002	- .171
1891-1895	- .025	- .187
1896-1900	- .065	- .197
1901-1905	- .055	- .136
1906-1910	- .001	- .053

NOTE: See the text for a definition of the index. The numbers of observations are the same as in table 10.

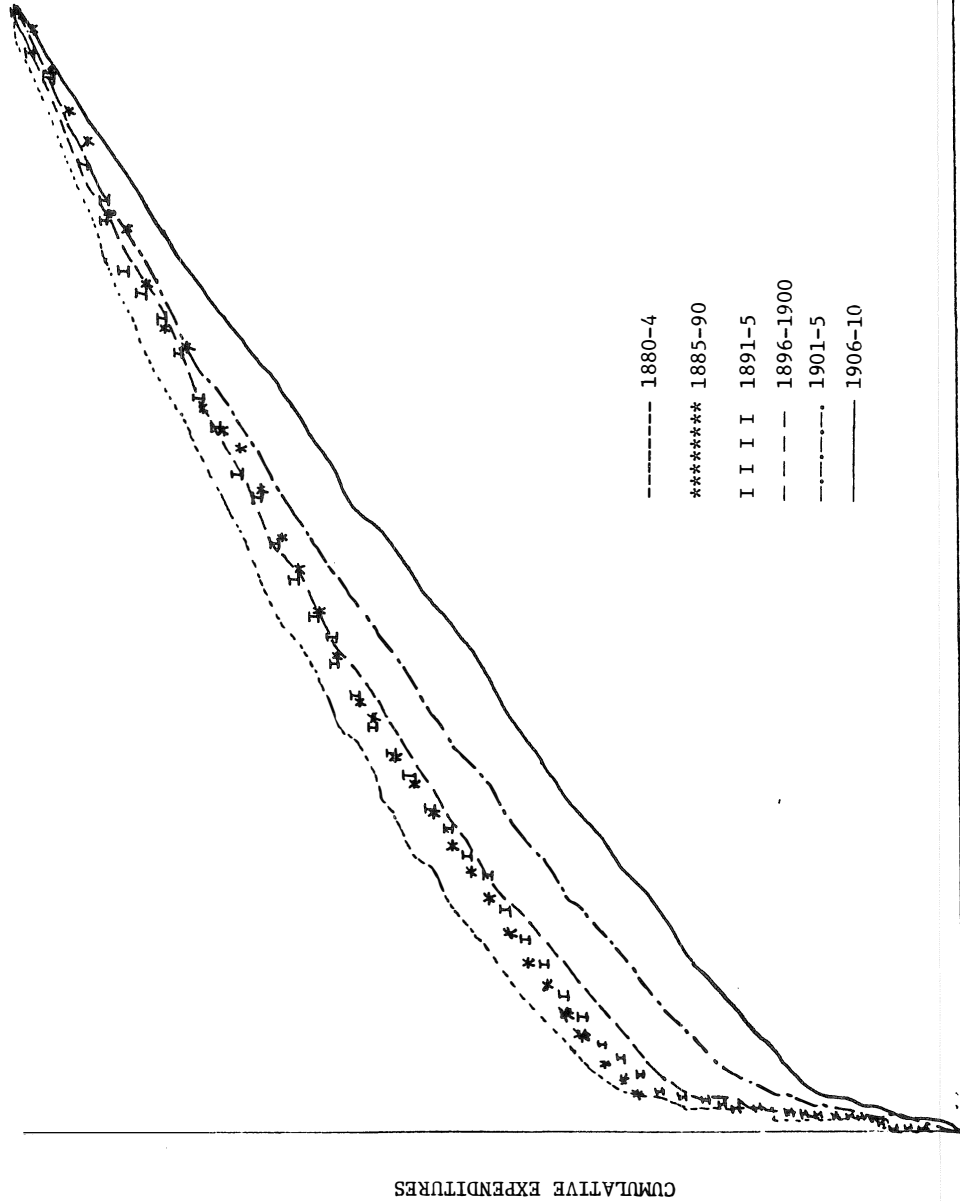
APPENDIX: TAX SHIFTS AND THE BLACK BALANCE OF PAYMENTS

Since the discussion of the black balance of payments in the text focuses on variations across counties, a consideration there of the possibility that taxes levied on white-owned property were passed through to blacks in the form of higher prices and rents would have been distracting. Nevertheless, because of the inherent interest of the concept of the balance, the problem deserves to be treated briefly.

