General Editor: Alberto G. Mata, Jr., Ph.D., University of Oklahoma

Associate Editor: Catalina Herrerías, MSW, Ph.D., University of Oklahoma

Published: Twice annually, once in spring and once in winter

Questions &/or Comments: freeinquiryemail@ou.edu

ISSN: 0736-9182

MISSION: To provide an outlet for interdisciplinary scholarship.

WORLD REFEREED AND DISTRIBUTED: Sociological Abstracts. There are over 150 academic subscribers including 15 libraries in Europe, Asia, Africa, and the Americas.

SUBSCRIPTION RATES: Individuals in the U.S. $40. Foreign Surface Mail $45 (U.S. $$) Institutional rate is $75. All subscriptions must be prepaid.

ADDRESS: Associate Editor, University of Oklahoma, Department of Human Relations, 601 Elm Avenue, PHSC 728, Norman, OK 73019, (405) 325-1756.

INTRODUCTION TO THIS SPECIAL ISSUE

Dr. Marvin L. Cooke
Tulsa Community College

INTRODUCTION

As a youth in the 1960s, sociology was a good path to understand and respond to various human rights movements and urban discontent. Consequently, my involvement with sociology has almost always been driven by concerns tied to practice rather than theory. The twenty-year period after college was taken up with various social justice causes and with developing and managing various human services programs. During this time, I watched as steel and auto workers from the Midwest moved to Tulsa after having their jobs eliminated and camped out at area lakes as they looked for jobs. I watched as native Tulsa workers lost full-time jobs that paid well and were eventually only able to find work in low paying jobs without benefits. I watched as the number of homeless increased and the unemployed children of friends were incarcerated. I came to consider the old saying about human services programs being an effort to rescue drowning victims as they floated downstream. As I noticed more and more victims floating downstream, the real question emerged– "Who or what is throwing these people into the stream?" At age 40, I quit my job and went to graduate school in sociology to work on that question. These commentaries –in various ways– represent attempts to answer that question.

The articles in this special issue are based on a purposefully local analysis of data regarding Tulsa or the State of Oklahoma. I can remember making arguments before fundraisers and politicians, using national studies and datasets, only to get the response, "But we aren't like that here." So I wanted to look at how we are here. Thankfully *Free Inquiry in Creative Sociology (FICS)* was a source for publication willing to consider studies on policy and practice as much as on theory and that would consider local studies as much as national studies.

The first three studies in this issue are my primary response to the question, "Who or what is throwing people in the water upstream?" My response in brief is: Changes in the labor market that have occurred since the 1970s. At least since 1970, employment in Oklahoma –and the United States– is losing good paying jobs with benefits and gaining jobs that pay wages lower than what is needed to sustain a household over the long run with few if any benefits. In fact, employment is providing more jobs at the poverty level over time.

The first of these studies, "Little Examined Elements in the Welfare Reform Debate: The Diminished Male and the Decreased Value of Education

in the Labor Market" (*FICS* 1998 26:1), was initially motivated by a conversation I had with a colleague at work one day. She was complaining that she could not find anyone to date. She was a minority female who had been married twice before and had a child from each marriage. In my flippant, offhanded way, I suggested that her standards must be too high. What did she want? She indicated that she wanted a man who had a full-time job, a car, and did not live with his mother. How hard could that be? I went to work with my new demographic skills and compared the number of full-time employed men in her age cohort and race to the number of women. From my reading, I knew that the incarceration rates for minority males in Oklahoma was over four times what it is for whites and that being a felon basically locks one out of the labor market. I knew that changes in the labor market more negatively affected minorities than whites. But what I found was sobering. By my friend's criterion of employment alone, half of the women had no available acceptable mate. While it wasn't as drastic for non-minority women, it wasn't good.

In that study, I found that the negative effects of the emerging labor market since the late 1970s –lower wages, part-time work, no benefits– directly affected men more negatively than women. Yet women across the board still lagged behind men in earnings. Given my friend's criterion and the fact that marriage tends to be stratified by educational background and occupational cluster, women in lower paying occupational clusters and educational levels were more negatively affected than women in higher educational clusters. It is little wonder that there has been a pretty steady increase in single female-headed households at or near the poverty level.

The next essay, "Deindustrialization and the Reorganization of Occupations: The Reorganization of the Labor Market in Oklahoma Between 1970 and 1990" (*FICS* 2001 29:1) was motivated in part by my reading of Bluestone and Harrison's *Deindustrialization of America* in graduate school. From Bluestone and Harrison (1984), I knew that the United States had been undergoing deindustrialization in that we were losing manufacturing jobs while gaining service and retail trade jobs. In addition to adding lower paying jobs while losing higher paying jobs, it meant that jobs capable of supporting a family that were open to high school graduates were being replaced by jobs that would not support a family on one income. From a study of north Tulsa that I did for Raymond Rosenfeld in the late 1970s, it was also likely that the occupational mix within industries was changing. Finally, I spent some time working for the City of Tulsa in the 1990s. During that time, I kept coming across employees in our department who were temps. I included that in my analysis as well.

In 1970, I found that Oklahoma had a lower concentration of manufacturing than the U.S. average. Between 1970 and 1990, manufacturing jobs decreased as service jobs increased. Moreover, the occupational mix within industries over this time period changed. The shift from craft, laborer, and administrative support occupations to service, sales, and managerial

and professional occupations increased significantly more than expected from the change in the industrial distribution alone. This shift in occupations hollowed out blue and pink collar occupations that paid living wages and replaced them with both lower paying occupations and higher paying occupations. Finally, the proportion of part-time employment in every occupation almost doubled between 1970 and 1990.

One often hears commentators bemoan how we don't have any power to do anything about the shift in employment by industry because of globalization. I found out in this study that the shift from manufacturing to services was not as troubling to incomes as the change of the mix of occupations used by employers and –most important– the shift from using full-time employees to using part-time employees. Those changes disrupted career ladders and reduced benefits– such as health care and pensions. Those are changes that took place here in Oklahoma and could be amenable to policies and practices here.

The last of the first three articles, "Testing Some Truisms about Poverty in Oklahoma" (*FICS* 2010 38:2) evolved from my attempt to do some voluntary research for a policy group. As I indicate in the article, the truisms seem common stock of the rhetoric used by both conservative and liberal politicians in Oklahoma with respect to poverty.

The first truism is that welfare makes people dependent and thereby causes poverty. History provided a test. Between 2000 and 2006, the proportion of poor families participating in the TANF program dropped in half. Instead of a decrease in poverty as one would expect if dependency was the principal cause of poverty, the poverty rate in Oklahoma increased by three percentage points. That mirrored the increase in jobs that paid a poverty level wage for an average family in Oklahoma.

I knew a person working in a training program for TANF clients during the time period who provided a window view into how the program worked in one county. Instead of first placing clients in training to position them for better paying jobs, clients were required to look for work, which was usually at minimum wage. A full-time minimum wage job will provide barely enough income for a household of one to earn more than poverty level. Since the average household in Oklahoma is just over two and the average family is three, full-time minimum wage jobs leave families in poverty. While the requirement to work first for minimum wage jobs does not get an average household of family out of poverty, it does increase competition for bottom end jobs and thereby holds down wages.

The second truism is that increasing education levels decrease poverty. From 1999 to 2006, I observed that the increase in educational levels correlated with an increase in poverty level. I also cited a study by the state that projects a significant growth in low-income jobs that require only a high school education or less. While I agree that getting an education is required to compete for better paying jobs, in the short run, it does not create those jobs. Employers create

those jobs. Moreover, people with educations are more mobile than companies that require serious capital investment to move. It is more likely that educated workers will move to where better paying jobs are than better paying jobs moving to where educated workers are.

The third truism that is being put forth these days is that race and sex no longer matter. After 40 years of various acts that theoretically protect minorities, one would expect race and sex to no longer matter. Yet, as I found, they still matter both with respect to the segregation of occupations and wages for occupations for various races and sexes. A labor market split on the basis of race and sex is another strategy to hold wages down. As an "antipoverty" program, simply ending racial and sex discrimination would make a difference.

The fourth truism is that a rising tide –economic growth– raises all boats. I found that, between 1999 and 2006, average hourly wages adjusted for inflation declined by one percent in Oklahoma while average gross domestic product per hour worked adjusted for inflation increased by six percent. That is similar to the national trend. Here one has a rising economic tide with none of it benefiting the average hourly wages of workers. So, if the state used all sorts of tax breaks and other giveaways to attract business, the result would be no improvement for the average worker's hourly wage. Note that average workers would be paying the taxes to improve the profits of companies without improving their hourly wages.

The distribution of economic growth is not even over all incomes or occupations. I found that the bottom wage income quartile benefited least in Oklahoma from increases in per capita gross domestic product; the middle two wage income quartiles benefited a bit more but still less than the top income quartile. But even with the top income quartile, the benefit was not as great as one would expect from the change in per capita gross domestic product.

Finally, I found that one of five jobs in Oklahoma in 2006 paid a poverty level hourly wage rate based on the poverty level for the average family size of three. If wages had improved at the rate of the growth of gross domestic product per hour, only one of ten jobs would have paid a poverty level wage rate. Poverty is rooted in the labor market.

The fourth article in this edition, "Identifying Possible Impediments to Fair Housing in Tulsa, Oklahoma, Using Less-than-perfect Home Mortgage Disclosure Act Data" (*FICS* 2001 29:2) does not directly address poverty. It focuses on discrimination in mortgage lending. At the time of the study (the late 1990s), the Home Mortgage Disclosure Act Data included the census tract in which the loan was made, which made it possible to distinguish effects of characteristics of individual loan applicants from the effects of characteristics of neighborhoods of the properties for which loans were applied on lending outcomes. The study found that lower income African American households that were headed by women or contained a couple as applicants were less likely to receive loans than equivalent non-African

American households. Since the home is the principal vehicle for accumulating wealth for average working Americans, discrimination in lending inhibits the accumulation of wealth by African American households.

The last article, "A Critical Analysis of the Concept of Power: An Interactionist Revelation of Its Moral Nature" (*FICS* 1990 18) was chronologically the first written and published. While it might look theoretical, it is an attempt to try to understand how power is exercised. In practice, one is almost always involved in the exercise of or resisting power. From my analysis, I concluded that the exercise of power involves a violation of someone's preferences. Resisting the exercise of power requires making responsible parties explicit and rendering relevant moralities relative and preferential. Otherwise, social analysis emasculates the fundamental moral resources available to resist by accepting the moralities and social organization of those exercising power and its outcomes as given.

After more than twenty years of researching and thinking about the cause of poverty, where do we stand? My studies of Tulsa and Oklahoma are consistent with national studies. Mischel (2012) recently discovered rising inequality –and with it poverty– was the result of increased inequality of wages and compensation, an increased share of income going to capital rather than labor, and increased inequality of capital income.

Second, most individuals and groups who claim to "fight poverty" only provide assistance to the poor. While that helps the poor to survive, it does not stop the basic impoverishing dynamic of the labor market since the late 1970s. Even foundations that appear the most enlightened regarding poverty often focus erroneously on education as the tool to eliminate poverty. While it gives some individuals a better ability to compete in the labor market, it does not change the structure of the labor market, which has inequality and poverty built into it.

Third, strategies to actually fight poverty would be strategies that would alter the inequality and poverty in the labor market. As noted in the Russell Sage Foundation study used in "Testing the Truisms", raising the floor on wages tends to reduce poverty by forcing the sharing of income. Increases in minimum wages were found to raise the floor on wages. Strong unions were found to be associated with more income going to wages, a higher floor for wages, and a narrower difference between higher paid and lower paid workers. These outcomes would require practices significantly different from the general practice of simply providing help and education to the poor. Since I assume that capitalists would not go gentle in that direction, it would take the equivalent of bringing back Saul Alinsky. It would take organized actions such as shareholder actions, strikes, boycotts, sit-ins, unionizing, lawsuits, lobbying, and political campaigns. It would also take strategies to overcome the federal/state split in laws and regulations such that states could no longer be used by capitalists to "beggar thy workers" for profits.

On some level, capitalists such as Henry Ford knew that consumption re-

quires income, and consumption is the basic driver of an economy. Although he was probably responding to threats of unionization, he paid his workers reasonable wages so they could buy things like his cars. Income inequality chokes off consumption by distributing too little income to too many and so much to so few that –with low consumption– there is no good place to invest for a return for those who have. In this vein, Berg and Ostry of the International Monetary Fund (2011) suggested that widening inequality since 1980 probably reduced the United States' economic expansions by as much as a third. From the capitalist side, the problem is that no capitalist will make the move to share income unless forced to do so. Can capitalist act in that enlightened collective way or –as maximizing individual entities– do we need the equivalent of Saul Alinsky to create the conditions that force them?

References

Berg, A.G. and J.D. Ostry. 2011. "Inequality and Unsustainable Growth: Two Sides of the Same Coin," *IMF Staff Discussion Notes* SND/11/08.

Bluestone, Barry and Bennet Harrison. 1984. *The Industrialization of America*. NY: Basic Books.

Cooke, Marvin. 1990. "A Critical Analysis of the Concept of Power: An Interactionist Revelation of its Moral Nature." *Free Inquiry in Creative Sociology* 18:121-126.

------. 1998. "Little Examined Elements in the Welfare Reform Debate: The Diminished Male and the Decreased Value of Education in the Labor Market." *Free Inquiry in Creative Sociology* 26(1):31-42.

------. 2001. "Deindustrialization and the Reorganization of Occupations: The Reorganization of the Labor Market in Oklahoma Between 1970 and 1990." *Free Inquiry in Creative Sociology* 29(1):3-12.

------. 2001. "Identifying Possible Impediments to Fair Housing in Tulsa, Oklahoma Using Less-than-perfect Home Mortgage Disclosure Act Data." *Free Inquire in Creative Sociology* 29(2):21-32.

------. 2010. "Testing Some Truisms About Poverty in Oklahoma." *Free Inquiry in Creative Sociology* 38(2): 1-13.

Mischel, J. 2012. "The Wedges Between Productivity and Median Compensation Growth." *Economic Policy Institute Issue Brief* #330.

The *FICS* editors wish to specially acknowledge:

Heather Williamson for her professional & timely liaison work on behalf of University Printing Services, *and*

Lawana Miller for all her help with journal distributions

LITTLE EXAMINED ELEMENTS IN THE WELFARE REFORM DEBATE: THE DIMINISHED MALE AND THE DECREASED VALUE OF EDUCATION IN THE LABOR MARKET *

Dr. Marvin L. Cooke
Tulsa Community College

ABSTRACT

In the welfare reform debate in the 1990s, Republicans argued that government programs designed to give a helping hand breed illegitimacy, crime, illiteracy, and more poverty. Democrats focused on the changing labor market: High tech jobs have educational requirements that persons with little education or training cannot fill; therefore, welfare reform should target job training and education. Neither party looked at how the reorganization of the labor market negatively affected men more than women such that women had a reduced pool of employed males with livable wages as marriage partners. The loss of employed men with livable wages was found to account for increased levels of poor families with dependent children headed by single females. Also, neither party accounted for the existence of more persons with educational requirements than there are positions requiring those requirements. The labor market continues to produce employment on both ends of the skill and wage spectrum. Thus, education and training do not necessarily translate to higher paying jobs as they did before the mid-1970s.

* *Originally printed in Free Inquiry in Creative Sociology 1998 26(1).*

INTRODUCTION

Since the 1994 national elections, the rhetoric of the welfare debate has been framed in terms of dependency and the culture of poverty versus effects of the changing labor market. In the *Contract with America*, Gingrich, Armey, and House Republicans (1994) have argued that government programs designed to give a helping hand to the needy have instead bred illegitimacy, crime, illiteracy, and more poverty. Their solution was to cap welfare spending by removing welfare as an entitlement and to give block grants and certain levels of discretion to the states to develop and administer welfare programs at the state level. Additionally, several consequences designed to engender responsibility were added– provide no welfare to teenage parents; require beneficiaries to work or to be in training no later than two years after first benefits; grant no more than five years of benefits to anyone during his or her life time; require that paternity and responsibility be established in all illegitimate births before welfare benefits are sought.

If the *Contract with America* represented one side of the debate, Carville's *We're Right, They're Wrong*

(1996) might be taken to represent the rhetoric on the other side of the debate. Rather than making welfare the cause of poverty, Carville focuses on the changing labor market. High tech jobs have educational requirements that individuals with little education or training cannot fill; therefore, welfare reform should include job training and education. Carville also included several welfare reform proposals that either work directly on the labor market or provide supports –help with childcare, healthcare for the poor, reduced taxes on the working poor, and an increase in the minimum wage– for persons working for low wages. These proposals do not assume higher paying jobs.

If welfare administration is to be shifted to the state, and possibly the local level, what might one expect in terms of the rhetoric of welfare reform? Since the "local" area for this author is Tulsa, Oklahoma, the rhetoric and reality of poverty will be more closely scrutinized in the Tulsa area.

As part of the planning process for the City of Tulsa's Enterprise Community application in 1994, recommendations and findings from over one hundred existing human service and community development plans provided by governmental and nonprofit organizations were compiled. In these local plans, one finds elements of both sets of rhetoric present at the national level. Several plans are devoted to the prevention of teenage pregnancy and to parenthood training. Other plans are devoted to improving educational attainment and vocational training to better prepare area residents for the labor market. Poverty is only mentioned fifteen times in the 179 pages of compiled findings and recommendations, yet data from the U.S. Census indicates that the poverty rate for the city of Tulsa increased from 10% in 1979 to 15% in 1989. In the compiled plan recommendations and findings, issues of illegitimate births and family dissolution and issues of education and training are not explicitly linked to the problem of poverty.

If one begins with the issue of poverty rather than framing the issue in terms of welfare reform, welfare reform seems to be only part of the picture. Most of the debate over welfare reform has been aimed at the Aid to Families with Dependent Children program and therefore only involves poor families with minor children. Yet from the 1990 U.S. Census, 41% of poor households headed by persons under the age of 65 in the City of Tulsa in 1989 contained no children under the age of eighteen. These households contained 30% of poor persons less than 65 years of age. Jencks (1994) found that unattached individuals living on extremely low incomes are the most likely to become homeless. In the City of Tulsa in 1989, data from the 1990 U.S. Census indicate that 25% of poor persons less than 65 years of age were unattached adults. Just as the rhetoric of the national welfare debate has concentrated on poor households headed by single women, the local planning documents have also concentrated on households with minor children headed by single women. In the compilation of recommendations and findings, women are mentioned sixty times while men are only mentioned five times and then only as

perpetrators of domestic violence and illegitimate children. Between 1979 and 1989, data from the U.S. Census indicate that the proportion of employed males in the City of Tulsa dropped from 78% to 72% while the proportion of employed females increased from 53% to 55%.

In this work, the author argues that the premises of both the national and local rhetoric over welfare reform are fundamentally flawed when tested against a view of poverty in Tulsa, Oklahoma, deduced from a secondary analysis of U.S. Census data. First, the author argues that higher rates of poor single female heads of households in Tulsa are associated with the loss of jobs for males who would most likely be their potential marriage partners. The negative effect of the labor market on males as a cause of poor single female-headed households with minor children is totally ignored in both the *Contract with America* and *We're Right, They're Wrong*. Second, the author argues that the labor market in Tulsa is becoming more bifurcated with some jobs that pay well and require education and training, and other jobs that do not pay well and do not necessarily require education and training. Furthermore, it will be shown that there are already more persons in Tulsa with educational requirements than there are jobs that require them. Thus, while education and training are important to compete for higher income jobs, there will be far more qualified applicants than jobs for the foreseeable future. Neither the *Contract with America* or *We're Right, They're Wrong* recognizes that training and education will likely have a minimal impact on poverty.

A VIEW OF POVERTY FROM LITERATURE ON THE LABOR MARKET

In a review of a study on welfare reform, Astone (1995) notes that most sociologists who study poverty probably believe that there will not be a reduction in welfare recipients without an expansion in employment opportunity. The question to be explored is exactly how the labor market is changing and how those changes affect the welfare population that is the usual rhetorical target of welfare reform: poor families–and usually families headed by single females with dependent children.

