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Reconsidering the roles of distance and selectivity in mass migrations:

The case of the twentieth-century U.S. South

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Numerous studies of U.S. internal migration have argued that blacks and whites who left the South during the twentieth century were relatively advantaged compared to those who stayed home. For instance, southern out-migrants were generally better educated, younger, and more likely to have prior experiences with urban living and industrial work than those who remained in the South (Lieberson 1978 and 1980, Marks 1989, Alexander 1998, Tolnay 1998 and 2001, Adelman and Tolnay 2003). Recent investigations have begun to link the selectivity of those making the Great Migration to the distance that migrants moved. As one recent paper found, migrants of both races who made the longest-distance moves to the West Coast were more even selective than those moving North (Tolnay, Eichenlaub, and Alexander 2006). Another recent article explicitly linked greater migration distances with a more advantaged migrant population, finding that migrants who were younger and more educated tended to move further away from the South than those who were older or had less education (Tolnay et al. 2005).

Migration theories have no trouble explaining these behaviors. More distant destinations are more expensive to get to and usually require a more abrupt social and cultural transition than nearby destinations. Moving far away requires that one overcome more "intervening obstacles," to use the term from Everett Lee's classic article "A Theory of Migration" (Lee 1966). As Lee argues and others have argued since, the degree of positive selection should be expected to increase with the difficulty of the intervening obstacles, distance being one of the most prominent intervening obstacles. It is not difficult to imagine that the most prepared migrants would be more likely to make big moves, whereas less prepared migrants would want or need to make shorter, less abrupt moves. This is one of the central tenets of modern migration theory.

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Migrants surely understood this dynamic in much the same way as the theorists did. Southerners who lived in cities or had relatively more education than others were also the most likely to go North. There is also considerable evidence that rural outmigrants often strategized to move "through" southern cities on their way to the North or West, spending months or even years picking up skills and maximizing their chances for success at distant northern and western destinations. Ernest Withers, a black resident of mid-century Memphis, described migrants' strategies in this way,

Beale Street was the congregant street of Memphis for African-American people, not only from here but from a good hundred-mile radius. Memphis was the kickoff point, the pivotal point for adjusting to living away from being on the farm. If a guy took a chance and came to Memphis and didn't make it here, it was just a short hop back home. But if he decided to make a strong attachment to the future, he could go on to Chicago. (Withers interview, 2002).

Ethel Smith, a white migrant from Kentucky to Indianapolis, put it even more succinctly: "my family never considered moving straight to Indianapolis from Hardinsburg [Kentucky]. No, we was down there in Kentucky, and Louisville was the next stop." (Smith interview, 2000)

The relationship between migration distances and migration selectivity are evident in internal migrations around the world (Ravenstein 1885 and 1889; Sjaastad 1962; Anderson 1971; Levy and Wadycki 1974a, 1974b; Schwartz 1973; Conway 1980; Jackson and Moch 1989; Withers and Watson 1991; Moch 1992; Hoerder and Moch 1996; Boyle and Shen 1997). Studies in numerous contexts have suggested that moving a short distance is a reasonable way to minimize one's risk. Nearby destinations were easier to get to, they were easier to adjust to, and--perhaps most importantly--they were easier to return home from. Big moves require a big risk, and the evidence shows that potential migrants do not take big risks lightly.

This paper seeks to problematize these well-established patterns. Previous studies of selectivity during the period of the Great Migration have focused only on migration *out of the South.* This paper additionally considers migration selectivity and distance among those who moved *within* the South. Relevant migration theories and the existing studies of the Great Migration suggest that the intra-South movers should have been less advantaged than those who made the move out of the South. Southern destinations were typically closer, cheaper to get to, and often allowed migrants to maintain tighter ties with home than did destinations in the North and West. In the words of the migrant quoted above, intra-South moves were usually "just a short hop home." Nevertheless, this paper will provide evidence that the intra-South movers were a surprisingly selective stream relative to the inter-regional movers. In the case of migration within and out of the mid-twentieth century South, the standard relationship between selectivity and distance breaks down.