There were two taxes which might have had a substantial effect on the black balance: the tax on white-owned farms tenanted by blacks, which might have been passed through in the form of higher rents, and the tax on the value of the property of railroad, telephone, and telegraph companies, which might have been shifted to consumers. Now, the effect of either of these transfers would have been much less in the earlier than in the later part of the era, for taxes on all forms of property comprised a much smaller proportion of the total taxes before 1900 than after. In 1880, for example, poll taxes comprised 58 percent of the total school taxes; in 1889 and 1894, 45 percent; and in 1900, 38 percent. But they dropped to 29 percent of the total by 1904, and 23 percent in 1909. Any shift of property taxes to renters, tenants, and consumers, therefore, would have a much greater impact on the total tax burden of blacks after 1900 than before, and their effect in the earlier years can for practical purposes be largely disregarded.

The calculation of the impact of tax shifts for 1909 is more tedious than complex. The 1910 U.S. Census gives the value of property

FIGURE 1
LORENTZ CURVE ILLUSTRATING THE IMPACT OF DISFRANCHISEMENT ON THE DEGREE TO WHICH EDUCATION WAS REDISTRIBUTIVE IN NORTH CAROLINA, 1880-1910 (BOTH RACES)



for farms tenanted by blacks on cash or shares as \$37,931,340. This land value, however, must be deflated to take into account North Carolina assessment practices. The total value of land in the state in 1909 given in the state auditor's report was \$176,881,261; whereas, the census rated the total value as \$307,606,620, which yields an implied assessment ratio of 57.5 percent. Let us assume that all farms with black tenants were owned by whites. Since the state property tax rate was 18 cents per \$1,000, the state property tax paid on all such land was about \$39,259 ($\$37,931,340 \times 0.575 \times 0.0018$). Similar calculations on the county level for local school taxes yield a value of \$34,846.¹

Blacks received 16.2 percent of the funds for salaries, buildings, and sites in the 1910 school year, when the 1909 taxes would have been spent. If white landlords shifted none of the taxes to black tenants, the blacks would have paid 10.4 percent of the total taxes, which gives a positive black balance of payments of 5.8 percent. If they passed through 50 percent of the taxes, the balance drops to 3.7 percent; if landlords transferred the total burden to croppers and renters, the balance goes to 1.6 percent.

Railroad, telephone, and telegraph taxes were smaller (a total of \$161,489 in 1909) and make less difference in the estimate of the balance of payments. Blacks owned 4.67 percent of the property in North Carolina in 1909. There are no income figures at the state level separated by race. If the corporations passed on all these taxes to consumers of freight and passenger services, and blacks bought goods and services in proportion to the wealth they held, then the increases in taxes blacks paid would amount to \$7542 ($4.67\% \times \$161,489$). Since blacks no doubt

received a higher proportion of total income than wealth, this may be an unreasonably low estimate. If they consumed 10 percent of the goods affected by railroad, telephone, and telegraph company tax shifts, the black tax burden would increase by \$16,149. Subtracting this arbitrarily chosen figure from the black balance computed above gives a balance in favor of the blacks of about 0.3 percent.

Thus, varying assumptions about the shifts in taxes from businesses and landlords to consumers and tenants yield a range of estimates of the black balance of payments in 1909 of from 5.8 percent to 0.3 percent. Though earlier census figures on tenancy are either too sketchy or too unreliable to allow similar estimates, it is clear that the earlier tax transfers must have been much smaller. It is reasonable to conclude, therefore, that while one can be fairly certain about the validity of the figures for the early years in table 8, the black balance of payments may well have been reduced to little or nothing by 1910.

FOOTNOTE TO APPENDIX

¹ The total of local taxes was computed in the following fashion:

The 1909 state auditor's report gives the total school taxes levied in each county by all districts. Dividing the local school taxes by the value of real and personal property in each county yields a local school tax rate. The 1910 census lists the number of farms (call it F); the value of their land (V); and the number of black cash and share tenants (T). $(T \div F) \times V$ gives the best estimate of the value of the land on which blacks were tenants. If we deflate the land value recorded in the census by 0.575, which is the ratio of the state and national assessments, multiply the result by the tax rate in each county, and sum over all counties, we get an estimate of the total local taxes paid on land tenanted by blacks. In equation terms, if "R" represents the tax rate and "L" the total of local taxes on black-tenanted land,

$$L = \sum (.575) \times (T/F) \times V \times R.$$

The two assumptions embedded in this procedure tend to offset each other. The first, the uniformity of the tax rate in each county, probably overestimates the taxes paid on land where blacks were tenants, since the rates were not really uniform, and were undoubtedly higher in urban than in rural school districts. The second, the uniformity of land values in each county, probably underestimates the tax, since the plantation owners who had black tenants almost surely owned comparatively high-priced land. In 1910, the value per acre of land tenanted by blacks was \$19.26, while the value of all farms was \$15.29 per acre according to the census. Unfortunately, because the data was aggregated at the county level, there is no way to test these two assumptions thoroughly.