It has been widely documented that processes such as downsizing, outsourcing, plant relocation, using contract labor and temporary employees, and anti-unionism have reduced employment in the better paying manufacturing and construction industries while increasing employment in the lower paying sales and services industries, have increased the number of hours worked both by forcing overtime and by forcing employment in several part-time jobs, and have put downward pressure on wages (Bluestone and Harrison 1982; Garson 1988; Prashad 1994; Schor 1991; Yates 1994). Wilson (1980, 1987) traced how educationally advantaged blacks were able to take advantage of changes in civil rights laws and changes in the labor market to achieve upward mobility. Unfortunately, educationally disadvantaged blacks were negatively affected by the loss of

manufacturing and construction jobs, by the flight of jobs to the suburbs, and by the growth of low wage sales and service jobs. Wilson observed that black men were most negatively affected because they tended to be heavily employed in the manufacturing and construction jobs that were being eliminated in the labor market.

Even though it is not widely recognized or discussed, the same dynamic interaction of education, civil rights laws, and changes in the labor market also altered the employment position of women with respect to men. Men, in general, have tended to be employed in the industrial and occupational sectors that have been losing ground. Although the wages of women still lag behind those of men in all occupational categories, Siegal, Foster and Cessna (1992) and Yates (1994) found that the income of men has declined over the past two decades while that of women has increased.

While these changes in the labor market can explain increased levels of poverty, one must explore the interaction of the stratification of marriage by education and occupation levels with changes in the labor market to finally link the impact of changes in the labor market on the rhetorical target of welfare reform: poor families– and usually families headed by single females with dependent children. Two lines of analysis are instructive. In their study of the American occupational structure, Blau and Duncan (1967) found that men and women tend to marry persons of their own educational levels. Since occupations and educational levels tend to also be stratified, it is reasonable to conjecture that marriage is also stratified by occupation. Thus, if the number of educationally advantaged women increased while the number of educationally advantaged males remained constant, one might expect to see an increase in the number of households headed by single females who are not poor.

A second element of the dynamics of the interaction of marriage and the labor market is suggested by Wilson (1987) and Wilkie (1991). They have found that, as men's participation in the labor force and income decrease, the proportion of poor households headed by single females increases. In general, there has been a rise in the proportion of young mothers who do not marry before the birth of their first child because young men without adequate employment are less likely to marry and because young mothers have little to gain financially from marrying the young fathers of their children. Wilkie found that those who do not marry tend to be better off in terms of higher educational attainment and lower fertility than those who do. So the employment status of males is another factor that affects the interaction of the labor market and the stratification of marriage by education and occupation. If the number of educationally advantaged women increased while the number of employed educationally advantaged males remained constant, one might expect to see an increase in the number of households headed by single females who are not poor. Similarly, if the number of educationally disadvantaged, unemployed males increased, one might expect to see an increase in the number of households headed by

single females who are poor. Thus, what is attributed to the culture of poverty in the rhetoric of welfare reform –unwed women with children– may be an epiphenomenon of the diminished employment opportunities for males in the labor market.

The second rhetorical assumption of the welfare debate to be examined is that education and skill enhancement are sufficient to take care of the problem of poverty for welfare recipients. If one examines the welfare reform debate (Astone 1995; Gueron and Pauly 1991; Porter 1990; Urban Institute 1994), one finds two diametrically opposed assumptions about education and the labor market. On the one hand, one finds the view that the workplace is becoming more technological and that higher levels of education and basic skills will be needed. On the other hand, one finds the view that most increasing occupations are those that require low levels of education, that pay low wages, and that contain relatively high levels of part-time work. For example, Nissen and Seybold (1994) cite a Department of Labor study that found that eight of the top ten fastest growing occupations are in services or retail sales. The only two occupations that fit the high skilled image are registered nurse and systems analyst. Regardless of the educational level of the overall population, more and more jobs being offered in the labor market will not pay a living wage for many families.

There is no question that higher education is necessary to be able to compete for jobs in occupations that pay higher wages and offer full-time work, but if there are generally more persons with educational requirements for higher paying occupations than there are persons in those occupations, how effective will education be as a poverty reduction strategy among welfare recipients?

METHODS

The U.S. Census contains employment by occupation cross-classified by sex and race for counties in 1969, 1979, and 1989 for persons 16 years of age and over. Thus, one can use employment classified by occupation to explore how the industrial reorganization that occurred between 1969 and 1989 differentially affected men and women in Tulsa County. Tulsa County, rather than the City of Tulsa, is utilized as the basic unit of analysis because Tulsa County contains over 98% of the City of Tulsa and because the city limit boundaries of the City of Tulsa changed from decade to decade. Since farming, forestry, and fishing occupations account for less than 1% of employment in Tulsa County, it was left out of the analysis. The U.S. Census otherwise classifies occupations as: 1) managerial and professional specialty occupations, 2) technical, sales, and administrative support occupations, 3) service occupations, 4) precision production, craft, and repair occupations, and 5) operators, fabricators, and laborers.[1] The number of persons employed in Tulsa County in each occupational category by sex is contained in Table 1. To specify the differential effects of changing occupational patterns on men and women in Tulsa County, the data from Table 1 for each occupational cate-

Table 1: **Employment by Occupation & Sex in 1969, 1979, and 1989 for Tulsa County**

Occupation	Sex	1969	% change	1979
Managerial & Professional	Male	27019	33%	36068
	Female	10508	102%	21182
	Total	37527	53%	57250
Technical, Sales, & Administrative Support	Male	21337	38%	29388
	Female	30704	70%	52244
	Total	52041	57%	81632
Services	Male	7168	32%	9455
	Female	13913	16%	16098
	Total	21081	21%	25553
Precision Production, Craft, & Repair	Male	22217	32%	29359
	Female	926	176%	2553
	Total	23143	38%	31912
Operator, Fabricator, & Laborer	Male	22344	19%	26528
	Female	4577	36%	6223
	Total	26921	22%	32751
Total	Male	100085	31%	130798
	Female	60628	62%	98300

Occupation	Sex	1979	% change	1989
Managerial & Professional	Male	36068	6%	38124
	Female	21182	53%	32476
	Total	57250	23%	70600
Technical, Sales, & Administrative Support	Male	29388	11%	32655
	Female	52244	2%	53279
	Total	81632	5%	85934
Services	Male	9455	41%	13325
	Female	16098	14%	18401
	Total	25553	24%	31726
Precision Production, Craft, & Repair	Male	29359	-16%	24617
	Female	2553	-5%	2435
	Total	31912	-15%	27052
Operator, Fabricator, & Laborer	Male	26528	-17%	21891
	Female	6223	-12%	5473
	Total	32751	-16%	27364
Total	Male	130798	0%	130612
	Female	98300	14%	112064

gory were expressed as a percent of employment by sex in each category for 1969, 1979, and 1989. The use of percentage comparisons allows one to compare populations of different sizes over time (Shryock et al. 1976). The results are contained in Table 2. The same classifications as Table 2 were

Table 2: **Employment by Occupation by Sex for Persons 16 Years of Age and Over for Tulsa County in 1969, 1979, and 1989**

MALES

Occupation	1969	1979	1989
All occupations	63	56	54
All persons	46	48	47
Managerial & Professional	72	63	54
Technical, Sales, & Administrative Support	41	36	38
Services	34	37	42
Precision Production, Craft	96	92	91
Operator, Fab., Laborers	83	81	80

FEMALES

Occupation	1969	1979	1989
All occupations	37	44	46
All persons	54	52	53
Managerial & Professional	28	37	46
Technical, Sales, & Administrative Support	59	64	62
Services	66	63	58
Precision Production, Craft	4	8	9
Operator, Fab., Laborers	17	19	20

Table 3**: Black Employment by Occupation & Sex in 1969, 1979, and 1989 for Tulsa County**

Occupation	Sex	1969	% change	1979
Managerial & Professional	Male	473	89%	893
	Female	530	128%	1206
	Total	1003	100%	2009
Technical, Sales, & Administrative Support	Male	634	77%	1125
	Female	1031	218%	3282
	Total	1665	165%	4407
Services	Male	1431	7%	1533
	Female	3111	-6%	2934
	Total	4542	-2%	4467
Precision Production, Craft, & Repair	Male	793	96%	1551
	Female	36	389%	176
	Total	829	108%	1727
Operator, Fabricator, & Laborer	Male	2317	29%	2990
	Female	361	144%	881
	Total	2678	45%	3871
Total	Male	5648	43%	8092
	Female	5069	67%	8479

***Table 3 (continued)*: Black Employment by Occupation & Sex in 1969, 1979, and 1989 for Tulsa County**

Occupation	Sex	1979	% change	1989
Managerial & Professional	Male	893	13%	1009
	Female	1206	47%	1771
	Total	2009	38%	2780
Technical, Sales, & Administrative Support	Male	1125	46%	1639
	Female	3282	18%	3873
	Total	4407	25%	5512
Services	Male	1533	56%	2389
	Female	2934	14%	3353
	Total	4467	29%	5742
Precision Production, Craft, & Repair	Male	1551	-11%	1383
	Female	176	-30%	124
	Total	1727	-13%	1507
Operator, Fabricator, & Laborer	Male	2990	-30%	2097
	Female	881	-15%	748
	Total	3871	-27%	2845
Total	Male	8092	5%	8517
	Female	8479	16%	9869

***Table 4:* Mean Earnings for Men and Women Ages 16-64 Working in Tulsa, Creek, and Osage Counties in 1979 and 1989 (in 1989 Dollars)**

Occupation	Sex	1979	1989	% Change
Manager	Men	$41,455	$47,377	14%
	Women	$18,175	$23,988	32%
Professional	Men	$36,600	$44,748	22%
	Women	$19,595	$22,397	35%
Technical	Men	$28,133	$29,921	6%
	Women	$18,338	$20,017	9%
Sales	Men	$29,335	$32,010	9%
	Women	$10,262	$13,273	29%
Administrative Support	Men	$25,723	$23,506	-9%
	Women	$13,966	$15,707	12%
Services	Men	$16,000	$14,679	-8%
	Women	$7,299	$8,820	21%
Crafts	Men	$26,759	$24,021	-10%
	Women	$13,058	$19,539	50%
Laborer	Men	$21,192	$18,945	-11%
	Women	$11,332	$12,763	13%

Table 5: **The Actual Distribution Minus the Expected Distribution of Married Couples with Heads from 16-64 Years of Age in Tulsa County by Husbands and Wives by Educational Attainment Level Divided by the Expected Distribution**

Wives	Husbands			
	No High School	High School	Some College	Bachelor Degree or more
No High School	1.6177	0.0330	-0.4584	-0.8386
High School	-0.0010	0.4560	-0.0771	-0.5654
Some College	-0.5359	-0.2413	0.4695	0.1965
Bachelor degree or more	-0.8501	-0.6765	-0.1607	1.9357

carried out for black males and females and are reported in Table 3.

To explore the differential rate of change in earnings between women and men, mean earnings for women and men who were 16-64 years of age and working in Tulsa, Creek, and Osage Counties were calculated for 1979 and 1989 from the 1980 and 1990 U.S. Census Public Use Microdata Sets (5% sample) and expressed in 1989 dollars adjusting the 1979 mean earnings by the CPI for urban consumers indexed on a 1982-1984 baseline. The results are found on Table 4. Tulsa, Creek, and Osage Counties are used as the unit of analysis for the Microdata Set data because it is the area for which data are reported both in the 1980 and the 1990 U.S. Census Public Use Microdata Sets (5% sample). The City of Tulsa and Tulsa County contain most of the employment in the three county area.

To test Blau and Duncan's (1967) findings that men and women tend to marry persons of their own educational levels, one can use the 1990 U.S. Census PUMS (5% sample) for Tulsa County to Test Blau and Duncan's findings for Tulsa. If one cross-classifies all married couples in Tulsa County with heads of households from 16-64 years of age by sex and educational levels, if one uses the marginal distribution of married couples by sex and by educational levels to create an expected distribution, and if one calculates the difference between the actual and expected levels as a fraction of the expected level, one will obtain the results found in Table 5. In Table 5, any value greater than zero (0) represents proportionally more respondents than one would expect from the marginal distribution alone.

As noted earlier, if educational levels stratify marriage and if educational levels stratify occupations, it is reasonable to conclude that marriage is also stratified by occupations. To test this in Tulsa County, the sample used to create Table 5 was used to create Table 6. The values in Table 6 were created by cross classifying all married couples in Tulsa County with heads of households from 16-64 years of age by sex and occupations, by using the marginal distribution of married cou-

ples by sex and by occupations to create an expected distribution, and by calculating the difference between the actual and expected levels as a fraction of the expected level. If marriage is stratified by occupations, one would expect over representation concentrated along the diagonal of the table.

It will be seen in Tables 5 and 6 below that marriage in Tulsa County is stratified by education and by occupations related to the office or professional work environment (managers, professionals, technical, and administrative support) and by occupations related to the manual or service work environment (sales, services, craft, and laborer). As will be seen in Table 3, occupations related to the office or professional work environment tend to pay more than occupations related to the manual or service work environment. Over a period of time, if there is a growing imbalance of women to men in occupations related to the office or professional work environment, one would expect a growth in the proportion of families headed by single persons –most of whom are female– who are not poor. On the other hand, if there is a growing imbalance of women to men in occupations related to

Table 6: **The Actual Distribution Minus the Expected Distribution of Married Couples with Heads from 16-64 Years of Age in Tulsa County by Husbands and Wives by Occupations Divided by the Expected Distribution**

Wives	Husbands			
	Unemployed	Manager	Professional	Technical
Unemployed	1.64	-0.11	-0.15	-0.13
Manager	-0.59	0.66	0.19	0.37
Professional	-0.53	0.42	1.33	0.12
Technical	-0.31	-0.19	0.18	1.15
Sales	-0.33	-0.11	-0.27	-0.11
Administrative Support	-0.54	0.17	-0.04	0.11
Services	-0.02	-0.44	-0.46	-0.29
Craft	0.06	-0.37	-0.57	-0.16
Labor	0.05	-0.49	-0.68	-0.26

Wives	Husbands				
	Sales	Administrative Support	Services	Crafts	Labor
Unemployed	-0.15	-0.16	-0.29	-0.01	0.05
Manager	0.20	0.18	-0.14	-0.18	-0.33
Professional	-0.01	0.01	-0.20	-0.34	-0.40
Technical	-0.03	0.08	-0.12	0.08	-0.16
Sales	0.62	-0.09	-0.03	0.01	0.02
Administrative Support	0.19	0.18	-0.01	0.02	-0.15
Services	-0.34	-0.10	0.62	0.18	0.34
Crafts	-0.30	0.02	0.00	0.37	0.24
Labor	-0.47	-0.10	-0.07	0.22	0.69

the manual or service work environment, one would expect a growth in the proportion of families headed by single persons who are poor. To test for this, changes in the number of women and men in different occupations between 1969 and 1979 and between 1979 and 1989 will be compared to changes in the proportion of families that are headed by singles and are either poor or not poor during the same time periods to determine if the two phenomenon co-vary in the hypothesized direction.

Wilson's (1987) and Wilkie's (1991) findings imply that the birth rate of unwed women can be accounted for by the availability of employed, i.e., marriageable, men. Using 1980 and 1990 U.S. Census data for the City of Tulsa, if one compares the number of employed men sixteen years or older to the number of women in this age group, one finds that 31% of women in this age group in 1980 and 36% in 1990 did not have actual or potential employed mates. Thus, one would expect the proportion of never married women with children to increase.

To test this hypothesis in the City of Tulsa, a modified marriage rate for women 15-34 years of age in 1980 and 1990 was calculated by dividing the number of ever-married women in the age group by the number of employed men in the age group to test for the stability of the propensity of women to be interested in marriage and family creation. Using the birthrate of ever-married women as an indicator of the general propensity of women to have children, an expected birthrate among never-married women was calculated for 1980 and 1990 and compared to the actual birthrate among never-married women. Assuming that the proportion of women in the age group that could be married to employed men was the same in 1990 as it was in 1980, the number of additional women who would fall in the ever-married category in 1990 if employed men were available was calculated. Assuming that these women who would have fallen in the ever-married category had children at the ever-married rate rather than the never-married rate, an expected birthrate among never-married women was calculated for 1990. If this rate is comparative to the ever-married birthrate, one could argue that the change in birthrates among unwed women can be accounted for by changes in the number of employed men.

To explore the diminished value of education, the median educational attainment for all occupations was obtained from the 1980 and 1990 U.S. Census Public Use Microdata Sets (5% Sample) for Tulsa, Creek, and Osage Counties. At that point, the number of persons with the median educational attainment for each occupation was compared to the number of persons in that occupation to determine if there were greater or fewer persons with occupational credentials than there were occupational positions available in the labor market. If there were more persons with educational credentials than there were positions in the labor market, education as a strategy for welfare reform is problematic.

FINDINGS

It is evident from Table 1 that all occupational categories increased between 1969 and 1979 for Tulsa County. In Tulsa County, precision production, crafts, and repair occupations decreased over 15% between 1979 and 1989. Operators, fabricators, and laborers decreased more than 16% between 1979 and 1989. During that same timeframe, managerial and professional specialty occupations and service occupations –occupations that tend to be on the opposite ends of the wage scale– grew by about 24% each while technical, sales, and administrative support occupations grew by over 5%.

In Table 2 one can see that the two occupational categories losing employment between 1979 and 1989 in Table 1, precision production, craft, and repair occupations and operators, fabricators, and laborers, are the occupations containing the highest concentration of male workers. Thus, what has traditionally been "men's" work is dying. One can see in Table 2 an increase between 1979 and 1989 in the proportion of men in technical, sales, administrative support, and service occupations as the occupations that traditionally employed them decreased. The one occupational category that traditionally employed proportionally more men that grew between 1979 and 1989 was managerial and professional specialty occupations. Yet the growth in employment during this period in this occupational category was fundamentally a growth in female employment. While males employed in managerial and professional specialty occupations increased by about 6% between 1979 and 1989, females employed in this occupational category increased by 54%.

Another area in which there was a shift from male dominance to female dominance in employment is in full-time (35 hours per week or more) and part-time (less than 35 hours per week) employment. Data from the U.S. Census indicated that between 1979 and 1989 in the City of Tulsa the number of males and females employed part-time increased about 14%, but during the same period the number of males employed full-time decreased by about 5% while the number of females employed full-time increased about 3%.

When one examines changes in the proportion of males and females 16 years of age and older employed in the City of Tulsa between 1979 and 1989, it is not surprising to find that the proportion of employed males dropped from 78% to 72% while the proportion of employed females increased from 53% to 55%.

Examining change by occupation between 1979 and 1989 (Table 1) which reports employment for all persons in Tulsa County classified by occupation and Black employment (Table 3) classified by sex and occupation, one can see that the effect of the loss of employment as operators, fabricators, and laborers has been most significant for Black males.

Managerial and professional specialty occupations have increased the most (13,350) in absolute terms between 1979 and 1989 and have grown almost at the same rate as service occupations. From Table 1, it is apparent

that women have been added to the ranks of managerial and professional specialty occupations at almost nine times the rate of men between 1979 and 1989. As evidenced in Table 1 and Table 3, Black women have been added to managerial and professional specialty occupations at a rate less than but close to all women. Black women have been added at almost eight times the rate of all men and at more than three times the rate of Black men. Black men have been added at twice the rate of all men.

The growth rates for males and females in technical, sales, and administrative support occupations have reversed between the periods 1969-1979 and 1979-1989. From 1969 to 1979, women were added to this occupational category at approximately twice the rate of men, yet from 1979 to 1989, men were added to this category at a higher rate than women. This reversal appears in Table 1 for all persons as well as in Table 3 for the Black population.

Service occupations increased at the highest rate between 1979 and 1989 (24%), and have grown in absolute terms during the period at the second highest number behind managerial and professional specialty occupations (6,173). Both between 1969-1979 and 1979-1989, the growth rate of male employment in service occupations for all persons and for Blacks was higher than the growth rate of female employment in service occupations.