Identifying Migrants and Estimating Migration Distance

Identifying migrants is typically a fairly straightforward matter when using U.S. census data. Researchers studying internal migration have two options: the question on state-of-birth (asked of all persons since 1850), or the question on town, county, and state of residence five years prior to the census (asked of persons aged 5+ since 1940, except in 1950, when the question referred to place of residence 1 year ago). These questions thus allow researchers to identify migrants who either left a given state at some point in

their lives or left a given town, county, or state within the past five years. Nearly all recent studies of southern outmigration identify migrants with the question on state of birth. The question on place of residence five years ago is more limited in that it identifies only *recent* migrants; analyses using this question are often troubled by low case-counts, especially in 1940 and 1950. While there are almost never enough cases to study migrants from a *particular* town or county, the 5-years-ago question does allow researchers to define large geographic areas that are comprised of parts of several states, such as the Great Plains, Appalachia, or the Rust Belt.

The question on place of residence 5 years prior to the census is essential for this analysis in that it allows a more fine-grained measure of distance moved. Since I am interested primarily in the migration of southerners (rather than the possible return migration of non-southerners who lived in the South), I use both of the migration-related questions that the census provides. I define migrants as southern-born persons who moved from within the South to any southern or non-southern destination in the five years prior to the censuses of 1940, 1950, 1970, and 1980. This analysis uses standard Census Bureau definitions of the regions of the United States. The 17-state South ranges from Texas to Delaware, the North ranges from the Great Plains to the East Coast, and the West consists of the Mountain and Pacific states (see Figure 1).

The best possible measure of distance one could generate from census data would be from previous county-of-residence to current census tract of residence.¹ As anyone who has used census microdata knows, the census microdata samples have never

¹ Larry Long and colleagues have used various survey data to investigate the extent to which even this measure is too crude for some analyses (Long, Tucker, and Urton 1988).

included the maximum level of geographic detail that was collected. The censuses with high-quality migration questions--those from 1940 onward--are also the censuses that are still bound by the Federal law specifying that all identifying information must be kept private for 72 years from the date of the census. The Census Bureau's main method of ensuring respondents' confidentiality has been to restrict the geographic identifiers on each case. Low-level geography such as block and tract are never identified in the microdata files.

The measure of distance employed in this paper relies on distances between the geographic center of every county pair in 1940 or every "County Group" pair in 1980. The 1940 IPUMS file comes the closest to providing an ideal measure of migration distance. While the creators of the original 1940 PUMS were not permitted to identify current or previous county of residence, they did include a county-to-county measure of miles moved for all inter-county migrants. This is almost as accurate a measure as we could hope to have from the census.² The data from 1980 are not quite as fine-grained. The lowest level of geography identified in the 1980 files is the "County Group." County Groups combine proximate counties into single units containing at least 100,000 people. The IPUMS files from 1980 includes variables for County Group of current residence and County Group of residence 5 years prior to the Census. County Groups contained an average of 2-3 counties each and were an average of about 3,000 square miles in size.

² County-to-county distances in the 1940 IPUMS file are based on populationweighted county centers, using 1970 population data. One significant shortcoming of the 1940 distance moved variable is that there is a great deal of missing data. About 12% of respondents apparently did not report a town or county of birth (or not one that could be identified). For more information, see the MIGDIST5 variable description at http://www.ipums.org/usa.

of the units can get quite large in some rural areas. In 1980, for instance, the state of Montana has only 3 County Groups, each measuring 30,000 square miles. County Groups are typically significantly smaller than this in the eastern states. The analgous concept in the 1940 microdata file is the State Economic Area (SEA).³

Previous research has used center-of-state to center-of-state measures to study distances moved in U.S. internal migrations (e.g., Tolnay et al. 2005). State-to-state measures are probably fine for studying most long-distance inter-regional moves, but they would be inappropriate for the short distance moves at the heart of this paper. Since the vast majority of all migrations are over very short distances, a great deal of inter-state migration happens right along state lines. For this reason, state-center to state-center measures usually tend to overstate distance moved. To take one example, the geographic center of South Carolina is 175 miles from the geographic center of North Carolina. State-to-state measures would thus assign all migrants between the two states a value of 175 miles moved. In 1940, State Economic Area to State Economic Area measures include more than 500 possible distances ranging from 22 miles moved to 362 miles moved. The estimated median distance moved using State Economic Area measures in 1940 is 120 miles. Using the even more fine-grained county-to-county measures available in that sample, the estimated median distance moved between the two states was only 75 miles. In this way, when the focus is on migrants between adjacent states, the detail of geographic identifiers can make a significant difference in the estimate of mean distance moved. State-to-state measures overstate migration distances the most,

³ I used the boundary files from the IPUMS-USA website to calculate the distances between all County Groups in the 1980 5% State sample. Boundary files and more information about 1980 County Groups is available at http://www.ipums.org/usa.

followed by County Groups and counties themselves. It seems likely that an even more detailed geographic identifier--were it available--would reveal an even lower average distance moved.