Per Table 4, it appears women only earned $0.35 (Sales) to $0.65 (Technical) for every $1 earned by men in 1979. Between 1979 and 1989, the rate of real wage growth for women was positive and greater than that of men in all occupational categories. The real wages of men employed in administrative support (-9%), services (-8%), crafts (-10%), and laborers (-11%) decreased between 1979 and 1989. As a result, the wage gap between women and men decreased to the range of $0.42 (sales) to $0.81 (crafts) per $1 earned by men in 1989.

These findings generally confirm national trends. Siegel et al. (1992) found that the median personal income of American men has declined over the past two decades while the median personal income of women has increased. Specifically, median earnings for males dropped 14% between 1973 and 1990 while the median earnings for females increased by 22%.

As expected from Blau and Duncan (1967), it is clear from Table 5 that there is a tendency for people to marry people with a similar education. With one exception –administrative support– the diagonal of Table 6 contains the most over-represented cells for each occupation. Furthermore, there is a general clustering of positive values among occupations related to the office or professional work environment and among occupations related to the manual or service work environment. This stratification probably intensifies the upward mobility of families taking advantage of growth in managerial and professional specialty occupations and the downward mobility of families affected by the decline of craft occupations and laborers and the increase of service and retail service occupations.

From Wilson's (1987) and Wilkie's (1991) findings, one would expect the proportion of never-married women with children to increase. The situation found in the City of Tulsa is similar to the situation described by Wilson and Wilkie for the United States. If one compares the number of men 16 years or older who are employed to the number of women in this age group, one finds that 31% of women in this age group in 1980 and 36% in 1990 did not have actual or potential employed mates.

To explore this hypothesis in the City of Tulsa, a modified marriage rate for women 15-34 years old in 1980 was calculated by dividing the number of ever-married women in the age group by the number of employed men, i.e., marriageable, in the age group. A modified marriage rate of 886 ever-married women per 1000 employed men was found. A rate of 869 ever-married women per 1000 employed men was found in 1990. This rate, while decreased, seems fairly stable.

The birth rate for ever-married women of ages 15-34 increased 7.3% from 1260 to 1352 per 1000 women between 1980 and 1990. If one took the birthrate of ever-married women as an indicator of the general propensity to have children, one would expect a shift in birthrate among never-married women proportionally from 142 to 152 per 1000 never-married women between 1980 and 1990. Instead, the birthrate for 15-34 years old never-married women increased from 142 to 271 per 1000 never-married women.

Now if one assumes that the proportion of women in the age group that could be married to employed men was the same in 1990 as it was in 1980, one would expect an additional 2,657 women to be in the category of the ever-married. Following Wilkie's (1991) observation, if one assumes that they had the same propensity as ever-married women to have children but had no suitable mate such that they had children at the ever-married rate, the rate of birth for the remaining never-married women 15-34 years old in 1990 would be 153 per 1000 never-married women instead of 271 per 1000 never-married women. This is approximately the birthrate one would expect if ever-married and never-married birth rates changed in the same proportion between 1980 and 1990. This tends to confirm Wilie's observation that the increased propensity for unwed women to have children is influenced by the imbalance in the number of women and the number of employed men.

In Tables 5 and 6, it was shown that marriage is stratified by education and by occupation related to the office or professional work environment and by occupation relative to the manual or service work environment. Between 1969 and 1979 in Tulsa County, occupations related to the office or professional environment added 25,114 more women than men; occupations related to the manual or service work environment added 8,155 more men than women. Between 1969 and 1979, the proportion of families that were headed by singles (almost all of whom are female headed) and that were not poor increased from 7% of families to 12% of families. The proportion of families that were headed by singles

and that were poor remained constant at 6% between 1969 and 1979. This is what one might expect given the increased imbalance between women and employed men in occupations related to the office or professional work environment. From 1979 to 1989, 6,966 more women than men were added to white collar positions; 5,509 men lost positions in blue collar and service occupations while 1,435 women gained such position. Between 1979 and 1989, the proportion of families that were headed by singles and that were not poor remained constant at 12%. The proportion of families that were headed by singles and that were poor increased from 6-9%. Again, this is what one might expect given the increased imbalance between women and employed men in occupations related to the manual or service work environment.

The problem of finding a mate to marry who is employed can be seen by looking at the proportion of women 16 years of age or older compared to the number of employed men of the same age. Among women 16 years or older in the City of Tulsa according to the 1990 U.S. Census, 34% of white women, 52% of Black women, 40% of Native American women, and 20% of Asian women do not have available employed mates. If one separates out the census tracts in the City of Tulsa that have 51% or more families with incomes less than the median income for the Tulsa MSA ($37,500) and examines these areas, 36% of white women, 56% of Black women, 46% of Native American women, and 43% of Asian women do not have available employed mates. If one examines the remaining census tracts that are not low income, 33% of white women, 39% of Black women, 35% of Native American women, and 13% of Asian women do not have available employed mates. These imbalances could easily account for differential rates of births among single female heads of households among different races.

Turning to examine the balance between education and occupational levels, 57,250 persons were employed in managerial and professional specialty occupations in Tulsa County in 1979 according to the U.S. Census. From 1980 to 1990, U.S. Census Public Use Microdata Sets (5% sample) for Tulsa, Creek, and Osage Counties (PUMS/INCOG area) show the median educational attainment in 1979 and 1989 for managers was some college and for professionals was a bachelor degree. There were 2,506 more persons employed in these occupations in 1979 than there were persons holding bachelor degrees or more.

In 1979, there were 81,632 persons employed in technical, sales, and administrative support occupations. In 1979 and 1989, the median educational attainment for persons in technical occupations was some college. The median educational attainment for persons in sales and administrative support occupations was, in 1979, a high school education. By 1989 the median education attainment for persons in these occupations was some college. There were 26,989 more individuals employed in these occupations in 1979 than there were persons with some college. Thus, in 1979, a person could occupy a position in one of

these three occupational categories without the average educational attainment.

By 1989 in Tulsa County, the relation between the number of positions occupied by persons and the number of persons with the prerequisite educational attainment for these two clusters of occupational categories was reversed from the situation in 1979. In 1989, there were 9,623 more persons holding college degrees or more than were employed in managerial and professional specialty occupations. There were 32,698 more persons having some college that were employed in technical, sales, and administrative support occupations. A recent study conducted by Deloitte and Touche for the Metropolitan Tulsa Chamber of Commerce found that more than 50,000 Tulsa workers were employed in jobs that do not utilize their skills and education and that do not pay enough for their training and education (Maurer 1996).

In 1989 services, crafts, and laborers were the only occupational categories with median educational attainment at the level of high school graduates. As noted earlier, craft occupations are decreasing in number. This would indicate that the main occupations to which persons with little education can gain entry are those with higher levels of part-time employment such as services and laborers. It is apparent from Table 7 that the general cluster of service occupations, sales, administrative support, and laborers are the most densely populated with part-time jobs. These are precisely the occupational categories usually classified as secondary labor market jobs.

The fastest growing occupational clusters are on the opposite sides of the educational and earnings divide from each other: managerial and professional specialty occupations on the one hand and sales and service occupations on the other. Thirty-four percent of the change in employment from 1990 through 1994 in the Tulsa area is in the first cluster. Fifty-one percent is in the second cluster. The remainder is in the middle. Thus, regardless of the educational level of the overall population, more and more

***Table 7:* Percent of Workers Employed Less than 50 Weeks per Year or Less than 35 Hours Per Week in Tulsa, Creek, and Osage Counties by Occupation**

Occupation	Percent Employed Part-time
Manager	10%
Professional	15%
Technical	12%
Sales	25%
Administrative Support	19%
Services	28%
Crafts	12%
Laborers	19%

jobs being offered in the labor market will not pay a living wage for many families.

There is no question that higher education is necessary to be able to compete for jobs in occupations that pay higher wages and offer full-time work. But, as noted earlier, there are generally more persons with educational requirements for higher paying occupations than there are persons in those occupations. The proportion of males and females 25 years of age and over with more than a high school education has continually improved from 1970 to 1990 for both the population as a whole and for Blacks. If one examines educational achievement levels for persons employed in Tulsa, Creek, and Osage Counties in the 1980 and 1990 U.S. Census PUMS, one finds that each ten year age cohort born between 1935 and 1965 increased the proportion of persons in that cohort with some college or higher educations by at least 10% during the ten year period.

The combined trends of growing lower-paying jobs and generally increasing levels of education among the workforce raise questions about the effectiveness of education as an antipoverty strategy.

CONCLUSION

If one uses Tulsa, Oklahoma, to test the assumptions of the rhetoric of the welfare reform debate, it has been shown that key assumptions of both Republicans and Democrats are fundamentally flawed.

First, negative effects of the reorganization of the labor market have directly affected men more negatively than women. However, women are indirectly affected by having a reduced pool of employed males with livable wages as potential or actual marriage partners. Because marriage partners tend to be stratified by educational level and occupational cluster, women employed in low paying occupations were more negatively affected than women in higher paying occupations. Furthermore, it was argued that the loss of potential or actual employed men with livable wages could easily account for increased levels of poor families with dependent children headed by single females. Thus, the labor market and not necessarily a culture of dependency could account for higher levels of households of AFDC.

Second, there are already more persons with educational requirements than there are positions requiring those requirements. The labor market continues to produce employment on both ends of the skill and wage spectrum. Moreover, the tactics of the routinization of jobs to deskill work, of outsourcing, and of contract and temporary labor are being applied to mental work as well as to menial work. Thus, education and training do not necessarily translate to higher paying jobs as they did before the mid-1970s.

END NOTE

[1] These classifications are essentially comparable between the U.S. Census of 1990 and 1980. However, they are not comparable with the occupational classification scheme contained in the 1970 U.S.

Census. To increase the comparability of the 1970 U.S. Census with the 1980 U.S. Census and 1990 U.S. Census, the 1970 U.S. Census data were reclassified in the following manner: Professional, technical, and kindred workers less health workers (except practitioners) and technicians (except health) in the 1970 U.S. Census were classified as managerial and professional specialty occupations; sales workers, clerical and kindred workers, health workers (except practitioners), and technicians (except health) in the 1970 U.S. Census were classified as technical, sales, and administrative support occupations; service workers and private household workers in the 1970 U.S. Census were classified as service occupations; craftsmen, foremen, and kindred workers in the 1970 U.S. Census were classified as precision production, craft, and repair occupations; and operatives, transport equipment operatives, and laborers (except farm) in the 1970 U.S. Census were classified as operators, fabricators, and laborers.

References

Astone, N.M. 1995. "Welfare: Yesterday and Today." *Contemporary Sociology* 24(1):16-17.

Blau, P.M. and O.D. Duncan. 1967. *The American Occupational Structure*. NY: Wiley.

Bluestone, B. and B. Harrison. 1982. *The Deindustrialization of America*. NY: Basic Books.

Carville, J. 1996. *We're Right, They're Wrong*. NY: Random House.

Garson, B. 1988. *The Electronic Sweatshop*. NY: Penguin.

Gingrich, N., D. Armey, and House Republicans. 1994. *Contract with America*. NY: New York Times Books.

Gueron, J.M. and E. Pauly. 1991. *From Welfare to Work*. NY: Russell Sage Foundation.

Jencks, C. 1994. *The Homeless*. Cambridge: Harvard University Press.

Maurer, M. 1996. "Tulsa Work Detailed: Survey Sees Underemployment, Low-skill Labor." Pp. E1 in *Tulsa World*, August 22.

Nissen, B. and P. Seybold. 1994. "Labor and Monopoly Capital in the Labor Education Context." *Monthly Review* 46(6):36-44.

Porter, K.H. 1990. *Making Jobs Work: What the Research Says about Effective Employment Programs for AFDC Recipients*. Washington, D.C.: Center on Budget and Policy Priorities.

Prashad, V. 1994. "Contract Labor: The Latest Stage of Illiberal Capitalism." *Monthly Review* 46(5):19-26.

Schor, J.B. 1991. *The Overworked American*. NY: Basic Books.

Shryock, H.S., J.S. Siegel, and Associates. 1976. *The Methods and Materials of Demography*. NY: Academic Press.

Siegel, M.A., C.D. Foster, and C.B. Cessna. 1992. *Social Welfare: Help or Hindrance*. Wylie, TX: Information Plus.

Urban Institute. 1994. *Self-Sufficiency and the Low-Wage Labor Market: A Reality Check for Welfare Reform: Summary of the April 12-14, 1994 Conference*. Washington, D.C.: The Urban Institute.

Wilkie, J.R. 1991. "The Decline in Men's Labor Force Participation and Income and the Changing Structure of Family Economic Support." *Journal of Marriage and Family* 53:111-122.

Wilson, W.J. 1980. *The Declining Significance of Race: Blacks and Changing American Institutions*. 2nd ed. Chicago: University of Chicago.

------. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.

Yates, M.D. 1994. *Longer Hour, Fewer Jobs*. NY: Monthly Review Press.

DEINDUSTRIALIZATION AND THE REORGANIZATION OF OCCUPATIONS: THE REORGANIZATION OF THE LABOR MARKET IN OKLAHOMA BETWEEN 1970 AND 1990

Dr. Marvin L. Cooke
Tulsa Community College

ABSTRACT

Studies of deindustrialization generally assume that the decline of craft and laborer occupations is principally associated with a relative loss of manufacturing jobs combined with a gain in service and trade jobs. This study tests this assumption in Oklahoma between 1970 and 1990 using a secondary analysis of U.S. Census data for the state as a whole and for Oklahoma City, Tulsa, Muskogee, Ardmore, and McAlester. Deindustrialization was found principally in Tulsa. Oklahoma City and McAlester lost a significant proportion of employment in the government sector. Tulsa, Oklahoma City, and McAlester each lost significantly more employment in craft and laborer occupations and gained more employment in managerial, professional, and technical occupations than can be accounted for by the change in the industrial distribution of employment alone. In most areas included in the study, employment in administrative support occupations decreased more than expected from changes in the distribution of employment by industry alone while sales occupations increased. This additional change in the occupational distribution was associated with the reorganization of occupations within industries. Finally, a doubling of the rate of part-time workers occurred that cannot be accounted for by the proportional change of employment by industry or by occupation within industries.

** originally printed in Free Inquiry in Creative Sociology 29(1).*

INTRODUCTION

Deindustrialization has been a well-studied phenomenon in the United States beginning with the closing of factories in the "rust belt" in the midwest and northeast in the 1970s. Its causes have been linked to the natural maturation of the economy (Levy 1998; Alderson 1999), downturns in the business cycle (Rowthorn and Wells 1987; Levy 1987 1998; Alderson 1999); exporting jobs (Bluestone and Harrison 1982; Harrison and Bluestone 1988; Yates 1994), and importing cheap foreign goods (Wood 1994; Alderson 1999). Its effects have been linked to personal and family deterioration (Newman 1998; Wilkie 1991; Schor 1991; Cooke 1998) and to increasing income inequality (Levy 1987, 1998; Yates 1994). Much of the labor movement and many leftists have adopted deindustrialization –defined as a loss of blue-collar jobs in manufacturing– as the principal focus

for political action. Globalization –an expanded explanation for exporting jobs– tends to be identified as the driving force behind deindustrialization (Schwartz 2000a, 2000b; Tabb 2000).

Though many studies of deindustrialization and the political agenda of much of the labor movement assume that the loss of manufacturing jobs tells the story of the loss of blue-collar employment, other studies link the decline of the blue-collar employment with how occupations and work are organized within firms. For example, Gordon (1996) found that the decline of blue-collar workers was due to simultaneously overstaffing management while cutting blue-collar employment and wages. Another important development in how occupations have been reorganized is the growth of part-time work in various occupations. For example, Edwards (1979) demonstrated how the labor process has segmented employment into full-time employment and "casual" employment in several industrial sectors. While commentators on the labor movement have noted the need for organizing workers to resist such changes, there is still a strong tendency for labor to define its problems in terms of the loss of manufacturing jobs to other countries or in terms of the growth of the service sector (Moberg 2000). Both definitions focus on changes in industrial sectors rather than changes in the occupational structure within industrial sectors.

The purpose of this study is to explore how much the loss of blue-collar jobs is associated with the proportional loss of employment in manufacturing and how much the loss of blue-collar jobs is associated with the proportional change in occupations within all industries. Additionally, how much of the increase in part-time employment is associated with proportional changes in employment by industrial sector, how much is it associated with proportional reorganization of occupations within industries, and how much is it as a factor independent of the proportional changes? These questions were explored using a secondary analysis of U.S. Census data for the state of Oklahoma for 1970 and 1990. Changes in employment by industry and by occupation were explored and compared for the state as a whole, for the two largest urban areas in the state, Oklahoma City and Tulsa, and for three larger towns in the eastern part of the state: McAlester, Ardmore, and Muskogee.

DEINDUSTRIALIATION AND THE REORGANIZATION OF OCCUPATIONS AND WORK

Deindustrialization is often defined as a decline in the relative proportion of employment in manufacturing as an industrial category. For example, Alderson (1999:702) defined deindustrialization "as the decline of manufacturing employment relative to employment in other sectors." Since manufacturing as an industrial category has an occupation distribution in which craft and laborer occupations are concentrated, one would expect a decline in the proportion of persons employed in laborer and craft occupations as manufacturing declines as a fraction of total employment. Similarly, one would expect a relative increase in the pro-

portion of those employed in service and sales occupations with an increase in the proportion of those employed in the service and trade industrial sectors. If deindustrialization alone is the cause of the decline of blue-collar jobs, one should be able to predict the changes in the distribution of employment by occupation by changes in the distribution of employment by industrial category alone.

There are ways that manufacturing declines could increase the decline in craft and laborer occupations beyond what one would expect from the decline in manufacturing alone. Several mechanism have been defined that would accelerate the loss of blue-collar jobs beyond what one would expect solely from deindustrialization.

According to the international division of labor model (Cohen 1981; Reich 1983), the proportion of the labor force in manufacturing could decline by moving manufacturing plants outside the United States while retaining management, engineering, and sales functions within the United States. Employment in manufacturing as an industrial sector would decline here, but employment in craft and laborer occupations would decline even more rapidly because of the changing mixture of occupations in manufacturing left in the United States. Maume (1987), Lobao (1990), and Brown and Hirschi (1995) found that such divisions of labor can also occur between urban and rural areas.

Levy (1987, 1998) suggested that the decline of an industrial sector in and of itself could both decrease the relative proportion of employment in that sector and rearrange employment by occupation within it. For example, a large number of blue-collar workers permanently lost their jobs with plant closings in the 1970s. Similarly, many administrative support positions were permanently eliminated with the consolidation of the financial sector in the 1980s.

Fundamental changes in how work is organized could also change the distribution of employment by occupation within different industrial sectors and across industrial sectors. Just as the digital revolution automated and deskilled work in manufacturing, Garson (1988) found that the same happened in the office environment. Levy (1998) reported shifts in employment from administrative support to sales occupations as industrial sectors have come under competitive pressure and as administrative support functions have become automated. Office environments are broadly distributed across industrial sectors. Gordon (1996) found that the decline in blue-collar employment and wages was a result of management overstaffing and overpaying itself at the expense of blue-collar employment and wages. Power differences in a hierarchical organization enable managers to exploit workers.

In addition to changing the distribution of occupations within industries, several mechanisms similar to those identified above seem to contribute to an increase in part-time employment. On the demand side of the labor market, Edwards (1979) demonstrated how the labor process has segmented employment into full-time employment and "casual" employment across industrial sectors. Wasmer (1999) found

that a slow-down in the growth of labor productivity and higher levels of population encourage temporary employment. Bluestone and Rose (1998) found that firms have shifted away from dealing with economic growth by hiring more full-time workers as in the 1970s to either employing workers longer hours or employing additional part-time workers in the 1980s and 1990s. On the supply side of the labor marker, Yates (1996) found that workers deal with household income maintenance in the face of stagnant wages and a weak labor marker by working more part-time jobs.

In reviewing these findings, three things stand out. First, these mechanisms are more pervasive than simply those associated with deindustrialization because they affect or potentially affect all industrial sectors rather than simply the manufacturing sector. Second, these mechanisms affect more than traditional blue-collar jobs. For example, employment in administrative support positions was lost while sales positions were added across various industrial sectors. Finally, some of these mechanisms contribute to the growth of part-time employment.

To investigate these trends in Oklahoma, employment in nonagricultural industrial sectors was analyzed to test whether deindustrialization as a proportional loss of manufacturing occurred between 1970 and 1990. Alderson (1999) found that manufacturing comprised 25% of nonagricultural employment in developed nations in 1970, but only 20% in 1990. Was the level of manufacturing in Oklahoma in 1970 and 1990 similar to the average developed country? This was explored for Oklahoma City, Tulsa, McAlester, Ardmore, and Muskogee as well as for the state as a whole.

To explore whether changes in employment by occupational category were principally associated with changes in employment by industry or by changes of employment by occupation within industries, three distributions of employment by occupation were generated and compared for each of the areas in the study. A percent distribution of employment by occupation was first calculated for 1970. A percent distribution of employment by occupation was then calculated using the distribution of employment by industry for 1990 and the 1970 occupational distribution of employment for each industry. This provides a picture of the occupational distribution of employment expected in 1990 if changes in the occupational distribution were due to changes in the industrial distribution alone. Finally, a percent distribution of employment by occupation was calculated for 1990. By comparing the distribution that is expected from changes in the industrial distribution alone with the distribution that actually occurred because of changes in both the industrial distribution and the occupational distribution within each industry, one can estimate the relative importance of deindustrialization compared to the reorganization of occupations within industries on the loss of blue-collar and administrative support occupations.

To determine whether part-time employment increased by occupation, the percent of employed persons from 16-64 years of age that were normally employed less than 35 hours per week

in each occupation in 1970 and 1990 for the state as a whole was calculated. The separate effects of changes in the distribution of employment by industry, by occupation within industries, and by the proportion of persons employed less than 35 hours per week in each occupation within each industry on the overall distribution of persons employed less than 35 hours per week by occupation were explored. Because of problems with the comparability of smaller areas between the 1970 and 1990 Public Use Microdata Samples (U.S. Bureau of the Census 1973c, 1992c) and because of limitations with the 1970 statewide sample used by this researcher, only a statewide comparison of part-time employment by industry by occupation was made.

METHODS AND DATA

From the technical documentation included in the U.S. Census Public Use Microdata Samples from 1970 and 1990 (U.S. Bureau of the Census 1973c, 1992c), certain issues of the comparability of data between the 1970 and 1990 U.S. Census for the purpose of this study are apparent. The definition of the Oklahoma City and Tulsa Metropolitan Statistical Areas changed between 1970 and 1990. The 1970 definition was used to define Oklahoma City as Oklahoma, Canadian, and Cleveland Counties and the Tulsa as Tulsa, Osage, and Creek Counties. There were some inconsistencies in the definition of occupations in nonagricultural industrial sectors. Some managerial, professional, and technical occupations classified under one of these categories in 1970 were classified in another in 1990, and some specific occupations were added. If one aggregates all of the occupations under one general category –managerial, professional, and technical occupations– the comparability between time periods is significantly improved. In 1990, some workers in nonagricultural industrial sectors were classified in agricultural occupations. None were classified in 1970. The workers so classified in 1990 appear to be principally laborers. One could have classified some of them as craft workers. Since most agricultural occupations in nonagricultural industries seemed to be laborers, they were classified as such. This probably slightly overstates the proportion of workers that are laborers and understates the proportion of workers that are craft workers in 1990.

To test whether a proportional loss of manufacturing occurred between 1970 and 1990, the tables, "Occupation of Employed Persons by Industry Group and Sex: 1970" and "Industry of Employed Persons and Occupation of Experienced Unemployed Persons for Places of 10,000 to 50,000: 1970," from the 1970 U.S. Census (1973a) and the tables, "Industry of Employed Persons: 1990," from the 1990 U.S. Census (1992a) were used to calculate a percent distribution of employed persons 16 years and over by nonagricultural industrial categories for the state as a whole, Oklahoma City, Tulsa, and the towns of McAlester, Ardmore, and Muskogee for 1970 and 1990. These distributions and results are reported in Table 1.

To explore whether changes in

employment by occupational categories were principally associated with changes in employment by industry or by changes of employment by occupation within industrial categories, three distributions of employment by occupation were generated and compared for each of the areas in the study. First, a percent distribution of employment by occupation was calculated for 1970 using "Occupation of Employed Persons by Industry Group and Sex: 1970" and "Occupation and Earnings for Places of 10,000 to 50,000: 1970" from the 1970 U.S. Census (1973a) for all of the areas in the study. Using the above data sources, a percent distribution of employment by occupation was calculated using the industrial distribution of employment for 1990 and the 1970 occupational distribution of employment within each industry for the state as a whole, Oklahoma City, Tulsa, and the part of the state excluding Oklahoma City and Tulsa.

Since census data for McAlester, Ardmore, and Muskogee do not include a cross classification of occupation by industry for 1970, the occupation by industry distribution for the part of the state excluding Oklahoma City and Tulsa adjusted by the overall occupational distribution for the three towns in 1970 were used for this pro-

Table 1: **Percent Distribution of Nonagricultural Employment in Oklahoma by Industry**

	Statewide		Oklahoma City		Tulsa	
Industry	**1970**	**1990**	**1970**	**1990**	**1970**	**1990**
Mining	4	3	2	2	5	3
Construction	7	6	6	5	6	5
Manufacturing	17	15	14	12	21	16
TCPU *	7	8	7	7	9	10
Trade	23	22	22	23	23	23
FIRE **	5	6	6	7	6	7
Services	29	34	29	35	26	33
Government	8	6	14	9	4	3

	McAlester		Ardmore		Muskogee	
Industry	**1970**	**1990**	**1970**	**1990**	**1970**	**1990**
Mining	1	3	4	4	0	0
Construction	6	4	7	5	7	5
Manufacturing	15	13	14	13	16	18
TCPU *	8	5	6	6	8	6
Trade	15	23	25	26	28	24
FIRE **	3	5	5	7	5	6
Services	28	34	33	35	30	35
Government	24	13	6	4	6	6

* Transportation, Communications, and Public Utilities

** Finance, Insurance, and Real Estate

Table 2: **Percent Distribution of Nonagricultural Employment in Oklahoma by Occupation**

Actual Distribution in 1970

Occupation	Statewide	Oklahoma City	Tulsa
Manager et al.*	25	27	26
Sales	7	8	9
Administrative Support**	18	21	20
Services	15	13	12
Crafts	15	14	15
Laborers	20	17	18

Occupation	McAlester	Ardmore	Muskogee
Manager et al.*	23	27	25
Sales	7	9	9
Administrative Support**	18	16	17
Services	16	18	17
Crafts	16	12	16
Laborers	20	18	19

Expected in 1990 Based on Occupational Distribution by Industry in 1970 and Industrial Distribution in 1990

Occupation	Statewide	Oklahoma City	Tulsa
Manager et al.*	26	28	26
Sales	8	9	9
Administrative Support**	18	21	19
Services	16	15	14
Crafts	14	12	13
Laborers	18	15	19

Occupation	McAlester	Ardmore	Muskogee
Manager et al.*	25	28	26
Sales	10	9	9
Administrative Support**	16	17	17
Services	17	18	18
Crafts	14	11	12
Laborers	18	17	18

* Managerial, Professional Specialty, and Technical Occupations

** Administrative Support Occupations

cedure for the three towns. This provides a picture of the occupational distribution of employment that one would expect in 1990 if changes in the occupational distribution were due to changes in the industrial distribution alone. Finally, a percent distribution of employment by occupation was calculated for 1990 for all defined areas in the study using the table, "Occupation

of Employed Persons: 1990" (1992a). These distributions are reported in Table 2.

To explore the relative contribution of changes in employment by industry, by occupation within industries, and by the use of part-time workers within occupations within industries to changes in part-time employment by occupation across industries, the U.S. Census Public Use Microdata Samples (PUMS) from 1970 (1973b) and 1990 (1992b) were used to estimate the percent of employed persons 16 through 64 years of age that were normally employed less than 35 hours per week in each occupation in 1970 and 1990 for the state as a whole. Following the suggestions in the technical documentation (U.S. Bureau of the Census 1973c), the 1970 estimate was created by combining the 1/100 sample from the 5% sample and the 1/100 sample from the 15% sample of the PUMS to create a 2% sample. The 1990 estimate was created from the 5% sample PUMS. Because of problems with comparability of smaller areas between the 1970 and 1990 Public Use Microdata Samples, only a statewide comparison of part-time employment by industry by occupation was made. Two additional distributions were created. First, the percent of part-time workers for each occupation that would be expected from the 1990 industrial distribution, the 1970 occupational distribution by industry, and the 1970 distribution of part-time workers in each occupation in each industry was calculated to estimate the effect of the change in the industrial distribution alone on part-time employment. Second, the percent of part-time

Table 2 (continued): **Percent Distribution of Nonagricultural Employment in Oklahoma by Occupation**

Actual Distribution in 1990

Occupation	Statewide	Oklahoma City	Tulsa
Manager et al.*	27	32	32
Sales	12	13	13
Administrative Support**	16	18	17
Services	16	14	13
Crafts	12	10	12
Laborers	17	13	13

Occupation	McAlester	Ardmore	Muskogee
Manager et al.*	29	28	26
Sales	11	14	14
Administrative Support**	18	15	15
Services	18	16	17
Crafts	12	10	10
Laborers	12	17	18

* Managerial, Professional Specialty, and Technical Occupations

** Administrative Support Occupations

Table 3: **Percent of Employees 16 through 64 Years of Age in Oklahoma Typically Employed Less than 35 Hours per Week in Each Occupation**

Occupation	1970	Expected from 1990 industrial, 1970 occupational, 1970 part-time
Manager et al.*	9	9
Sales	16	16
Administrative Support**	13	13
Services	20	20
Crafts	10	10
Laborers	13	13
All Employees	13	13

Occupation	Expected from 1990 industrial, 1990 occupational, 1970 part-time	1990
Manager et al.*	9	18
Sales	16	37
Administrative Support**	13	28
Services	19	48
Crafts	10	16
Laborers	13	23
All Employees	13	27

* Managerial, Professional Specialty, and Technical Occupations

** Administrative Support Occupations

workers for each occupation that would be expected from the 1990 industrial distribution, the 1990 occupational distribution by industry, and the 1970 distribution of part-time workers in each occupation in each industry was calculated to estimate the effect of the changes in the industrial distribution and in the occupational distribution within each industry on part-time employment. The results are reported in Table 3.

FINDINGS

Statewide employment in manufacturing in Oklahoma hardly meets the standards of a developed nation. Instead of having 25% of nonagricultural employment in manufacturing as did most developed nations in 1970 (Alderson, 1999). Oklahoma's employment in manufacturing was only 17%. While Alderson (1999) found that employment in manufacturing in developed nations dropped to 20% by 1990, Oklahoma's employment in manufacturing dropped only to 15%. While Oklahoma was not as industrialized as

the average developed nation in 1970, it also did not experience the level of deindustrialization between 1970 and 1990.

Tulsa most resembled a developed nation with respect to deindustrialization. Nonagricultural employment in manufacturing in Tulsa dropped from 21% in 1970 to 16% in 1990. As with the state as a whole, Oklahoma City, Ardmore, and McAlester had lower initial levels of employment in manufacturing and small changes in levels between 1970 and 1990. Against the trend of deindustrialization, Muskogee gained employment in manufacturing from 16% in 1970 to 18% in 1990. Employment in manufacturing in Muskogee in 1990 was almost at the level of the average developed nation reported by Alderson (1999).

Some locations had higher proportions of employment in certain industries than average for the state in 1970 and lost significant proportions of employment in those industries between 1970 and 1990. Employment in government in Oklahoma City –the state capitol– dropped from 14% of nonagricultural employment in 1970 to 9% in 1990. In McAlester, employment in government dropped from 24% to 13% between 1970 and 1990. Two towns experienced a greater gain or loss in employment in trade than the state average. Between 1970 and 1990, McAlester gained five percentage points of nonagricultural employment in trade while Muskogee lost four percentage points.

Consistent with the deindustrialization model, employment in the service sector increased between 1970 and 1990 from five to seven percentage points for all areas in the study except Ardmore. No industrial category of nonagricultural employment in Ardmore gained or lost more than two percentage points between 1970 and 1990.

While it is evident from the above examination of Table 1 that changes in nonagricultural employment by industry have occurred, the distributions in Table 2 indicate that these changes have played a minor role in changes in the occupational distribution. If one compares the actual occupational distribution for 1970 with that expected in 1990 based on the occupational distribution by industry in 1970 and the industrial distribution in 1990 and with the actual occupational distribution for 1990, 38% of the redistribution of employment by occupation between 1970 and 1990 appears to be attributable to changes in the distribution of employment by industry alone for the state as a whole, 33% for Oklahoma City, 23% for Tulsa, 29% for Muskogee and for Ardmore, and 43% for McAlester. Most of the change in the overall distribution of occupations appears to be rooted in changes in how occupations are organized within industries rather than in changes in the distribution of employment by industry alone, i.e., deindustrialization.

An examination of each occupation in Table 2 reveals that more than blue-collar occupations were affected by the reorganization of occupations within industries. Consistent with Levy's (1998) findings, the proportion of those employed in administrative support occupations decreased between 1970 and 1990 more than one would expect from changes in the industrial distribu-

tion alone as the proportion of those employed in sales occupations increased more than expected. This was the most uniform change in the distribution of occupations across all towns and cities as well as the state as a whole with the exception of McAlester. In McAlester, the proportion employment in both sales and administrative support occupations increased more than expected from the change in the distribution of employment by industry alone.

Changes in the organization of occupations within industries decreased the proportion employed in service and craft occupations by 1990 somewhat more than one would expect from changes in the proportion of the workforce employed by industry alone. While one would expect small gains in the proportion of those employed in service occupations because of changes in employment by industry alone, the gains exactly equaled what one would expect for the state as a whole and were slightly less than expected for all of the towns and cities in the study. While one would expect small losses in the proportion of those employed in craft occupations because of changes in employment by industry, the losses were somewhat larger than expected for the state as a whole as well as for all of the towns and cities in the study.

Changes in the proportion of employment in managerial, professional specialty, and technical occupations and in laborer occupations represent an interesting case. For the state as a whole and for the towns of Muskogee and Ardmore, most of the small decline in the proportion of those employed in laborer occupations and small increase in the proportion of those employed in managerial, professional specialty, and technical occupations can be accounted for by changes in the distribution of employment by industry alone. But for Tulsa, McAlester, and, to a lesser extent, Oklahoma City, employment in managerial, professional specialty, and technical occupations increased, and employment in laborer occupations decreased significantly more than expected because of changes in the industrial distribution alone.

One might be able to argue that Tulsa represents a case consistent with the international division of labor theory of deindustrialization. However, since Tulsa experienced a significant loss in the proportion of those employed in manufacturing while McAlester and Oklahoma City experienced a significant loss of those employed in government, something other than the mechanisms associated with deindustrialization must affect the reorganization of occupations. The one factor affecting Oklahoma City and McAlester with respect to government and Tulsa with respect to manufacturing was a significant decline in the proportion of those employed in those industrial sectors. As Levy (1998) suggested, the downsizing of an industrial sector in and of itself may well affect the loss of laborers in an industry.

From Table 3 it appears that part-time employment for all workers in the state of Oklahoma has more than doubled between 1970 and 1990. Proportionally, craft occupations have been affected least by this trend followed by laborer occupations and

managerial, professional specialty, and technical occupations. Sales, service, and administrative support occupations have been affected most by this trend. All occupations seem to have been affected by the introduction of "casual" labor (Edwards 1979).

If one compares the first and second columns in Table 3, the distributions are the same. Thus, the change in the industrial distribution of employment alone between 1970 and 1990 does not seem to increase part-time employment overall for any occupation. If one compares the first two columns with the third column, the distributions are almost the same. The only difference occurs with a 1% decrease of part-time workers for service occupations. Thus the change in the industrial distribution of employment combined with the change in the distribution of occupations within industries between 1970 and 1990 does not seem to increase part-time employment overall for any occupation. The increase in part-time work within each occupation appears to be a third, independent way in which the labor market changed between 1970 and 1990.

CONCLUSION

This study explores to what degree the decline in blue-collar jobs in Oklahoma between 1970 and 1990 was related to deindustrialization and to what degree it was related to the reorganization of occupations. Deindustrialization was found principally in Tulsa. Oklahoma City and McAlester lost a significant proportion of employment in the government sector. Tulsa, Oklahoma City, and McAlester each lost significantly more employment in craft and laborer occupations than can be accounted for by changes in the industrial distribution of employment. The abnormally large loss of employment in craft and laborer occupations and gain of employment in managerial, professional, and technical occupations was associated with the reorganization of occupations within industries. The most consistent shift in employment from place to place was the shift from employment in administrative service to sales occupations. This change is almost completely attributable to occupational changes within industries.

A doubling of the rate of part-time workers occurred that cannot be accounted for by the proportional change of employment by industry or by occupation within industries. The increase in part-time jobs was least pronounced in craft, laborer, and managerial, professional, and technical occupations and most pronounced in sales, service, and administrative support occupations. On average, the part-time worker in each occupation earned about one-third what the full-time worker earned. This makes the increase in part-time work across occupations the most problematic change in the labor market explored in this study for income inequality.

The use of the decennial census of population and housing does not easily allow one to test the relative contribution of the various factors identified in other studies as contributing to deindustrialization or to the reorganization of occupations within or across industries. But this study dem-

onstrates that one can use the decennial census of population and housing to assess the relative importance of industry based changes and occupational based changes within industries on overall distribution of occupations and on part-time employment in a geographical area. The findings of this study suggest that the labor movement should focus more on factors affecting the organization of existing industries. While deindustrialization has contributed to the loss of good paying blue-collar jobs, factors that have been working on the occupational distribution of existing industries seem to contribute as much or more to the loss of those jobs.

References

Alderson, A.S. 1999. "Explaining deindustrialization: globalization, failure, or success?" *American Sociological Review* 64:701-721.

Blue, B. and B. Harrison. 1982. *The Deindustrialization of America*. NY: Basic Books.

Bluestone B. and S. Rose. 1998. "The unmeasured labor force: the growth in work hours." *Jerome Levy Economics Institute of Brad College Public Policy Brief No. 40.*

Brown D.L. and T.A. Hirschl. 1995. "Household poverty in rural and metropolitan-core areas of the United States." *Rural Sociology* 60: 44-66.

Cohen R.B. 1988. "The new international division of labor and multinational corporations." Pp. 120-129 in *The Transformation of Industrial Organization, edited by* F. Hearn. Belmont, CA: Wadsworth.

Cooke, M.L. 1998. "Little Examined Elements in the Welfare Reform Debate: The Diminished Male and The Decreased Value of Education in The Labor Market." *Free Inquiry in Creative Sociology* 26:1-11.

Edwards, R. 1979. *Contested Terrain.* NY: Basic Books.

Garson, B. 1988. *The Electronic Sweatshop.* NY: Penguin Books.

Gordon, D.M. 1996. *Fat and Mean.* NY: Free Press.

Harrison, B. and B. Bluestone. 1988. *The Great U-Turn.* NY: Basic Books.

Levy, F. 1987. *Dollars and Dreams.* NY: Russell Sage Foundation.

------. 1998. *The New Dollars and Dreams.* NY: Russell Sage Foundation.

Lobao, L.M. 1990. *Locality and Inequality.* Albany: State University of New York Press.

Maume, Jr., D.J. 1987. "Local labor market structure and male employment stability in large metropolitan areas." *Work and Occupations* 14:216-235.

Moberg, G. 2000. "Labor's modest rise." *Democratic Left* 27:28.

Newman, K.S. 1988. *Falling from Grace.* NY: Free Press.

Reich, R. B. 1983. *The Next American Frontier.* NY: Times Books.