Moving within and out of the South during the Great Migration

As anyone following developments in southern or African-American history knows, scholars of the Great Migration no longer restrict their focus to the half-million southern blacks who moved north in search of industrial work during World War I. Newer studies of the Great Migration have expanded the scope to the middle and later decades of the twentieth century, to western destinations, and to the even larger parallel out-migration of southern whites. Ironically enough, the last frontier of Great Migration studies seems to be the closest to home: there are relatively few studies of migration *within* the mid-twentieth century South.

While there are good reasons for the scholarship's primary focus on inter-regional migration, there is undoubtedly increasing interest in the within-South migration that was taking place at the same time. Numerous recent and forthcoming works deal with migrants to southern cities (e.g., Cassanello 2000; Warren 2000; Caldwell 2001; Adams 2002; Gessel 2003; and Kyriakoudes 2003). As migration studies more generally has evolved into a field in its own right, historians and sociologists studying the Great Migration have also come to ask more pointed questions about the actual process of migration that took place during the southern exodus. Questions about who moved, how the black migration differed from the parallel white out-migration, and what type of

migrant went where have emerged to the fore. Only recently have scholars begun to turn the story inward, asking similar questions about migration within the South.

Migration was extraordinarily common in the mid-twentieth century South. With a total population of just over 34 million people, about two-thirds of all southerners moved between 1935 and 1940. As Table 1 shows, about half of these moves were *within* a county. Even among those who moved across county boundaries, the majority moved within their own state. About 5% of all southerners moved across state lines between 1935 and 1940, and 2% left the South for the North or West. In the single year between 1949 and 1950, about 1-in-5 southerners of both races had moved.⁴ The numbers of those moving declined significantly by 1965-1970 and 1975-1980, during which times fewer than half of all southerners moved. The proportion of southerners moving to the North or West was slightly higher in 1970 than in the other years. Otherwise, destination selection among those who moved was largely stable over time.

On the whole, the southern out-migrants were more educated and more urban than the average black or white southerner. As has been argued by numerous scholars, the southern out-migration was *selective* in this sense. It is not obvious that a high school education or urban experience would necessarily benefit a migrant at destinations that were largely urban and industrial, yet time and time again scholars have identified this clear bias in the migration. No study has systematically addressed the question of whether education or urban experience had a tangible economic benefit to migrants in the North and West, but it does seem likely that there would at least be a cultural benefit that that would help the southerers adjust to life in another region. Rather than necessary

⁴ Data on 1950 migration patterns was generated from the 1950 1% IPUMS sample and is not presented in Table 1.

training that has a measurable economic payoff, education and urban experience are perhaps more properly viewed as cultural conditioning that encouraged migration and probably benefited migrants in other ways. In the words of the migrant quoted in the introduction, people in cities had already "made a strong attachment to the future," a commitment which often went hand in hand with the desire to leave the South. For better or for worse, these were qualities on which potential migrants placed value.

Mid-twentieth century migration patterns: 1935-40 and 1949-50

In terms of the relationship between distance and migration, mid-century black migrants moved exactly as migration theories and the existing empirical literature suggests they should have. As Table 2 suggests, the relationship between distance moved and migration selectivity was extraordinarily clear among black migrants who moved between 1935-40 and 1949-50. The westward migrants came from the most urban and educated backgrounds, followed by the northern migrants, the interstate South migrants, the within-state inter-county migrants, the intra-county migrants, and finally by the non-movers, in that order.⁵ Farmers were more inclined to make short distance moves, while urban people were more inclined to make long-distance moves. In short, the migrants' increasing selectivity moved in lock-step with increasing migration distance.