Rowthorn, R.E. and J.R. Wells. 1987. *DeIndustrialization and Foreign Trade.* Cambridge: Cambridge University Press.

Schor, J.B. 1991. *The Overworked American.* NY: Basic Books.

Schwartz, J. 2000a. "World Trade Organization." *Democratic Left* 27: 2,4-5.

------. 2000b. "Labor and Globalization." *Democratic Left* 28:14-16.

Tabb, W.K. 2000. "After Seattle." *Monthly Review* 51:1-18.

U.S. Bureau of the Census. 1973a. Census of Population: 1970 Vol. I, Characteristics of the Population Part 38, Oklahoma. Washington, D.C.: U.S. Government Printing Office.

------. 1973b. Census of Population and Housing, 1970: Public Use Microdata Samples U.S. (machine-readable data files). Washington, D.C.: The Bureau.

------. 1973c. Census of Population and Housing, 1970: Public Use Microdata Samples U.S. Technical Documentation. Washington, D.C.: The Bureau.

------. 1992a. Census of Population: 1990 Vol. I, Characteristics of the Population Part 38, Oklahoma. Washington, D.C.: U.S. Government Printing Office.

------. 1992b. Census of Population and Housing, 1990: Public Use Microdata Samples U.S. (machine-readable data files). Washington, D.C.: The Bureau.

------. 1992c. Census of Population and Housing, 1990: Public Use Microdata Samples U.S. Technical Documentation. Washington, D.C.: The Bureau.

Wasmer, E. 1999. "Competition for jobs in a growing economy and the emergence of dualism." *The Economic Journal* 109:349-371.

Wilkie, J.R. 1991. "The decline in men's labor force participation and income and the changing structure of family economic support." *Journal of Marriage and the Family* 53: 111-122.

Wood, A. 1994. *North-South Trade, Employment, and Inequality*. Oxford: Oxford University Press.

Yates, M.D. 1994. *Longer Hours, Fewer Jobs*. NY: Monthly Review Press.

------. 1996. "The labor market is unlike any other." *Monthly Review* 47:5-18.

TESTING SOME TRUISMS ABOUT POVERTY IN OKLAHOMA*

Dr. Marvin L. Cooke
Tulsa Community College

Abstract

Four truisms about poverty are often heard in Oklahoma: Dependency causes poverty, education solves poverty, discrimination is no longer a problem, and a rising economic tide floats all boats. This paper uses publicly available sources –such as the U.S. Census– to test these truisms in Oklahoma. From 1999 and 2006 it was found that poverty increased in the face of decreased public assistance, that poverty increased in the face of increased education levels, that higher rates of poverty level wages were paid to minorities and women than to white men, that poverty level wages were a part of the labor market and that poverty rises and falls as the proportion of jobs that pay poverty level wages rises and falls, and that real wages fell as per capita gross domestic product rose. After a close examination of various industrial sectors and of recent cross national studies, it was concluded that a rising floor under the labor market is more effective at reducing poverty than a rising general tide of economic growth.

* *originally printed in Free Inquiry in Creative Sociology 2010 38(2).*

INTRODUCTION

Depending on where one lives and on what media one consumes, one can hear various truisms about poverty and its causes. In my state of Oklahoma, I often hear that assistance to poor people causes them to be dependent and thereby traps them in poverty. A truism that one hears from educators is that education can decrease poverty. Another truism heard is that discrimination does not really happen now and therefore has no affect on poverty. I also hear from both conservatives and liberals that a rising tide –meaning economic growth in general– raises all boats, which is another statement of the trickle-down theory of economic growth.

One can find studies that debunk these truisms. For example, Iceland (2003) found that, while poverty decreased in real terms as the gross domestic product increased prior to 1973, the poverty rate marginally increased in a recession and marginally decreased during growth after 1973. Beginning in the late 1970s, Bluestone (1995) found that inequality in wages actually increased after recoveries from recessions. The factors that Iceland and Bluestone found associated with the change in how the labor market affects poverty after the 1970s have been reported in Oklahoma (Maril 2000; Cooke 2001) and include deindustrialization, the growth of the service sector, globalization, the large cohorts of the baby boom, the growth

of women in the labor market, the decline of unionization, and the flight of education and jobs from the central cities to the suburbs. Yet, one still finds truisms used in public discourse based on the performance of the economy before 1973.

The purpose of this study is to look at these truisms one more time in the state of Oklahoma.

Truism 1: Welfare causes poverty by causing dependency

One side of the welfare reform debate in the 1990s (Cooke 1998) claimed that welfare causes poverty by encouraging people to stay on the dole and thereby remain poor. One still hears this truism today in arguments against extending unemployment benefits in the face of 10% unemployment (Noah and York 2010). To test this truism, the TANF statistics from the Oklahoma Department of Human Services were combined with information about families from the 2000 Census and the 2006 American Community Survey. In 2000, there were 927,703 families in Oklahoma with children under 18. Eleven percent of these families were poor and thereby could quality for welfare/TANF. If one uses the December 2000 TANF case report as an indicator of the number of families on TANF, almost one out of five families that were poor with children under 18 were on TANF in 2000. By December 2007 –using the 2006 American Community survey to estimate the number of poor families– just over one out of ten families that were poor with children under 18 were on TANF. With a drop of TANF participation by eligible families of almost half, one would expect the poverty rate to drop if dependency caused poverty. Instead, the poverty rate rose to 13% for families with children under 18. This does not support the truism that dependency causes poverty.

Truism 2: Raising education levels reduces poverty

The relationship between education, the labor market, and poverty can be seen in the *Oklahoma Employment Outlook 2014*. In projecting the labor market from 2004 to 2014, the authors projected the educational credentials required for the labor market during this time period (Carpenter et al. 2006:16). About 59% of the jobs expected to be created during this period can be done with a high school education or less. Given current poverty rates by education and the study's expected distribution of educational requirements for added employment over the next ten-year period, one could expect that there will be a poverty rate of about 19% among those in the jobs created. Thirty-one percent of the jobs projected to be created in Oklahoma between 2004 and 2014 will only require "short-term on-the-job training." The good news is that this type of job requires very few skills, can be learned with a short demonstration of duties, and assures that there will be some jobs for high school dropouts. The bad news is that this type of job lends itself to poverty rate wages, high turnover, and part-time employment.

Finally, according to U.S. Census, the percent of Oklahomans 25 years of age and older that had more than a high school education marginally in-

creased from 49.2% in 1999 to 51.2% in 2006. Over the same time period, the poverty rate increased from 13% to 16%. Contrary to education advocates, the nature of jobs created by the economy tends to affect educational levels required rather than increasing education levels causing good jobs to be created.

Truism 3: Discrimination is not really a problem nowadays. Thus, it can have no effect on poverty.

Poverty level wages[1] are a part of the labor market. For workers from 25 to 61 years of age[2], about one in ten were paid a poverty wage rate for a household of three in mining, in transportation, communications, and public utilities, and in wholesale trade. About one in eleven were paid at a poverty wage rate in public administration. These were the industrial sectors that had the lowest proportion of jobs that paid at the poverty level or lower. With respect to sex and race among these industries, women are 74% less likely to receive a poverty wage rate than men in mining and about equally likely to receive a poverty wage rate as men in wholesale trade. Minorities are 42% more likely to receive a poverty wage rate than whites in mining but only 8% more likely in wholesale trade. Women are 35% more likely to receive a poverty wage rate than men in public administration and 96% more likely in transportation, communications, and public utilities. Minorities are 64% more likely to receive a poverty wage rate than whites in public administration but are about equally likely to receive a poverty wage rate as whites in transportation, communications, and public utilities. Women composed 18% of workers in mining, 22% in wholesale trade, 27% in transportation, communications, and public utilities, and 44% in public administration. Minorities composed 15% of workers in mining, 12% in wholesale trade, 14% in transportation, communications, and public utilities, and 22% in public administration. The two industries that proportionally contained more women also were more likely to pay women poverty rate wages. Similarly, the two industries that proportionally contained more minorities were more likely to pay minorities poverty rate wages.

About one worker in seven was paid at a poverty wage rate in manufacturing and in finance, insurance, and real estate. Women were 28% more likely to receive a poverty wage rate in finance, insurance, and real estate, which was the industry with next to the highest concentration of women workers at 65%. Minorities were 77% more likely to receive a poverty wage rate in finance, insurance, and real estate. They composed 14% of workers in the 25 to 61 years age range in the industry. Twenty-six percent of workers in manufacturing were women, who were 142% more likely to receive a poverty wage rate than men. Twenty percent of workers were minorities. They were 78% more likely to be paid a poverty wage rate than whites.

About one in five workers were paid at a poverty rate in construction. Women only make up 10% of construction workers and are 17% less likely than men to receive a poverty wage rate. Minorities make up 18% of construction workers and are 47%

more likely than whites to receive a poverty wage rate. About one in four were paid at a poverty rate in services. Women were 12% more likely to receive a poverty wage rate in services, which was the industry with the highest concentration of women workers at 67%. Minorities make up 19% of service workers and are 63% more likely than whites to receive a poverty wage rate. And about one in three were paid at a poverty rate in retail sales and in agriculture. Women were 80% more likely to receive a poverty wage rate in retail sales and made up 52% of workers in the industry. Minorities were 63% more likely than whites to receive a poverty wage rate in retail sales and composed 17% of workers. In agriculture, women were 22% more likely to receive a poverty wage rate and composed 22% of workers. Minorities were 76% more likely than whites to receive a poverty wage rate and composed 14% of workers.

Overall in 2006, 19.4% –or about one in five– jobs paid at a poverty rate for a household of three. This is proportional to the household poverty rate for the state of 16%. Overall, women made up 47% of wage earners in the 25 to 61 years age range. They were 47% more likely to receive a poverty wage rate than men. Minorities composed 19% of wage earners in the 25 to 61 year age range. They were 57% more likely to receive a poverty wage rate than whites.

We are about 40 years beyond the passage of the federal legislation that made discrimination illegal. We have had enough time to have the age cohorts who lived under segregation pass through the work force. Should we still see such discrepancies in outcomes if discrimination were not a factor in hiring and promotion? Obviously, since women and minorities are the most likely to receive a poverty wage, simply stopping discrimination should decrease the poverty rate in Oklahoma.

Truism 4: A rising tide raises all boats

Since most of us live by earning a wage, the most likely cause of poverty is the labor market itself. To test this in Oklahoma, look at the proportion of poverty level jobs in the labor market and the poverty rate in a neighboring state, Kansas, and at an earlier point in time for Oklahoma– the 2000 Census, which actually reports labor and earnings information for 1999. In the 2006 Census Bureau's American Community Survey, Kansas had a household poverty rate of 12.3%. Almost one in seven jobs in Kansas (14.8%) paid a poverty rate wage for a household of three for 25 to 61 year olds in the labor force. From the discussion above, about one in five (19.4%) jobs paid a poverty rate wage in Oklahoma in 2006, which had a 16% household poverty rate. In the 2000 Census, 14.7% of households were poor and about one in six (15.8%) jobs paid a poverty rate wage in Oklahoma. There is an association between the proportion of jobs that pay a poverty rate and the household poverty rate across time and geography.

As earlier noted, Iceland found that, after 1973, the poverty rate marginally increased in a recession and marginally decreased during growth. Since

the proportion of poverty level jobs and poverty both increased in Oklahoma between 1999 and 2006, one would expect that the tide was falling. In fact, the gross domestic product for the state increased by 38% between 1999 and 2006 as the population increased by 4%. Here one has a case in which the tide was rising while poverty increased.

What would one expect if wages rose at the same rate as the growth in the state's gross domestic product? Using Iceland's (2000) method of calculating poverty rates under different assumptions to estimate what would have happened to the poverty rate in Oklahoma if wages would have changed at the same rate as the per capita gross domestic product for the state, the hourly wage rate for each worker from 25 to 61 years of age in the 2000 Census was increased by the change in per capita gross domestic product for Oklahoma between 1999 and 2006, taking inflation into account. If the change in per capita gross domestic product during this period had affected all workers equally, one would expect about one in ten (11.1%) poverty wage rate. Instead, one finds a poverty wage rate in 2006 of about one in five.

Looking at specific industrial sectors, the actual poverty wage rate was less than the expected poverty wage rate from the per capita gross domestic product increase only in wholesale trade. The actual poverty wage rate was somewhat higher than expected in transportation, communications, and public utilities (poverty wage rate of 1 out of 12 workers expected, 1 out of 10 actual), agriculture (1 out of 4 expected, 1 out of 3 actual), and mining (1 out of 14 expected, 1 out of 10 actual). It was higher than expected in finance, insurance, and real estate (1 out of 12 expected, 1 out of 7 actual), services (1 out of 7 expected, 1 out of 4 actual), construction (1 out of 10 expected, 1 out of 5 actual), public administration (1 out of 20 expected, 1 out of 10 actual), and manufacturing (1 out of 17 expected, 1 out of 7 actual). It was significantly higher in retail sales (1 out of 16 expected, 1 out of 3 actual). Clearly, the increase in gross domestic product does not positively affect workers in all industrial sectors.

Using the same method from Iceland (2000), one can look at the effect of the rising gross domestic product on each quartile of the income distribution for the state. To do this, the wage distribution expected in 2006, based on the assumption that all wages in 1999 increased at the rate of change of the per capita gross domestic product, adjusted for inflation, were compared to the actual wage distribution in 2006 for each income quartile. On average, actual wages were 88% of what would be expected from increases in the per capita gross domestic product. This means that an increasing proportion of gross domestic product is returning to capital instead of labor. Beginning with the lowest quartile, actual wages were 81% of expected wages for the lowest quartile, 85% for the second quartile, 87% for the third quartile, and 91% for the top quartile. Thus, more of the growth of the gross domestic product is going to higher income quartiles rather than to lower income quartiles as well as more of the gross domestic product going to capital.

To understand this distribution of poverty wages by industry, it is instructive to look at wage level, wage distribution, and the use of part-time or temporary workers. Using the population of employed persons from 25 to 62 years of age in 2006, the four sectors with the highest proportion of poverty wage jobs had the lowest average hourly wage rate for full-time workers, ranging from $11.85/hour to $17.32/hour. The four sectors with the lowest proportion of poverty wage jobs had the highest average hourly wage rate for full-time workers, ranging from $19.90/hour to $26.06/hour. Retail sales also had the widest standard deviation of wages as a proportion of the average wage rate for full-time retail sales workers, 0.97. A wide standard deviation indicates that there are more jobs that pay further below and above the average for the industry than usual. The narrowest standard deviation of wages as a proportion of the average wage rate for full-time workers was for transportation, communications, and public utilities, 0.57. A narrow standard deviation indicates that the pay for most jobs bunch more closely to the average. Services had the widest standard deviation of wages as a proportion of the average wage rate for part-time workers, 6.48. The narrowest for part-time workers was 1.22 for workers in public administration. Services, retail sales, and construction industries used the largest proportion of part-time or temporary workers, ranging from 28% to 36%. The four industrial sectors with the lowest proportion of poverty rate wages used the smallest proportion of part-time or temporary workers, ranging from 14% to 18%. These three factors correlate well with high poverty rate wages in an industrial sector. They also are also consistent with a strategy of using part-time workers as a method for holding down wage demands from full-time workers.

To get another picture of the relationship between the increase in gross domestic product –the rising tide–and the incomes of workers –the boats– Table 1 was constructed based on the Bureau of Economic Analysis' "Gross Domestic Product by State and Industry" (2009) and on hours worked by industry and occupation based on the Census Bureau's Public Use Microdata Sample for Oklahoma for the 2000 Census for 1999 and for the 2006 American Community Survey. For 1999 and 2006 in Oklahoma for each nonagricultural nongovernmental industrial sector, Table 1 compares real gross domestic product per hour worked[3], the market value of gross domestic product per hour worked[4] in 1999 dollars, the average hourly wages[5] for the industrial sector and for three occupational clusters in each industrial sector[6] in 1999 dollars, and the percent of part-time workers –working less than 35 hours per week or less than 50 weeks per year– for the three occupational clusters in each industrial sector.

Before looking at the various sources of inequality found in Table 1, first note that, as real productivity (chained GDP per hour worked) for the nonagricultural, private sectors of the economy in Oklahoma increased by 12% between 1999 and 2006, the real market value (market value of GDP per hour worked adjusted by the Consumer Price

Index) of that growth only increased by 6%. The real value of labor in terms of the average hourly wage rate adjusted by the Consumer Price Index decreased by 1%. This is direct evidence that, as productivity increased –admittedly at a slow pace– real hourly wages fell. This is a direct refutation of the truism that a rising tide raises all boats.

To look at what factors cause some boats to rise and others to sink in terms of wages, consider Botwinick's (1993) work on social inequality. He found three major sources of wage inequality. First, differences in earnings between and within industries set different limits to the wages of workers. Second, the disparate efforts of workers to increase their wages will affect wage differences. Finally, the ever-present reserve army of labor will set limits to wage variation. These three factors can be seen at work in Table 1.

As one looks at Table 1, industrial sectors with high rates of growth in real market value of gross domestic product were those with higher rates of growth of average wages. Both mining and wholesale trade experienced significant increases in the real market value of productivity between

Table 1: **Comparison of Gross Domestic Product per Hour Worked, Average Wages, and Percent Part-time Employment for Nonagricultural, Private Sectors for Oklahoma for 1999 and 2006**

Variable	Year	Industrial Sector	
		Mining	Construction
GDP per hour, chained in 2000 dollars	1999	89.74	18.48
	2006	72.15	14.20
GDP per hour in 1999 dollars adjusted by CPI[c]	1999	54.00	17.34
	2006	160.13	16.3
Average hourly wage in 1999 dollars:			
For industry	1999	17.76	14.05
	2006	21.03	12.49
For managers and professionals	1999	26.84	21.72
	2006	35.19	20.59
For technical, sales, and administrative support	1999	15.38	13.87
	2006	16.23	13.21
For production, repair, operators, labors, etc.	1999	13.98	13.00
	2006	18.66	11.07
Percent part-time positions:			
For managers and professionals	1999	20%	18%
	2006	16%	15%
For technical, sales, and administrative support	1999	21%	38%
	2006	23%	48%
For production, repair, operators, labors, etc	1999	27%	36%
	2006	25%	33%

[c] Consumer Price Index

***Table 1 (continued):* Comparison of Gross Domestic Product per Hour Worked, Average Wages, and Percent Part-time Employment for Nonagricultural, Private Sectors for Oklahoma for 1999 and 2006**

Variable	Year	Industrial Sector	
		Manufacturing	TCPU[a]
GDP per hour, chained in 2000 dollars	1999	30.33	72.96
	2006	34.41	41.34
GDP per hour in 1999 dollars adjusted by CPI[c]	1999	30.91	74.24
	2006	24.34	28.84
Average hourly wage in 1999 dollars:			
For industry	1999	15.87	15.68
	2006	14.89	16.63
For managers and professionals	1999	23.91	23.69
	2006	24.73	20.60
For technical, sales, and administrative support	1999	15.52	17.25
	2006	15.00	14.57
For production, repair, operators, labors, etc.	1999	13.89	11.66
	2006	12.36	16.07
Percent part-time positions:			
For managers and professionals	1999	11%	21%
	2006	13%	16%
For technical, sales, and administrative support	1999	23%	23%
	2006	20%	31%
For production, repair, operators, labors, etc	1999	23%	25%
	2006	25%	22%

[a] Transportation, Communications, and Public Utilities
[c] Consumer Price Index

1999 and 2006. The real market of productivity for mining increased 197% and for wholesale trade increased 134%. While the average hourly value of real wages fell during this time period for almost all other industrial sectors, the real value of wages increased 18% for mining and 42% for wholesale trade. Thus, higher wages can be paid to workers in industrial sectors that have higher rates of real market value growth.

As an aside, one often hears management admonish workers to work harder to increase productivity as a means of potentially increasing wages. Ironically, real productivity actually decreased for mining by 20% between 1999 and 2006. The reason for the increase in real market value of productivity for mining was an increase in the price of gasoline from $1-$2 per gallon in 1999 to $3-$4 per gallon in 2006. The increased return on an hour worked was rooted in market conditions for the product.