These descriptive patterns are supported by the multinomial logistic regression results presented in Table 3. All of the models presented in this paper use the few available pre-migration characteristics to predict migrants' destination as either interstate

⁵ Data on 1950 migration patterns and on 1940 intra-state migration patterns is not presented in Table 2. All statistics were generated using the 1940 and 1950 1% IPUMS files.

South, North, or West. The models are restricted to persons aged 18 and up. I have run separate models for whites and blacks. All models present relative risk ratios, with the base category being interstate migration within the South. In 1940 and 1950, the available variables on pre-migration characteristics include age, sex, education, metropolitan status before moving, and farm status before moving.⁶ The relative risk ratios in Table 3 suggest that, for instance, black migrants with a high school education were 1.3 times more likely to choose a northern destination than a destination within the South. Black southerners living in the central cities of southern metropolitan areas were 1.4 times more likely to go North and 2.2 times more likely to go West than to move to another southern state. Similarly, those on southern farms were only 0.5 times as likely to go North or West as to another southern state. On the whole, the models presented for blacks in Table 3 suggests that the descriptive findings are robust and not simply driven by any particular variable.

The mid-century southern white migration followed a radically different pattern. As panels describing white migrants in Tables 2 and 3 show, white migrants moving in 1935-1940 showed an inverse relationship between migration selectivity and the destination distance. The most selective migrants made relatively short-distance moves within the South. The northward migrants were less educated and urban than the interstate southern movers, and the westward migrants were the least educated and urban of all. Those with a farming background were significantly over-represented in the move out of the South; this was particularly true of those making the long-distance move to the West. All of these patterns were evident despite that inter-state southern migrants moved

⁶ Future model could include variable indicating marital status prior to moving.

just over half the distance of the northward migrants, on average, and only one sixth the distance of the westward migrants. Again, the multinomial logistic regressions suggest that the descriptive statistics are robust and for the most part operate independently of one another.

This deviation from the expected pattern is not likely to surprise anyone familiar with Depression-era trends in white migration. In the late 1930s, it is well known that the Dust Bowl pushed poor southern white migrants to the far West. Maybe it should not be surprising to learn of the inverse relationship between selectivity and distance in the Dust Bowl migration to the West at this time. While recent Dust Bowl migration scholarship has argued that the move was actually highly representative of the population as a whole (rather than mostly destitute people), the analysis presented here reminds us that migrant streams within the modern United States are typically much more than representative--most are selective (Gregory 1989).

Still, from the perspective of the orderly black migration, the white migration patterns are curious. Black southerners had their own environmental catastrophe of sorts during the 1930s, as the Agricultural Adjustment Act and increasing southern farm mechanization pushed many black laborers and sharecroppers out of the rural South (Daniel 1985; Holley 2000). Most of them responded by moving very short distances. Why did rural whites who made the Dust Bowl migrations go so far? They traveled more than 1,100 miles on average. The North was much closer: Oklahomans and Texans who moved North between 1935 and 1940 traveled only 550 miles on average. And, of course, very large numbers of Oklahomans and Texans moved across state lines within the South, traveling only about 280 miles on average. Farm labor opportunities were available at all of these destinations. In fact, Texans and Oklahomans who made those shorter distance moves were just as likely to work as farm laborers as were those who headed West. Part of the explanation for the West's draw undoubtedly lies in the welldocumented boosterism that drew Dust Bowl migrants to California. But all of the same questions could be asked of the southern white migration to the late 1930s North, where no similar boosterism has been documented. Why was this stream less selective than the intra-South stream as a whole? Why did these migrants move so far?

Late-twentieth century migration patterns: 1965-70 and 1975-80

Just as was the case among southern whites in the early-twentieth century, trends in late-twentieth century migration selectivity and distance deviated sharply from the expected patterns. Among southern black migrants, those moving within the South were increasingly indistinguishable from those moving West. Black migrants who moved within the South and to the West were highly selective along the measurable dimensions. Northern migrants were by far the most anomalous among late twentieth century southern black migrants. Northward movers between 1965-1970 and 1975-1980 were significantly less educated and less urban than those who moved shorter distances within the South. They were also more rural than even the non-movers among southern population as a whole, violating not only our expectations regarding distance and selectivity, but the generally accepted pattern of migration selectivity itself (see Tables 4, 5, and 6)