The increase in the real market value of productivity for wholesale trade appears to reside in an increase in real productivity. Chained productivity

per hour of work increased for wholesale trade by 194%. However, the total hours worked in wholesale trade decreased by 60% between 1999 and 2006. The proportion of part-time workers was cut in half over that time period.

Without a detailed history of the wholesale trade sector, it is impossible to tell the story of this sector. But clearly, either less productive enterprises left the state, went out of business, or some found means of seriously increasing productivity –such as computerization and automation– that resulted in more output with less labor.

The real market value of productivity for all other industrial sectors was either stagnant or declining. With respect to the stagnant sectors, the real market value of productivity increased for finance, insurance, and real estate by 1% and decreased for services by 4% and for construction by 6%. Real wages decreased for finance, insurance, and real estate by 1%, for services by 1%, and for construction by 11%.

The sectors that experienced a decline in the real market value of productivity present a mixed picture with respect to wages. Retail sales behave

***Table 1 (continued):* Comparison of Gross Domestic Product per Hour Worked, Average Wages, and Percent Part-time Employment for Nonagricultural, Private Sectors for Oklahoma for 1999 and 2006**

Variable	Year	Industrial Sector	
		Wholesale	Retail
GDP per hour, chained in 2000 dollars	1999	14.39	25.89
	2006	42.32	28.85
GDP per hour in 1999 dollars adjusted by CPI[c]	1999	13.99	25.96
	2006	32.78	19.39
Average hourly wage in 1999 dollars:			
For industry	1999	12.22	16.81
	2006	17.33	11.74
For managers and professionals	1999	18.11	20.79
	2006	20.32	22.30
For technical, sales, and administrative support	1999	11.83	15.14
	2006	21.39	11.08
For production, repair, operators, labors, etc.	1999	11.23	16.16
	2006	11.05	9.80
Percent part-time positions:			
For managers and professionals	1999	28%	20%
	2006	17%	40%
For technical, sales, and admin. support	1999	51%	32%
	2006	20%	49%
For production, repair, operators, labors, etc.	1999	43%	24%
	2006	28%	48%

[c] Consumer Price Index

Table 1 (continued): **Comparison of Gross Domestic Product per Hour Worked, Average Wages, and Percent Part-time Employment for Nonagricultural, Private Sectors for Oklahoma for 1999 and 2006**

Variable	Year	Industrial Sector	
		FIRE[b]	Services
GDP per hour, chained in 2000 dollars	1999	69.18	17.26
	2006	73.50	19.14
GDP per hour in 1999 dollars adjusted by CPI[c]	1999	66.91	16.58
	2006	67.57	15.98
Average hourly wage in 1999 dollars:			
For industry	1999	16.73	14.13
	2006	16.52	14.02
For managers and professionals	1999	21.09	18.40
	2006	21.07	19.05
For technical, sales, and administrative support	1999	15.2	9.67
	2006	13.58	9.69
For production, repair, operators, labors, etc.	1999	13.47	11.52
	2006	13.30	10.88
Percent part-time positions:			
For managers and professionals	1999	19%	40%
	2006	14%	37%
For technical, sales, and administrative support	1999	36%	58%
	2006	34%	54%
For production, repair, operators, labors, etc.	1999	24%	42%
	2006	47%	44%
	2006	47%	44%

[b] Finance, Insurance, and Real Estate
[c] Consumer Price Index

as expected from Botwinick's study. The real market value of productivity declined by 25%; real wages declined by 30%. The behavior of the manufacturing sector and the transportation, communications, and public utility sector are a bit aberrant with respect to the observation that growth of productivity sets the limits to the growth of wages. While the real market value of productivity for manufacturing decreased by 21%, real wages only decreased by 6%. As the real market value of productivity for the transportation, communications, and public utility sector declined by 61%, real wages actually increased by 6%.

One can use Botwinick's observation that disparate efforts of workers to increase their wages will affect wage differences to account for the rising wages in the transportation, communications, and public utilities sector. The Bureau of Labor Statistics reports that transportation, communications, and public utilities is the private sector with the highest percent of employees represented by unions (Bureau of

Labor Statistics 2009b). Moreover, if one examines the databases for stories from the *Tulsa World* and the *Daily Oklahoman* for the last 10 years, almost all of the stories that involve unions are about the transportation, communications, and public utilities sector. Concerted actions by unions along with the regulated nature of utilities could easily account for upward pressure on real wages in the face of a decline in the real market value of productivity. Additionally, it should be noted that the gross domestic product for transportation, communications, and public utilities actually increased by 15%. Thus, there may have been room in budgets to cover wages in the face of declining real market value of productivity. Moreover, the transportation, communications, and public utilities sector has the narrowest difference between the top and bottom of the salary range as measured by the standard deviation of wages divided by the average wage. As such, wages to management and non-represented workers could be depressed to cover wage increases to represented workers.

The relative small loss of real hourly wages for manufacturing workers in the face of the significant loss of real market value of product probably cannot be accounted for without further study. One should note that the real productivity for manufacturing rose between 1999 and 2006 at the second highest rate behind wholesale trade. Whether this increase can be attributed to increased automation, more successful management or organization, increased productivity of workers, or some other factor, it likely indicates that the specific skills used by manufacturing workers in new systems, skills, or methods of work would make them more difficult to replace in the local labor market. It is also likely that manufactures that rely on cheap labor move their operations to low wage countries, such as China. Anecdotally, a former neighbor, an engineer, shared that the small company for whom he works moved its manufacturing to China. I assume that, if my neighbor's small company that manufactures trolling motors for fishing boats can move its manufacturing to China, such a strategy is available to most manufactures that choose to use low wages for its competitive advantage. Otherwise, increasing productivity rather than beggaring ones workers seems to be the strategy in manufacturing to remain in Oklahoma.

Botwinick's last finding was that the ever-present reserve army of labor will set limits to wage variation. The effect of the "ever-present reserve army" can be best seen in the retail sales sector. As one would expect from Botwinick's first finding that the growth in earnings limits growth in wages, the decline of the real market value of productivity in retail sales lead to a proportional decline in real wages. One of the ways that the retail sales sector dealt with its situation was to double part-time employment for all occupations. This strategy has obvious benefits for management and owners in the retail sales sector in that part-time employees are flexibly scheduled, casually employed, receive the lowest of wages, and receive no additional benefits. One of the effects of increasing part-time employment is to increase the reserve

army of workers. Note from the Consumer Expenditure Survey (Bureau of Labor Statistics 2009a) that households making less than $34,685 spend more than they make. This means that they have additional pressure to earn. Multiple jobs or multiple workers in the household are required to maintain the household over the long term. With a rise in low-paying, part-time jobs, more workers must work more than one job in order to try to maintain a standard of living. Thus, the effect of increasing part-time, low wage work in the labor market is to increase the reserve army of workers by increasing the number of jobs than any one worker must work.

Conclusion: The rising floor as the solution to poverty

In the Russell Sage Foundation study of low-wage work in Europe and the United States (Gautié and Schmitt 2010), the authors found that the proportion of low-wage work, and therefore work that pays poverty level wages, does not correlate with per capita Gross Domestic Product, Gross Domestic Product Growth, the growth in the hourly productivity of labor, or demographic factors such as the growth of women in the labor market. In other words, as with this study, they found that the rising tide does not assure that all boats will rise.

The factor their study found that reduced low-wage work, thereby poverty, was a rising floor. They found that the rising floor took several forms. In some cases, strong bargaining power of workers affected multiple sectors through various mechanisms to spread the agreement. In Oklahoma, this is most clearly seen in the Transportation, Communication, and Public Utilities sector. In other cases, a strong minimum wage provided a rising floor. While some would argue that a strong minimum wage would possibly decrease employment, Bluestone (1995) found that higher minimum wages only lead to very modest losses of low income jobs that are more than offset by overall higher wages in the labor market. In yet other cases, strong income support provided a rising floor. For example, in countries that had strong income support for the unemployed, wages were forced to be higher than the income support level. While not discussed in the Russell Sage Foundation study, the elimination of the two-tier wage system involving racial and sexual discrimination would help to set a floor to wages. One practice that Iceland (2000) and Ridgeway (2006) found that enable discrimination to continue is the failure to assess and use actual skills required and demonstrated for hiring, remuneration, and promotion decisions. In the absence of good, objective systems to assess skills required and demonstrated, they both found that employers default to stereotypes that privilege white males to make decisions.

The findings on Oklahoma in this study along with the findings of the study sponsored by the Russell Sage Foundation on the United States and Europe turn the truisms about poverty upside down. Tax breaks and incentives thrown at businesses without a strong floor of worker benefits and rights simply result in more profits for businesses and higher wages for

management. They do little to lower the poverty rate for the population. Having a generous welfare/unemployment system does not create dependency; it gives workers an alternative to low wages and thereby puts a solid floor on the labor market by forcing employers to pay more to entice workers into the labor market.

END NOTES

[1] The poverty wage rate for this study is a wage rate paid to a worker who works 40 hours per week and 52 weeks per year that would still leave the worker and her/his household in poverty if she/he were the only income earner in a household of three. In the 2006 American Community Survey, the average size of a household in Oklahoma was 2.5, and the average size of a family was just over three.

[2] The values reported for variables were calculated from the Public Use Microdata Sample for Oklahoma from the U.S. Census Bureau's 2000 Census for values identified as 1999 and from the U.S. Census Bureau's 2006 American Community Survey for values identified as 2006. Given the wide variability in employment of persons under 25 years and of persons 62 years and older, the calculations were based only on adults 25 to 61 years of age.

[3] Gross domestic product values for Oklahoma were drawn from "Gross Domestic Product by State and Industry" (Bureau of Economic Analysis 2009). Real gross domestic product per hour was calculated by dividing gross domestic product values by industry chained to the year 2000 by the number of hours worked in that industry as calculated from the Public Use Microdata Sample for Oklahoma from the 2000 U.S. Census for 1999 and from the 2006 American Community Survey for 2006. Multiplying various amounts of products in an industrial sector by the cost of those products for a reference year, which is 2000 in this case, creates a chained value (Bureau of Economic Analysis 2008). The idea is to create a dollar amount that reflects changes in mixes and amounts of products produced in an industrial sector while neutrallizing the effect of changes in market prices and inflation.

[4] Using the same databases as identified in Note 3 above, the market value of gross domestic product per hour worked for an industrial sector was calculated by dividing the nominal market value of the gross domestic product for the industrial sector, adjusted for inflation using the Consumer Price Index, by the number of hours worked in that industry. The adjustment by the Consumer Price Index was done to make values in 1999 comparable with values in 2006. Values are expressed in 1999 dollars.

[5] Hours worked in an industrial sector were estimated from census sources cited in Note 3 above.

[6] Average wages reported by industrial sector and, in Table 1, by occupational cluster within an industry were estimated from census

sources cited in Note 3 above. Once again, the wages are reported in 1999 dollars, and the Consumer Price Index was used to make values in 1999 comparable with values in 2006.

References

Assistant Secretary for Planning and Evaluation. 2006. "The 2006 HHS Poverty Guidelines." Washington, D.C.: U.S. Department of Health & Human Services. Retrieved February 17, 2010 from http://aspe.hhs.gov/POVERTY/06poverty.shtml.

Bluestone, Barry. 1995. *The Polarization of American Society: Victims, Suspects, and Mysteries to Unravel.* NY: Twentieth Century Fund Press.

Botwinick, Howard. 1993. *Persistent Inequalities.* NJ: Princeton University Press.

Bureau of Economic Analysis. 2008. "Concepts and Methods of the U.S. National Income and Product Accounts (Introductory Chapters 1-4)." Washington, D.C.: U.S. Department of Commerce. Retrieved June 2, 2009 from http://www.bea.gov/National/pdf/NIPAhandbookch1-4.pdf.

------. 2009. "Gross Domestic Product by State and Industry." Washington, D.C.: U.S. Department of Commerce. Retrieved January 13, 2010 from http://www.bea.gov/regional/gsp/action.cfm.

Bureau of Labor Statistics. 1999. "Table 2. Income before taxes: Average annual expenditures and characteristics, Consumer Expenditure Survey, 1999." Washington, D.C.: U.S. Department of Labor. Retrieved February 22, 2010 from http://www.bls.gov/cex/1999/Standard/income.pdf.

------. 2009a. "Table 2 Income before taxes: Average annual expenditures and characteristics, Consumer Expenditure Survey, 2006." Washington, D.C.: U.S. Department of Labor. Retrieved June 21, 2010 from http:/www.bls.gov/cex/2006/Standard/income.pdf.

-------. 2009b. "Table 3 Union affiliation by employed wage and salary workers by occupation and industry." Washington, D.C.: U.S. Department of Labor. Retrieved June 21, 2010 from http://www.bls.gov/news.release/union2.t03.htm.

Carpenter, John, Huifen Zhang, Rebecca Darko, and Philip West. 2006. *Oklahoma Employment Outlook 2014.* Oklahoma City: Oklahoma Employment Security Commission.

Cooke, Marvin. 1998. "Little Examined Elements in the Welfare Reform Debate: The Diminished Male and the Decreased Value of Education in the Labor Market." *Free Inquiry in Creative Sociology* 26(1):31-42.

------. 2001. "Deindustrialization and the Reorganization of Occupations: The Reorganization of the Labor Market in Oklahoma between 1970 and 1990." *Free Inquiry in Creative Sociology* 29(1):3-12.

Gautié, Jérôme and John Schmitt, eds. 2010. *Low-Wage Work in the*

Wealth World. NY: Russell Sage Foundation.

Iceland, John. 2003. *Poverty in America*. Berkeley: University of California Press.

Levy, Frank. 1998. *The New Dollars and Dreams*. NY: Russell Sage Foundation.

Maril, Robert Lee. 2000. *Waltzing with the Ghost of Tom Joad: Poverty, Myth, and Low-wage Labor in Oklahoma*. Norman: University of Oklahoma Press.

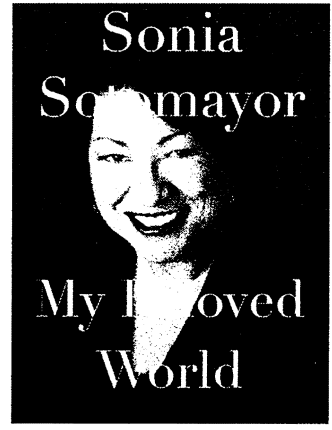
Noah, Timothy and Byron York. 2010. Bloggingheads: Jobs Benefits Battle." *New York Times*. Retrieved July 24, 2010 from http://video.nytimes.com/video/2010/07/23/opinion/1247468501970/bloggingheads-jobs-benefits-battle.html.

Ridgeway, Cecilia. 2006. "The Persistence of Gender Inequality in Employment." Pp. 401-409 in *The Production of Reality* by J. O'Brien. 4th ed. Thousand Oaks: Pine Forge Press.

My Beloved World
By Sonia Sotomayor
ISBN: 978-0307594884

The first Hispanic and third woman appointed to the United States Supreme Court, Sonia Sotomayor has become an instant American icon. Now, with a candor and intimacy never undertaken by a sitting Justice, she recounts her life from a Bronx housing project to the federal bench, a journey that offers an inspiring testament to her own extraordinary determination and the power of believing in oneself.

Here is the story of a precarious childhood, with an alcoholic father (who would die when she was nine) and a devoted but overburdened mother, and of the refuge a little girl took from the turmoil at home with her passionately spirited paternal grandmother. But it was when she was diagnosed with juvenile diabetes that the precocious Sonia recognized she must ultimately depend on herself. She would learn to give herself the insulin shots she needed to survive and soon imagined a path to a different life. With only television characters for her professional role models, and little understanding of what was involved, she determined to become a lawyer, a dream that would sustain her on an unlikely course, from valedictorian of her high school class to the highest honors at Princeton, Yale Law School, the New York County District Attorney's office, private practice, and appointment to the Federal District Court before the age of forty. Along the way we see how she was shaped by her invaluable mentors, a failed marriage, and the modern version of extended family she has created from cherished friends and their children. Through her still-astonished eyes, America's infinite possibilities are envisioned anew in this warm and honest book, destined to become a classic of self-invention and self-discovery.



IDENTIFYING POSSIBLE IMPEDIMENTS TO FAIR HOUSING IN TULSA, OKLAHOMA, USING LESS-THAN-PERFECT HOME MORTGAGE DISCLOSURE ACT DATA*

Dr. Marvin L. Cooke
Tulsa Community College

Abstract

Studies that utilize Home Mortgage Disclosure Act (HMDA) data reveal more problems than they resolve. HMDA data include limited variables used by lenders. Even when supplemented with additional information, researchers question their results by hypothesizing additional variables that might account for race. Criteria of adequacy for utilizing HMDA data are proposed that are adequate to the planning task of identifying the effects of impediments to fair housing. While HMDA data provide questionable evidence for discrimination, they provide adequate evidence to determine if a minority population experiences impediments to fair housing. A methodology is derived from a literature review.

* *originally printed in Free Inquiry in Creative Sociology 2001 29(2).*

PURPOSE OF THE STUDY

Units of government that submit a Consolidated Plan for Community Development Block Grant, Home, and Emergency Shelter Grant funds are required to certify that they are affirmatively furthering fair housing. This certification requires that the unit of government conduct an analysis of impediments to fair housing choice and take appropriate actions to overcome the effects of any identified impediments.

One data source recommended by the Department of Housing and Urban Development to test for impediments to lending is Home Mortgage Disclosure Act (HMDA) data. Yet as one examines studies of impediments to lending that utilize HMDA data, one encounters problems and limitations that appear to render HMDA data inadequate to the task. The HMDA dataset includes only a fraction of the variables that lenders appear to use in making lending decisions. Even when researchers have the ability to supplement HMDA data with all remaining variables that seem to be used by lenders, researchers still tend to question the results by hypothesizing additional variables that might be responsible for the significance of race in lending decisions. Moreover, statistical models based on data from natural settings can only reveal patterns of association. They cannot prove the existence of discriminatory intent on the part of individuals or institutions.

The principal purpose of this study is to address these apparent problems

and limitations by specifying criteria of adequacy for utilizing HMDA data that are adequate to the task of identifying the effects of impediments to fair housing as defined by federal housing regulations. A critical review of HMDA literature was conducted in order to specify criteria of adequacy and in order to build a model to explore whether or not there are differential lending outcomes based on race. This model was then utilized to test for evidence of the effects of impediments to fair housing based on race in the City of Tulsa, Oklahoma. The HMDA Public Transmittal Sheets for the Tulsa MSA for 1990-1994 and census tract information from the 1990 U.S. Census for Tulsa were utilized. Finally, the results for housing policy will be discussed.

DEVELOPING CRITERIA OF ADEQUACY FOR IDENTIFYING EFFECTS

Many concepts and procedures of measurement in natural and social science were invented to solve practical problems rooted in social purposes (Duncan 1984). In a like manner, the conceptualization and measurement of lending discrimination evolved in the political conflict between lending institutions and community activists over lending disclosure.

In the original Home Mortgage Disclosure Act in 1975, HMDA data consisted of census tract level reports of the number of mortgages and the aggregate dollar amounts of lending. Instead of enabling a well-defined test for lending discrimination, this approach expanded the universe of alternative explanations that could be used to discount any findings of racial discrimination that might be found in a community.

Lending data is initially reported as the aggregate number of loans or dollar amounts in a census tract forced researchers (Shlay 1988, 1989; Hula 1991; Galster 1992; Shlay et al. 1992; Galster and Hoopes 1993; Perele et al. 1994; and Turner and Skidmore 1999) to conceive of differential lending outcomes as redlining– discrimination based on the racial or economic characteristics of an area. Munnell et al. (1996) and Tootell (1996) argued that redlining so conceived and measured confounds discrimination based on the racial or economic make-up of an area with discrimination based on the characteristics of individual loan applicants. If one treats the census tract as one's unit of analysis and tests for evidence of redlining, one is left with the problem of trying to interpret the evidence for redlining as discrimination against an area, a loan applicant, both, or possibly neither.

Discrimination in lending is then probably best tested as a rate of loan approval (Benston 1981; Ingram and Frazier 1982; Leven and Sykuta 1994; Munnell et al. 1996; Tootell 1996). By reporting only the number and aggregate dollar amount of loans, the total number of loan applications required to calculate a loan rate is missing. Typically, Shlay (1988, 1989), Hula (1991), Galster (1992), Shlay et al. (1992), and Perle et al. (1994) used either the quantity of lending in number of loans originated or aggregate dollars of loans originated as the dependent variable in their studies. As they noted in various ways, the quantity of lending in a cen-

sus tract must be standardized by the number of housing units or the number of owner-occupied units in a census tract. Notably, Shlay (1989) found that most studies used the log of the standardized lending volume because such models better fit the data in terms of the R^2 criterion. This would point to a rate embedded in lending volume as a dependent variable. Without a loan rate, a low loan volume found in a minority area could be countered by the argument that few persons applied for loans rather than more loan applications were rejected.

Next, if lending volume is reported by census tract, a model to test whether the racial composition of a census tract affects lending must control for the housing and population characteristics that might affect lending decisions. (Shlay 1988, 1989; Hula 1991; Galster and Hoopes 1993; Perle et al. 1994). The problem with interpreting the effects of these variables is created by confounding the effects of characteristics of loan applicants and of areas of applicant properties when both are embedded in variables that are measures of characteristics of census tracts. Some variables, such as the percent of vacant or vacant for sale single-family detached units, seem to be most related to the characteristics of an area. Other variables, such as the median household income of a census tract, are characteristics of both an area and individual loan applicants. This creates an indeterminacy that opens the interpretation of findings to challenge. As Tootell (1996) noted, this indeterminacy can only be resolved by including in the same model both variables measuring characteristic of census tracts and variables measuring characteristics of individuals.

Finally, if one uses HMDA data organized by census tracts and fits models of lending outcomes utilizing population and housing characteristics by census tract to make inferences about individual discrimination, one immediately is open to being challenged on the grounds of an ecological fallacy.

In 1989, Congress passed amendments to the HMDA requiring lenders to report the following: the location of properties for which loans were applied; the location of properties for which loans were approved; type, purpose, and amount of loan; race, sex, and income of applicant; race and sex of co-applicant; and reason for loan denials. On the one hand, the new HMDA dataset allows one to calculate loan approval rates for areas and to model the odds of loan approval for individual applicants. It provides some individual loan applicant variables as well as census tract information to allow one to test for both redlining and individual discrimination in lending. On the other hand, the dataset provided in HMDA data still does not provide a comprehensive set of variables used by lenders to assess the loan worthiness of a loan applicant (Benston 1981; Ingram and Frazier 1982; Leven and Sykuta 1994; Turner and Skidmore 1999). Two articles (Munnell et al. 1996; Tootell 1996) published from a Boston Federal Reserve Bank study conducted in 1992 included over forty variables used by lenders obtained from the Boston Federal Reserve Bank's own survey to supplement HMDA data. Although both of these studies found differential outcomes based on race, they represent

studies that cannot be conducted from HMDA data alone. A researcher using HMDA data is still left with an incomplete dataset that leaves a finding of differential outcomes based on race still open to challenge on the basis of a spurious relationship between race and outcome.

In response to the Boston Federal Reserve Bank study, Becker (1993) questioned the validity of studies of loan approval or denial rates by noting that underwriters determine lending criteria based on loan default rates. In response, Ross and Yinger (Turner and Skidmore 1999:107-127) observed that the default approach would still have potential problems of biased findings if all variables that influenced default were not included in the study. Furthermore, there are no guarantees that the factors included in the underwriting criteria are necessarily used by the lender at the time of loan approval or denial. They conclude that the loan denial approach can yield an acceptable test of the hypothesis that discrimination exists in the mortgage market.

Every study is open to methodological challenge. One can always claim that there might be some variable missing from a model that renders the resulting relation between dependent and independent variables spurious. Within the universe of available methods and data, methodological criticism makes practical sense. However, one often hears or reads methodological challenges that ask for additional data or modifications to methods beyond what is practically available to a researcher. At some point, such lines of questions become what Toulmin (1970: 205) called a limiting question:

> ...the way of answering suggested by the form of words employed will never completely satisfy the questioner, so that he continues to ask the question even after the resources of the apparent mode of reasoning have been exhausted.

By continuing methodological criticism in the mode of a limiting question, the questioner is asking for a level of certainty that does not exist within practical parameters. At that point, the criticism becomes an ad hominem argument.

In *Cosmopolis*, Toulmin (1990:137) suggested a different level of adequacy in the following statement: "Our revised account may or may not stand up to further factual examination, but at least it is based on circumstantial observations and plausible interpretations."

Here Toulmin claims that although always open to challenge in the face of further evidence, a study is adequate if it is consistent with available evidence and if the interpretation of the available evidence is plausible. While such criteria of adequacy cannot guarantee certainty, they provide guidelines for the practical use of experience.

For the purpose of this study, Toulmin's criteria of adequacy mean that one can test for the possible presence of differential lending activity based on race, sex, and other factors using the best data available to any researcher: the HMDA Public Transmittal Sheet records. Most researchers would not be able to use the methodology used in the Boston Federal Reserve Bank study either because they might not be

able to get the cooperation from lending institutions in the same manner as a branch of the Federal Reserve Bank or because they might not be able to fund such a survey. While there are methodological reasons for believing that studies based on HMDA and census data alone might overstate the presence of differential lending activity based on race, there are no studies that conclusively demonstrate that the overstatement is directionally an incorrect statement (Turner and Skidmore 1999). Furthermore, Toulmin's approach obligates the researcher to use the best approach of modeling and testing available to one. Beyond this, a reasonable methodological challenge to a study is practically moot.

The real challenge to a study alluded to by Toulmin is a substantial challenge to the adequacy of a study provided by further factual examination. In this case, it would mean that someone would have to conduct another study and argue that it provided evidence of a different outcome. Within the limits of plausible interpretations and circumstantial evidence proposed by Toulmin, one can review studies of redlining for plausible interpretations and use HMDA data as evidence to build a test model for differential outcomes in lending based on race.

As noted earlier, statistical models can only demonstrate association among variables. Even if all practically available variables are used to model lending decisions, only statistical relations are demonstrated. One is not proving discrimination –intentional or unintentional– on the part of lending institutions. However, it is not necessary to demonstrate discrimination or even the source of an impediment to fair housing to meet the certification to affirmatively further fair housing because the purpose of the analysis is to overcome the effects of impediments. All one must do is provide evidence of an effect of an impediment to fair housing by demonstrating that a statistically significant differential lending outcome associated with race, sex, or other indicators of protected populations exists.

This finding may be spurious or caused by intervening variables, but if all relevant variables are appropriately included in a model, one can control for such prior or intervening variables. Given the limited variables in HMDA data and U.S. Census data, all relevant variables are probably not available. If one is simply testing for differential outcomes or effects associated with indicators of populations, it is not necessary to control for all possible spurious or intervening variables. Even if one assumes that the relation between an indicator of a protected class and lending outcome is cause by an unknown prior or intervening variable not included in the model, the prior or intervening variable and the indicator of a protected class are associated. The effects of prior or intervening variables on lending outcomes are tied to the indicator of a protected class. Whether indicators of a protected class or other associated variables are the truly significant factor associated with differential lending outcomes, the effect is that the protected class experiences an impediment to lending. Having established that, it is still important to identify the nature of the impediments to fair housing affecting a population as accurately as possi-

ble in order to develop policies that are effective in furthering fair housing.

BUILDING THE MODEL

To build a model based on HMDA stat, Munnell et al. (1996) and Tootell (1996) have identified two categories of independent variables to test for differential outcomes based on race: (1) those associated with characteristics of census tracts containing properties for which loan applications are being made and (2) those associated with the individual characteristics of loan applicants and their households. Studies (Shlay 1988, 1989; Hula 1991; Galster and Hoopes 1993; Perle et al. 1994) that examined the characteristics of census tracts most often found the following variables to be statistically significant in predicting loan approval: the median family income, the percent of owners who had lived in a different house five years ago, the percent of vacant or vacant for sale single family detached units and condominiums, the percent of households composed of married families with children under eighteen years of age, and the percent of owner occupied units. Less often median home value was found statistically significant. Another variable is the median age of housing. Some researchers (Benston 1981; Sykuta 1994) treated the age of a house in terms of depreciation and housing condition. However, the age of a house could also be considered in terms of taste. These independent variables for census tract characteristics were included in the model in this study.

Two approaches have been developed to define the racial composition of a census tract for purposes of testing for differential lending outcomes. Most studies based on data organized by census tracts define race as the percent of minority population in a census tract. However, Shlay (1989), Galster (1992), and Masset et al. (1994) have argued for the importance of reflecting racial tipping and transitional neighborhoods. In Tulsa, the percentage of owner occupied units in which African Americans reside gradually increases from none to 15%. Then, the distribution jumps to 33% and rapidly increases to 100%. The census tracts containing 33% or more African American households among owner-occupied units are continuous and will be entered in the model as a categorical independent variable assigned a value of "1" if the census tract is in the African American area and "0" if it is not.[1] Surrounding the African American area is a boundary area containing four of the five census tracts with 10-15% African American households among owner-occupied units and 23 of the 39 non-African American census tracts with median household incomes in the same income range as the African American area ($8,583 to $22,773). Census tracts in the boundary area are contiguous and will be entered in the model as a categorical independent variable assigned a value of "1" if the census tract is in the boundary area and "0" if it is not.[2]

Studies that examined the characteristics of individual loan applicants and their households (Casey 1980; Benston 1981; Ingram and Frazier 1982; Leven and Sykuta 1994; Munnell et al. 1996; Tootell 1996) tended to focus on loan-to-income, loan-to-value,

credit history, consumer history, mortgage history, tenure in current employment, tenure of co-applicant in current employment, occupation, years to loan maturity, annual rate of loan, life of the dwelling without major rehabilitation, first-time buyer, private mortgage insurance approval, special programs, and secondary market loan. However, most of these variables are not available in the HMDA data. Using what is in the HMDA data, an indicator variable for the applicant's race (1 if African American, 0 if not), sex (1 if female, 0 if not), and number of applicants (1 if an applicant and co-applicant, 0 if applicant only) and continuous variables for the applicant's income and loan-to-income ratio were used to model loan approval for the individual applicant.

Since the decision to originate a loan is a dichotomous, categorical outcome, a logistic regression model (Nester et al. 1989; Agresti 1990; Menard 1995; Long 1997) was developed to test for differential outcomes based on race with lending outcome as the dependent variable. If a loan was originated or approved but not accepted, the loan outcome variable was assigned a value of "1". If the loan was denied by the financial institution, the loan outcome variable was assigned a value of "0". Rather than using the ordinary least squares method of fitting a model that is common with continuous, normally distributed dependent variables, logistic regression models –including the models fitted in this study– tend to use maximum likelihood estimators to fit a model because of the distribution of the dichotomous outcome variable.

In a critique of redlining studies, Shlay et al. (1992) observed that housing markets are local in nature. Galster and Hoopes (1993) demonstrated this by showing that different models fit lending behavior in different cities. Therefore, a model cannot necessarily be full specified before the fact of the study. Accordingly, a comparative approach to the study of redlining that explores all suggested approaches to modeling the relation between race and lending outcomes needs to be used to explore the exact nature of the distribution of lending effects by race, sex, and other areas covered by the requirement for an analysis of impediments to fair housing choice. Therefore four different models in which the natural logarithm of the odds of loan approval are a function of independent variables were fitted and are reported in Table 1. First, a model with the racial composition of a census tract defined as the percent of minority population in the census tract, with no interactions, and with all other dependent variables was fitted. Next, a similar model was fitted, but it used the racial composition of a census tract defined by an indicator variable for census tracts in the African American area and an indicator variable for census tracts in the boundary area. Finally, using these two schemes, two more models were fitted with additional independent variables reflecting the interaction of the area racial composition variable(s) with other census tract variables and the interaction of the race of the loan applicant with other variables associated with individual loan applicants.

Several adjustment were made to the data to control for variables not included in the model, to increase com-

Table 1: **Four Logistic Regression Models of Factors Affecting the Lending Decision – Characteristics of Applicants**

MODEL 1's Variables	Regression Coefficient
African American Applicant Indicator	-0.7472*
Sex Indicator	0.2737*
Two applicants indicator	-0.2716*
Income	0.0380*
Loan to income	0.3480*
Minorities per thousand households	-0.0005
Median family income	-0.0000
Owners	0.0022*
Movers	0.0005
Median age of housing	0.0121
Median value of housing	0.0000
Families	-0.0019*
Vacant for sale	-0.0011
R_L^2: 0.073 p: 0.371	

*Wald statistic significant at the 0.05 level.

parability between African American loan applicants and non-African American loan applicants, and to ensure the linear nature of continuous independent variables. First, to control for the possible effects of census tracts being in the central city versus suburbs and to control for the natural growth of areas of new construction versus areas of existing housing, only census and loan applications in the City of Tulsa in census tracts with fewer than ten building permits issued for new residential construction in either 1990 or 1991 were included in the dataset.[3] Second, since the middle four standard deviations of income of African American loan applicants were contained under $70,000, only loan applicants with incomes under $70,000 were included in the dataset. Since the loan-to-income ratio increased geometrically for loan applicants with incomes of $10,000 or less, only loan applicants with incomes over $10,000 were included in the dataset. Since loans originated or approved but not accepted and loan applications denied are the only lending actions that clearly imply an active lending decision, loan applications withdrawn by applicants or closed for incompleteness were excluded. Finally, only loan applications to purchase homes that were owner-occupied as principal dwellings were considered. The final dataset included 2,270 cases.

FINDINGS

From Table 1, the measure of multiple associations between independent var-

iables and the dependent variable, R_L^2, is relatively weak. The proportional reduction in the absolute value of the log-likelihood measure is as follows: 0.073 for Models 1 and 2, 0.080 for Model 3, and 0.095 for Model 4. If one were to select the best fitting model based on R_L^2, it would be Model 4. The measure of the proportion each model reduces error of classification of cases is moderate. The proportional reduction in the error of classification of cases is 0.371 for Model 1, 0.378 for Model 2, 0.392 for Model 3, and 0.405 for Model 4.

If one were to select the model that most improved the efficiency of classification of cases as approved or rejected loans, it would be Model 4. While the magnitude of the measure of multiple association and of efficiency of classification are similar for all four models, the ordering of the four models by goodness of fit and by efficiency of classification is the same. Therefore, Model 4 will be deemed to be the best fitting model.

The variables in Model 4 that are statistically significant at the 0.05 level or better as assessed by the Wald statistic are: sex, loan to income, income, owners per thousand households in the census tract containing the property, families per thousand households in the census tract containing the property, median age of housing in the census tract containing the property, the boundary census tract indicator, and interactions of African American applicant indicator by the applicant sex indicator, African American applicant indicator by the indicator for two applicants, African American applicant indi-

***Table 1 (continued):* Four Logistic Regression Models of Factors Affecting the Lending Decision – Characteristics of Applicants**

MODEL 2's Variables	Regression Coefficient
African American Applicant Indicator	-0.6878*
Sex Indicator	0.2664
Two applicants indicator	-0.2692*
Income	0.0378*
Loan to income	0.3312*
African American census tract indicator	-0.4660
Boundary census tract indicator	-0.1312
Median family income	-0.0000
Owners	0.0022*
Movers	0.0005
Median age of housing	0.0144*
Median value of housing	0.0000
Families	-0.0018*
Vacant for sale	-0.0005
R_L^2: 0.073 p: 0.378	

*Wald statistic significant at the 0.05 level.

***Table 1 (continued):* Four Logistic Regression Models of Factors Affecting the Lending Decision – Characteristics of Applicants**

MODEL 3's Variables	Regression Coefficient
African American Applicant Indicator	-0.2774
Interaction of African American Applicant Indicator with:	
Sex Indicator	-1.3365*
Two applicants indicator	-1.7217
Income	0.0358
Loan to income	-0.1894
Sex Indicator	0.3863*
Two applicants indicator	-0.1582
Income	0.0369*
Loan to income	0.3707*
Minorities per thousand households	-0.0029
Interaction of Minorities per thousand households with:	
Median family income	-0.0000
Owners	-0.0000
Movers	0.0000
Median age of housing	0.0000
Median value of housing	0.0000
Families	0.0000
Vacant for sale	-0.0000
Median family income	-0.0000
Owners	0.0024*
Movers	0.0005
Median age of housing	0.0091
Median value of housing	-0.0000
Families	-0.0020*
Vacant for sale	-0.0011
R_L^2: 0.080 p: 0.392	

*Wald statistic significant at the 0.05 level.

cator by the applicant's income, and the boundary census tract indicator by the number of owners in the census tract containing the property who had lived in a different house five years ago per thousand owners.

As Munnell et al. (1996) and Tootell (1996) found, the race of the applicant rather than the racial composition of the area in which a property is to be purchased is the racial variable that affects loan outcome. However, unlike Munnell and Tootell, the race of the applicant interacts with the sex of the applicant, the number of persons making the application, and the income of the applicant. These interactions could reflect some of the other variables from the Boston Federal Reserve Bank study used by Munnell et al. (1996)

Table 1 (continued): **Four Logistic Regression Models of Factors Affecting the Lending Decision – Characteristics of Applicants**

MODEL 4's Variable	Regression Coefficient
African American Applicant Indicator	-0.4217
Interaction of African American Applicant Indicator with:	
Sex Indicator	-1.3367*
Two applicants indicator	-1.9376*
Income	0.0524*
Loan to income	-0.2386
Sex Indicator	0.3857*
Two applicants indicator	-0.1734
Income	0.0368*
Loan to income	0.3565*
African American census tract indicator	5.5216
Interaction of African American indicator with:	
Median family income	0.0000
Owners	-0.0144
Movers	0.0069
Median age of housing	-0.0622
Median value of housing	0.0002
Families	-0.0047
Vacant for sale	0.0047
Boundary census tract indicator	10.8959*
Interaction of Boundary Indicator with:	
Median family income	-0.0000
Owners	-0.0067
Movers	-0.0160*
Median age of housing	-0.0044
Median value of housing	0.0000
Families	-0.0048
Vacant for sale	-0.0008
Median family income	-0.0000
Owners	0.0039*
Movers	0.0011
Median age of housing	0.0150*
Median value of housing	-0.0000
Families	-0.0023*
Vacant for sale	-0.0025
R_L^2: 0.095 p: 0.405	

*Wald statistic significant at the 0.05 level.

and Tootell (1996). All other variables being equal, sole loan applicants that are African American females are predicted to be more likely than any non-African American applicant to receive loan approval with incomes over $25,520 and less likely with incomes less than $25,510. African American applicants that have two persons applying for the loan with a male as the the principal applicant –all other variables being equal– are predicted to be more likely than any non-African American applicant to receive loan approval with incomes over $36,980 and less likely under than income. African American male applicants who are sole applicants are predicted to be more likely than any non-African American applicant to receive loan approval over the entire income range in this study. They are predicted to be almost twice as likely as any non-African American to receive loan approval at the lowest in-come ($11,000) and 37 times more likely at the highest income ($69,000). These findings are in the opposite direction of the findings of Cloud and Galster (1993) and Yinger (1995), who found that African Americans have comparable loan approval rates to non-African Americans in lower income ranges and lower loan approval rates in higher income ranges. However, Turner and Skidmore (1999) report that reversed results were found between two different regions of the country even when paired tester methods were used.

If one examines the African American population of loan applicants, 32% are sole male applicants, 30% are sole female applicants, 34% are two applicants with the male as the principal applicant, and 4% are two applicants with the female as the principal applicant. All other variables being equal, sole-African American male applicants are predicted to be almost four times more likely than sole-African American female applicants to receive loan approval. Sole-African American female applicants are predicted to be almost twice as likely to receive loan approval as two applicants with the male as the principal applicant. Since none of the models in Table 1 include variables measuring credit history or debt-to-income ratios and since households with more persons at the same income level tend to have more expenditures (U.S. Department of Labor, Bureau of Labor Statistics, 1993), this ordering is possibly reflective of increased debt associated with children and increased household size.