Again, it is not difficult for anyone familiar with the historical context of the U.S. North to make sense of this finding. Industrial development in the North and Midwest was clearly on the decline as early as the 1950s. Numerous midwestern cities began to suffer from a dispersion in auto and rubber manufacturing jobs, with many of these positions going to the South, the West, and overseas. Even as southerners continued to move to the North and Midwest in large numbers, the regions saw a net *out-migration* in the decades after World War II. Midwestern hubs such as Chicago, Detroit, Cleveland, St. Louis, Cincinnati, and Indianapolis lost anywhere from 20% to 50% of their total populations between 1950 and 1980 (Teaford 1985).

Just as the North was becoming less of a magnet, the South was becoming more attractive. As the Civil Rights movement began to make its impact in the South, and as the vision of the northern Promised Land became a bit more tarnished, some black southerners surely felt less driven than ever to leave the South. Also, industrial development in many southern areas progressed at an unprecedented rate between 1950 and 1980. Through a combination of business-friendly labor laws and flexible local tax and assistance policies, southern states had great success attracting northern and foreign business in the post-World War II period As a result, most major southern cities saw massive growth in the second half of the twentieth century. By the 1970s the big-city South had substantially lower poverty rates, lower unemployment rates, lower taxes, newer housing, and faster rising incomes than did cities in the Northeast and Midwest (Cobb 1993). Most urban southerners--and most "prepared" southerners more generally-continued to make up more than their share of the streams to the most desirable destinations. The difference in the 1960s and 1970s was that some of the most desirable destinations were now in the South.

The late-twentieth century southern white migration followed yet another trajectory: there was no clear relationship between distance moved and migration selectivity. As the descriptive statistics in Tables 4 and 5 show, the West drew a more urban and educated stream than the North or South did, but only slightly so. The multivariate relationships presented in the regression in Table 6 support this analysis. The model statistics suggest that selectivity was still evident in the move to the West, but only in a very muted way. It seems possible that distance was simply no longer the obstacle that it had been earlier in the century. It was easy and fairly inexpensive to drive or take a bus almost anywhere. Regional cultures were arguably not as prominent as they had been in the past, so "fitting in" was probably less of an issue than it ever had been. Furthermore, since the migration had been going for more than a half-century, many if not most southerners had contacts with earlier out-migrants to the North and the West, and fewer migrants had to move without any information about their destination. In other words, in the late twentieth century, it seems possible that the entire United States was "just a short hop home."

Conclusion

No reasonable person expects theories to work properly in the messiness of the real world. As the case of migration within and out of the twentieth-century U.S. South suggests, the theoretical relationship between migration distance and migration selectivity is actually most compelling in what it fails to explain. Of the four data points considered in this paper--early black migration, early white migration, late black migration, and late white migration--only the first made clear sense in the context of basic migration theory.

While the other cases were understandable in terms of the historical and environmental context, their failure to conform to a broadly applicable theory helps to draw attention to patterns that otherwise might have seemed completely natural simply because they are part of the recorded past.

This study's most meaningful contribution to the study of the Great Migration and United States history more generally is to put the spotlight on some of these irregular patterns. Previous studies of the southern outmigration have established the migrants' selectivity by comparing inter-regional migrants to those who stayed behind. When one also considers the much larger number of southerners who moved within the South--and differentiates between those who moved North and West--the conventional wisdom about selectivity in the Great Migration simply does not hold up to scrutiny. It is only possible to see this anomaly by using greater geographic specificity when identifying migrants' destinations.

This investigation also has a contribution to make to scholars' broader understanding of the meaning of distance as an intervening obstacle in migrations. The fact that the relationship between selectivity and distance was almost non-existent in the later period could be considered simply a fluke, except that there are numerous cases around the world (and in the early-twentieth century South) where the pattern really does work. So we should take these deviations seriously. What we might be seeing here is a significant historical change. Perhaps the theory, which was first devised in the nineteenth century, is most suited to a time when migration happened mostly by foot or buggy rather than by car or plane. It would make sense that the importance of distance as an intervening obstacle has declined over time with every transportation revolution.

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Maybe we are now at a point where--for internal migrations of more than a 50 miles or so--distance really does not matter.

WORKS CITED

Adelman, Robert M. and Stewart E. Tolnay (2003) "The Occupational Status of Immigrants and African Americans at the Beginning and end of the Great Migration." *Sociological Perspectives* 46: 179-206.

Alexander, J. Trent. "The Great Migration in Comparative Perspective: Interpreting the Urban Origins of Southern Black Migrants to Depression-era Pittsburgh." *Social Science History* 22:3 (Fall 1998): 349-376.

Anderson, Michael (1971) "Urban Migration in Nineteenth Century Lancashire: Some Insights into Two Competing Hypotheses." *Annales de Demographie Historique* 13-26.

Adams, Luther. (2002) "Way Up North In Louisville: African American migration in Louisville, Kentucky, 1930-1970." Ph.D. Dissertation at the University of Pennsylvania.

Boyle, Paul and Jianfa Shen (1997) "Public Housing and Migration: A Multi-level Modelling Approach." *International Journal of Population Geography* 3(3): 227-242.

Cassanello, Robert (2000) "The Great Migration, migrants, and identity in the making of New South Jacksonville, Florida, 1865-1920." Ph.D. Dissertation at Florida State University.

Cobb, James C. *The Selling of the South: The Southern Crusade for Industrial Development, 1936-1990.* Urbana and Chicago: University of Illinois Press, 1993.

Conway, Dennis (1980) "Step-Wise Migration: Toward a Clarification of the Mechanism." *International Migration Review* 3-14.

Daniel, Pete. *Breaking the Land: The Transformation of Cotton, Tobacco, and Rice Cultures Since 1880.* Urbana: University of Illinois Press, 1985. Gessel, Elizabeth Anne (2003) "Nowhere but heaven: Savannah, Georgia during the era of the First Great Migration." Ph.D. Dissertation at the University of California, Berkeley.

Gregory, James N. (1989) *American Exodus: The Dust Bowl Migration and Okie Culture in California*. New York and Oxford: Oxford University Press.

Gregory, James N. (1995) "The Southern Diaspora and Urban Dispossessed: Demonstrating the Census Public Use Microdata Samples." *Journal of American History* 82: 111-134.

Gregory, James N. (2005) *The Southern Diaspora: How the Great Migrations of Black and White Southerners Transformed America*. Chapel Hill: University of North Carolina Press.

Hoerder, Dirk, ed. (1985) *Labor Migration in the Atlantic Economies: The European and American Working Classes During the Period of Industrialization*. Westport, Connecticut and London, England: Greenwood Press.

Hoerder, Dirk, and Leslie Page Moch, eds. (1996) *European Migrants: Global and Local Perspectives*. Boston: Northeastern University Press.

Holley, Donald. (2000) *The Second Great Emancipation : The Mechanical Cotton Picker, Black Migration, and How They Shaped the Modern South.* Fayetteville: University of Arkansas Press.

Jackson, James H. and Leslie Page Moch (1989) "Migration and the Social History of Modern Europe." *Historical Methods* 22: 27-36.

Kyriakoudes, Louis M. (2003) *The Social Origins of the Urban South: Race, Gender, and Migration in Nashville and Middle Tennessee, 1890-1930.* Chapel Hill: University of North Carolina Press.

Levy, Michael B. and Walter J. Wadycki. 1974a. "What is the Opportunity Cost of Moving? Reconsidering the Effects of Distance on Migration." *Economic Development and Cultural Change* 22(2) 198-214.

Levy, Michael B. and Walter J. Wadycki. 1974b. "Education and the decision to migrate: an econometric analysis of migration in Venezuela." *Econometrica* 42(2) 377-388.

Lieberson, Stanley (1978) "Selective Migration from the South: A historical view." Pp 119-141 in Frank Bean and Parker Frisbie, eds., *The Demography of Racial and Ethnic Groups*. New York: Academic Press.

Lieberson, Stanley (1980) *A Piece of the Pie: Blacks and Immigrants Since 1880*. Berkeley and Los Angeles: University of California Press.

Long, Larry C., Jack Tucker, and William L. Urton. 1988. "Measuring Migration Distances: Self-Reporting and Indirect Methods." *Journal of the American Statistical Association* 83(403): 674-678.

Marks, Carole. *Farewell--We're Good and Gone: The Great Black Migration*. Bloomington: Indiana University Press, 1989.

Ravenstein, E. G. (1889) "The Laws of Migration, Second Paper." *Journal of the Royal Statistical Society* 241-301.

Schwartz, Aba (1973) "Interpreting the Effects of Distance on Migration." *Journal of Political Economy* 81: 1153-1169.

Interview with Ethel Smith. By Erin Cornish. Indianapolis, Ind. March 24, 1983. Held at the Indiana University Oral History Archives, Indiana University, Bloomington, IN.

Teaford, Jon C. (1993) *Cities of the Industrial Heartland: The Rise and Fall of the Industrial Midwest*. Bloomington and Indianapolis: University of Indiana Press.

Tolnay, Stewart E. (1998) "Educational selection in the migration of southern blacks, 1880-1990." *Social Forces* 77: 487-514.

Tolnay, Stewart E. (2001) "The Great Migration Gets Underway: A comparison of black southern migrants and non-migrants in the North, 1920." *Social Science Quarterly* 82: 235-51.

Tolnay, Stewart, Katherine J. Curtis White, Kyle D. Crowder, and Robert Adelman. (2005) "Distances Traveled During the Great Migration: An Analysis of Racial Differences Among Male Migrants." *Social Science History* 29: 523-548.

Tolnay, Stewart E., Suzanne Eichenlaub, and J. Trent Alexander. (2006) "The Correspondence Between Migration Selection and Migration Outcomes: The Case of the Great Migration." Working Paper.

Warren, Gloria Vickers (2000) "With hope in their hearts': The migration of African-American Women to Baltimore, 1918-1946." Ph.D. Dissertation at Morgan State University.

Interview with Ernest C. Withers as quoted in, Jon Pareles, "A Shutter that Clicks to the Rhythm of the Blues," *New York Times*, March 19, 2002, p. B1-2.

Withers, Charles W.J. and Alexandra J. Watson (1991) "Step-wise migration and Highland Migration to Glasgow, 1852-98." *Journal of Historical Geography* 17: 35-55.



Figure 1 Census-defined regions of the United States



Figure 1 Census-defined regions of the United States

Table 1 Percentage of southern-born adults moving to each destination

	1935-40		1965-70		1975-80	
	White	Black	White	Black	White	Black
Non-mover	36.1	31.7	53.5	57.0	56.5	61.4
Within a county	47.0	56.9	24.3	28.6	24.4	26.2
Within a state, between counties	8.1	5.2	10.7	5.0	11.9	6.4
Within the South, between states	6.4	4.5	8.7	5.5	5.3	4.1
To the North	1.3	1.5	1.7	2.9	1.0	1.3
To the West	1.2	0.3	1.0	1.0	0.8	0.7

Source: Integrated Public Use Microdata Series files (IPUMS), 1940 1% sample, 1970 Form 2 State sample, 1980 5% sample. Note: These statistics include only persons aged 18+ who moved within our out of a southern state.

				Destination type	
		Southern	Between	To the	To the
		non-mover	southern states	North	West
	% with a high school education	21	38	34	27
Whites	% moving from a large central city	16	30	27	24
	% moving from a farm	46	26	29	40
	Miles moved (median)	-	199	353	1232
	% with a high school education	6	10	12	16
<u>Blacks</u>	% moving from a large central city	17	28	35	45
	% moving from a farm	46	41	29	19
	Miles moved (median)	-	150	480	1233

Table 2 Characteristics of southern-born adults moving within or out of the South between 1935-1940

Source: Integrated Public Use Microdata Series files (IPUMS), 1940 1% sample.

Table 3 Multinomial Logistic Regression Predicting the Relative Risk of Migration to the North andWest, as compared to interstate migration within the South, 1935-1940

	White Migrants		
	To the North	To the West	
	(N=1,311)	(N=1,372)	
Age	0.985 ***	0.986 ***	
(in years)	(0.002)	(0.003)	
Sex	0.999	0.886 *	
(0=Male, 1=Female)	(0.063)	(0.055)	
High school graduate	0.840 **	0.654 ***	
(0=No, 1=Yes)	(0.057)	(0.000)	
Large City Status Before Moving	0.953	0.978	
(0=Not in large city, 1=Large city)	(0.073)	(0.077)	
Farm Status Before Moving	1.183 *	1.674 ***	
(0=Non-farm, 1=Farm)	(0.090)	(0.000)	
Intercept	0.501	0.602	
	(0.141)	(0.138)	

	Black Migrants		
	To the North (N=449)	To the West (N=112)	
Age	0.991	0.994	
(in years)	(0.005)	(0.009)	
Sex	1.504 **	1.057	
(0=Male, 1=Female)	(0.182)	(0.214)	
High school graduate	1.303	1.706 *	
(0=No, 1=Yes)	(0.230)	(0.453)	
Large City Status Before Moving	1.431 **	2.190 ***	
(0=Not in large city 1=Large city)	(0.199)	(0.000)	
Farm Status Before Moving	0.518 ***	0.495 *	
(0=Non-farm 1=Farm)	(0.076)	(0.138)	
Intercept	0.402 (0.269)	0.132 (0.454)	

Notes: Reference category for the equation is Moving Between States Within the South

Relative Risk Ratios are presented. The standard errors are in parentheses.

Universe includes only persons aged 18+.

*p < 0.05 **p < 0.01 ***p < 0.001

Source: Integrated Public Use Microdata Series (IPUMS), 1940 1% sample.

			Destination type		
		Southern	Between	To the	To the
		non-mover	southern states	North	West
	% with a h.s. education	40	64	64	70
<u>Whites</u>	% moving from metropolitan areas	50	66	58	66
	Miles moved (mean)	0	406	564	1601
	% with a h.s. education	20	47	44	56
Blacks	% moving from metropolitan areas	54	71	48	60
	Miles moved (mean)	0	344	601	1710

Table 4 Characteristics of southern-born adults moving within or out of the South between 1965-1970

Source: Integrated Public Use Microdata Series files (IPUMS), 1970 Form 2 State sample.

Table 5 Characteristics of southern-born adults moving within or out of the South between 1975-1980

			Destination type		
		Southern	Between	To the	To the
		non-mover	southern states	North	West
	% with a h.s. education	52	79	79	82
<u>Whites</u>	% moving from metropolitan areas	61	74	75	78
	Miles moved (median)	-	331	482	1469
	% with a h.s. education	37	71	63	76
<u>Blacks</u>	% moving from metropolitan areas	67	77	61	78
	Miles moved (median)	-	235	588	1601

Source: Integrated Public Use Microdata Series files (IPUMS), 1980 5% State sample.

Table 6Multinomial Logistic Regression Predicting the Relative Risk of Migration to the North andWest, as compared to interstate migration within the South, 1975-1980

	White M	White Migrants		
	To the North	To the West		
	(N=7,257)	(N=6,212)		
A	0.000 ***	0.004 ***		
Age	0.992	0.994		
(in years)	(0.001)	(0.001)		
Sex	1.136 ***	1.007		
(0=Male, 1=Female)	(0.023)	(0.028)		
High school graduate	0.895 **	1.134 **		
(0=No, 1=Yes)	(0.289)	(0.041)		
Metropolitan status before leaving	1.076 *	1.273		
(0=Not metropolitan 1=Metropolitan)	(0.315)	(0.041)		
Intercent	0 222	0 154		
Intercept	0.222	0.134		
	(0.064)	(0.070)		

	Black Mi	Black Migrants		
	To the North	To the West		
	(N=2,588)	(N=1,389)		
Age	1.012 ***	1.001 ***		
(in years)	(0.002)	(0.002)		
Sex	1.359 ***	1.255 ***		
(0=Male, 1=Female)	(0.630)	(0.073)		
High school graduate	0.850 **	1.230 **		
(0=No, 1=Yes)	(0.463)	(0.091)		
Metropolitan status before leaving	0.505 ***	1.035		
(0=Not metropolitan 1=Metropolitan)	(0.024)	(0.070)		
Intercept	0.253	0.081		
•	(0.108)	(0.145)		

Notes: Reference category for the equation is Moving Between States Within the South Relative Risk Ratios are presented. The standard errors are in parentheses.

Universe includes only persons aged 18+.

*p < 0.05 **p < 0.01 ***p < 0.001

Source: Integrated Public Use Microdata Series (IPUMS), 1980 5% State sample