All of the studies reviewed for this study and the interpretation of the findings of this study to this point have adopted a *ceteris paribus* strategy to test for the unique contribution of race to loan approval rates. However, when one examines the significant variables other than race for Model 4, one finds that the mean level of several variables for African Americans and for non-African Americans are not similar. While African American loan applicants have average incomes of $27,920, non-African American loan applicants have average incomes of $34,280. In African American census tracts, there is an average of 595 owner occupied units per thousand occupied. In non-African American census tracts, there is an average of 696 owner occupied units per thousand occupied households.

For African American loan appli-

cants and for applicants for housing in African American census tracts, these differences in the average level of these variables are significant. If the average income of African American applicants were the same as non-African American applicants, the predicted odds of loan approval for African American loan applicants would be 76% higher. If home ownership were as concentrated in African American census tracts as in non-African American census tracts, the predicted odds for loan approval for a property in an African American census tract would be 50% higher.

POLICY IMPLICATIONS AND CONCLUSION

The populations that seem to experience diminished lending outcomes in this study cannot be described by single variables alone. Therefore, housing policies cannot be built on simple income or racial categories. To address the situation in Tulsa, one would need to target housing assistance for home ownership to female, African American sole loan applicants with incomes less than $25,520 and to African American applicants that have two persons applying for the loan with incomes less than $36,980. Depending on the number of persons in the household, assistance provided under the definition of low to moderate income families under the Department of Housing and Urban Development guidelines may not be available to those applicants on the upper end of these income categories.

Although a policy addressed to these two populations of loan applicants might resolve the problem of diminished lending outcomes for these populations *ceteris paribus*, these populations of loan applicants do not exist *ceteris paribus* as individuals alone. They exist in racially and economically segregated communities (Shevsky and Bell 1955; Berry and Kasarda 1977). As noted above, African Americans as a population have lower mean incomes than non-African Americans. Home ownership in predominantly African American census tracts is lower than in predominantly non-African American census tracts. To address the problem of diminished lending outcomes in the predominantly African American area, one would need to develop policies to increase the income levels of African Americans or to offset the lower income levels with lending programs to address the problem of lower incomes. Similarly, home ownership programs need to be targeted for the predominantly African American area to address the diminished lending outcomes associated with lower concentrations of home ownership in that area.

Finally, the approach of this study implies a different policy approach to address effects of impediments to fair housing choice than that implied in the literature reviewed for this study. Most of the literature reviewed for this study focused on finding evidence for discrimination in lending. Focusing on this legally threatening issue invites a demand for a level of certainty that is not practically possible. It encourages a proliferation of speculation about potential variables not included in a model as alternative hypotheses explaining evidence of discrimination. It leads to a *ceteris paribus* approach

that ignores differences in populations that have real effects on racially and economically segregated neighborhoods. In its extreme form, it leads to a possible justification of differential lending treatment by identifying default rates uniquely attributed to race. The approach suggested in this study shifts the emphasis to identifying populations that experience differential outcomes or effects with respect to lending. Policies and programs can be crafted to assist populations overcome effects without necessarily addressing causes that are difficult to specify. By adopting this approach, the problems of unattainable levels of certainty and limited access to variables can be addressed.

NOTES

[1] The census tracts excluded from consideration for this reason in this study using the 1980 census tract numbering configuration are: 10.00, 50.02, 67.04, 73.06, 73.07, 74.03, 75.05, 76.01, 76.03, 76.04, 76.05, 76.06, 76.07, 90.05, and 101.

[2] The predominantly African American area includes census tracts 2, 5, 6, 7, 8, 9, 57, 61, 62, 80.02, and 91.01.

[3] The census tracts included (in 1980 configuration): 1, 3, 4, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 46, and 80.01. The exceptions falling outside of the edge of the predominantly African American area are census tracts 31, 34, 35, 48, 49, 50.01, 59, 67.01, 68.01, 69.05, 71.01, 81, 86, 88, 90.02, and 90.04.

References

Agresti, Alan. 1990. *Categorical Data Analysis*. NY: John Wiley & Sons.

Becker, G.S. 1993. "The Evidence Against Banks Doesn't Prove Bias." Pp. 18 in *Business Week*, April 19.

Benston, G.J. 1981. "Mortgage Redlining Research: A Review and Critical Analysis." *Journal of Bank Research* 12:8-23.

Berry, B. and J. Kasarda. 1977. *Contemporary Urban Ecology*. NY: Macmillan.

Cloud, C. and G. Galster. 1993. "What Do We Know About Racial Discrimination in Mortgage Markets?" *Review of Black Political Economy* 22:101-120.

Duncan, Otis Dudley. 1984. *Notes on Social Measurement: Historical and Critical*. NY: Russell Sage Foundation.

Galster, G. 1992. "Theoretical Framework for Econometrically Analyzing Mortgage Lending Activity in Census Tracts." *Urban Affairs Quarterly* 28:146-155.

Galster, G. and P. Hoopes. 1993. "Note on Aggregation Bias in Analyzing Mortgage Lending Patterns in Census Tracts." *Urban Affairs Quarterly* 29:146-150.

Hula, R.C. 1991. "Neighborhood Development and Local Credit Markets." *Urban Affairs Quarterly* 27:249-267.

Ingram, F.J. and E.L. Frazier. 1982. "Alternative Multivariate Tests in Limited Dependent Variable Models: An Empirical Assessment." *Journal of Financial and Quantitative Analysis* 17:227-240.

Leven, C.L. and M.E. Sykuta. 1994. "The Importance of Race in Home Mortgage Loan Approvals." *Urban Affairs Quarterly* 29:479-489.

Listokin, D. and S. Casey. 1980. *Mortgage Lending and Race*. New Brunswick, NJ: Rutgers University Center for Urban Policy Research.

Long, J.S. 1997. *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks, CA: Sage.

Massey, D.S., A.B. Gross, and K. Shibuya. 1994. "Migration, Segregation, and the Geographic Concentration of Poverty." *American Sociological Review* 59:425-445.

Menard, S. 1995. *Applied Logistic Regression Analysis*. Thousand Oaks: Sage.

Munnell, A.H., G.M.B. Tootell, L.E. Browne, and J. McEneaney. 1996. "Mortgage Lending in Boston" Interpreting HMDA Data." *American Economic Review* 86:25-53.

Neter, J., W. Wasserman, and M.H. Kutner. 1989. *Applied Linear Regression Models*. Homewood, IL: Irwin.

Perle, E.D., K. Lynch, and J. Horner. 1994. "Perspectives on Mortgage Lending and Redlining." *Journal of the American Planning Association* 60:344-354.

Rosenbaum, E. 1994. "The Constraints on Minority Housing Choices, New York City, 1978-87." *Social Forces* 72:725-747.

Shevsky, E. and W. Bell. 1955. *Social Area Analysis*. Palo Alto: Stanford University Press.

Shlay, A.B. 1988. "Not in that Neighborhood: The Effects of Population and Housing on the Distribution of Mortgage Finance within the Chicago SMSA." *Social Science Research* 17:137-163.

------. 1989. "Financing Community: Methods for Assessing Residential Credit Disparities, Market Barriers, and Institutional Reinvestment Performance in the Metropolis." *Journal of Urban Affairs* 11:201-223.

Shlay, A.B., I. Goldstein, and D. Bartelt. 1992. "Racial Barriers to Credit." *Urban Affairs Quarterly* 28:126-140.

Tootell, G.M.B. 1996. "Redlining in Boston" Do Mortgage Lenders Discriminate Against Neighborhoods?" *Quarterly Journal of Economics* 111:1049-1079.

Toulmin, S.E. 1970. *Reason in Ethics*. Cambridge: Cambridge University Press.

------. 1989. *Cosmopolis*. NY: The Free Press.

Turner, M.A. and F. Skidmore (eds.). 1999. *Mortgage Lending Discrimination: A Review of Existing Evidence*. Washington, D.C.: The Urban Institute.

U.S. Department of Labor, Bureau of Labor Statistics. 1993. *Consumer Expenditure Survey, 1990-91. Bulletin 2425*. Washington, D.C.: U.S. Government Printing Office.

Yinger, J. 1987. "The Racial Dimension of Urban Housing Markets in the 1980s." *Urban Affairs Annual Reviews* 32:43-67.

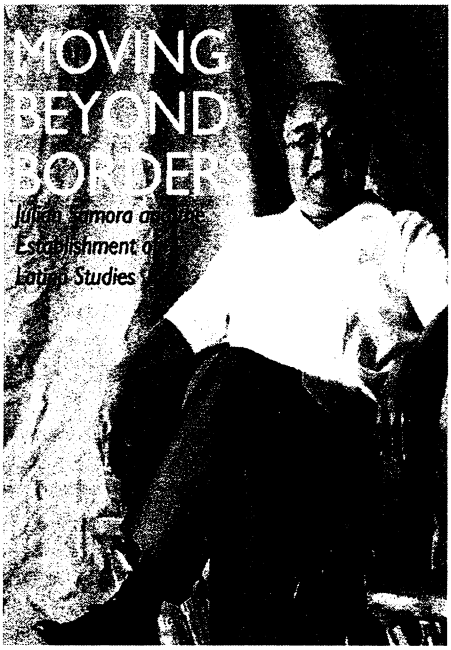
------. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination.* NY: Russell Sage.

Moving Beyond Borders
Julian Samora and the Establishment of Latino Studies
Edited by Alberto López , Barbara Driscoll de Alvarado, and Carmen Samora
ISBN 978-0252076565

The lifework of a pioneering scholar and leader in Latino studies.

Moving Beyond Borders examines the life and accomplishments of Julian Samora, the first Mexican American sociologist in the United States and the founding father of the discipline of Latino studies. Detailing his distinguished career at the University of Notre Dame from 1959 to 1984, the book documents the history of the Mexican American Graduate Studies program that Samora established at Notre Dame and traces his influence on the evolution of border studies, Chicano studies, and Mexican American studies.

Samora's groundbreaking ideas opened the way for Latinos to understand and study themselves intellectually and politically, to analyze the complex relationships between Mexicans and Mexican Americans, to study Mexican immigration, and to ready the United States for the reality of Latinos as the fastest growing minority in the nation. In addition to his scholarly and pedagogical impact, his leadership in the struggle for civil rights was a testament to the power of community action and perseverance. Focusing on Samora's teaching, mentoring, research, and institution-building strategies, *Moving Beyond Borders* explores the legacies, challenges, and future of ethnic studies in United States higher education.



Contributors are Teresita E. Aguilar, Jorge A. Bustamante, Gilberto Cárdenas, Miguel A. Carranza, Frank M. Castillo, Anthony J. Cortese, Lydia Espinosa Crafton, Barbara Driscoll de Alvarado, Herman Gallegos, Phillip Gallegos, José R. Hinojosa, Delfina Landeros, Paul López, Sergio X. Madrigal, Ken Martínez, Vilma Martínez, Alberto Mata, Amelia M. Muñoz, Richard A. Navarro, Jesus "Chuy" Negrete, Alberto López Pulido, Julie Leininger Pycior, Olga Villa Parra, Ricardo Parra, Victor Rios, Marcos Ronquillo, Rene Rosenbaum, Carmen Samora, Rudy Sandoval, Alfredo Rodriguez Santos, and Ciro Sepulveda.

A CRITICAL ANALYSIS OF THE CONCEPT OF POWER: AN INTERACTIONIST REVELATION OF ITS MORAL NATURE *

Dr. Marvin L. Cooke
Tulsa Community College

Abstract

It is argued that power is best understood as a moral category rather than as a causal category for purposes of social analysis. Since the exercise of power implies the violation of preferences, it is a moral problem which requires the identification of a responsible party for remedy. If a social analysis does not make responsible actors and relevant moralities manifest, the analysis emasculates the fundamental moral resources available to the party over whom power is exercised. Concepts of power involving closed, substituted, simultaneous, and negotiated moral universes are examined from this perspective.

* *originally printed in Free Inquiry in Creative Sociology 1990 18(2).*

INTRODUCTION

The concept of power begins in our common sense, everyday usage. People and institutions are described as powerful when they get their way. Those who lose out try to figure out how those who dominate can be resisted. Those who dominate try to figure out how to keep from being resisted. Some uses of power are seen as legitimate. Some are seen as coercive.

Historically, social thinkers have explored the common sense concepts of power to discover the realities behind the usage. For example, concepts of power before the nineteenth century focused on the individual in the process of gaining what he or she desired (Weinstein 1971). In this period, Hobbes (1971) defined power as the present means to some future apparent good. Here, a person has power to the extent that he or she has resources such as wealth, reputation, cunning, strength, and weapons. The tradition of focusing on the individual is also reflected in Weber's (1978) definition of power: power is the chance of a person to realize his or her own will in a social action even against the resistance of others.

In the nineteenth and twentieth centuries, the concepts of power used by social thinkers began to reflect a new taken-for-granted reality. Power was seen as inhering fundamentally in institutions rather than in people. Examples of this are seen in concepts of power inherent in Marx's (Tucker 1978) concept of a mode of production and in Durkheim's (1984) idea of solidarity based on the division of labor. Additionally, the concept of a person as an important factor in understand-

ing social life began to vanish. This can be seen in Durkheim's (1982) notion of social facts as explanation for social behavior.

In the twentieth century, following the lead of the pragmatist and the phenomenologist, taken-for-granted notions began to be approached as problematic. Following what has come to be known as the Thomas theorem –if people define situations as real, they are real in their consequences– power has been studied in terms of how its perception is constructed in interaction (Becker 1975; Brown 1983; Collins 1982; Douglas 1975; Garfinkel 1956; Kitahara 1986; Rosen 1985; Scheff 1975; Wasielewski 1985; Watson 1978).

While one could examine power by placing the concept in its historical context and thereby construct an understanding of how it developed, most of the works consulted for this paper treat concepts of power as competing paradigms. Much time is spent criticizing notions of power for what they miss or overlook. At the heart of this quest is the hope for an unassailable understanding of power in terms of causality. The purpose of this paper is, first, to demonstrate that trying to understand power from the standpoint of causality is fundamentally doomed. This will be done by demonstrating that power is ubiquitous and that any sense of causality is dependent on the framing of change and on the search for causes for change within that frame. Second, it will be demonstrated that power if fundamentally a moral category. Furthermore it will be demonstrated that some concepts of power emasculate the fundamental moral nature of the term and consequently render it useless in the everyday world of individual action.

THE DOOMED SEARCH FOR POWER IN TERMS OF CAUSALITY

Let us begin by examining how various concepts of power have been framed. Consider Weber's concept of power defined above. One knows that power has been exercised when one person has one preference which is materialized over the preference of another. While Weber does not require resistance to be present, Berndtson (1970) has noted that power is apprehended only in a situation in which resistance is present. Now, how is one to determine what caused one person to prevail over another?

Weber identified charisma, the unique qualities that people attribute to a leader, as one source of power. Here, if one frames the issue of cause in essentialist terms, one explores the character of the leader for causes. If one frames the issue of cause in terms of norms and values of institutions (Collins 1982), one explores norms and values in an institution that define what characteristics a charismatic leader must have. If one frames the issue in terms of how one uses framing rules in social interaction (Wasielewski 1985), one explores the interaction process of framing rules used to gain legitimacy in interaction.

In addition, Weber identified tradition and rationality as grounds for commanding compliance. Again, framing the issue of cause in terms of norms and values leads to a search for rules that are the cause. And

again, if one shifts to an interactionist frame, one finds interactionist causes. For example, Douglas (1975) documented how gaps exist between supposed shared values and the specific nature of situations such that individuals must continually negotiate the meaning of norms and values in the process of interaction.

Hunter (1953) identified status as yet another cause for the situation of one person prevailing over another in the face of resistance. By assuming that power was inherent in social status, Hunter could then explore how people with these factors caused others to act in the face of resistance. Furthermore, he could explore how power was distributed by looking at the distribution of social status. But, if one changes the frame of examination, as did Garfinkel (1956), one can observe the acts by which one can successfully degrade another's social status. Thus social structure seems to be continually created by interaction.

Resources have also been identified as a tool of power. If one frames a study in terms of the use of resources by organizations to secure compliance from others (Clark 1968; Dahl 1960; Hawley, Wirt 1968; Murphy1988), one explores the relations between the distribution of resources among actors in institutions and among institutions and observes how those resources are used to gain compliance. Yet if one shifts the frame to interaction (Kitahara 1986), one can see how resources are perceived resources and therefore depend on how their perception is constructed.

While the above is not an exhaustive review of literature on the concept of power, it does reveal that any search for causality in terms of power changes with every change in the way the concept is framed and with every level of social phenomenon to which the concept is applied. The way that most social scientists treat this state of affairs is by submitting to the unique solution aspect of the concept of truth in logic and then by sorting out concepts and levels with data and reasoning to find the right answer. Yet the phenomenological nature of power may not permit one to find the right answer one so fervently seeks.

First, consider Ernest Becker's (1975) analysis of demeanor and deference. He pointed out that the verbal context of action gives the possibility of the direct exercise of power over others. Here, every time one person addresses another, the situation changes and requires a response from the one being addressed. Additionally, if one analyzes interactions, one can document actions and responses, but the question of power in terms of cause is not possible to ask beyond a person deciding to start some line of action.

Second, consider Arthur Berndtson's (1970) phenomenological analysis of the concept of power. One does not know power except as one observes change and infers power as a source of change. Change is known by its novel character. An enduring being surmounts change from moment to moment. Thus, the appearance of permanence is created by overcoming the novel from moment to moment. Additionally power is not open to direct inspection. It can only be apprehended through a situation of resistance.

Finally, power has no antecedent and therefore is a self-caused cause.

From Becker's and Berndtson's analyses, one can seriously entertain the possibility that power is ubiquitous. Second, one can ask questions about causes up to a point. Then, the question no longer has an answer. It is what Toulmin called a limiting question:

> ...the way of answering suggested by the form of words employed will never completely satisfy the questioner, so that he continues to ask the question even after the resources of the apparent mode of reasoning have been exhausted. (1970:205)

The words employed to ask the limiting question and the modes of reasoning that are exhausted are those of the frame or concept of power used. Thus we look at a ubiquitous phenomenon with a frame that makes some things important and ignores others (Burke 1954). To inquire into the truth of any frame is to ignore most of that which is everywhere with a frame which cannot ask beyond itself. Thus, any attempt to compare frames, or notions of power, to find the unique answer about cause with respect to power is doomed to failure.

POWER AS A MORAL CATEGORY

Even though power is ubiquitous and power as a cause is an unanswerable question, the use of the term power by the common person and by the social scientist is *not* ubiquitous, and the question of power as a cause is treated as if it were answerable. In what kind of situation is the term power applied? And what is a person doing when applying the term?

If one returns to Hobbes' definition of power, one finds that, in applying the term power to a situation in which one uses some source to overcome resistance, a person must attend to the propriety of the uses of particular means to overcome resistance in terms of the apparent good to be achieved. If one returns to Weber's definition of power, one finds a situation in which one party is appealing to another party to compel them to obey. Here, there must be some basis for accepting the command, such as tradition, rationality, or the charismatic nature of the commander. Hawley and Wirt (1968) also included the offer of payoffs and the threat of inflicting costs as appeals to induce compliance.

When one applies the term power to institutions, people vanish. Actually they do not vanish, but responsibility for acts is not easily attached to people. The consequences of not being able to attach responsibility to people such that their behavior can be challenged can be seen in Richard Edwards' (1984) historical analysis of the forms of control in the labor process. Edwards defined a system of control as a process by which a work task is directed, evaluated, and rewarded or disciplined. A simple control system consists of a boss exercising power openly and personally. Here, responsibility between the boss and the worker is direct and definable. If a worker does not like how the boss conducts

one of the three tasks of control, assigning responsibility for how those control tasks are done is possible. As the scale of industry increased, the task of directing work was taken over by an assembly line. Technical control removes the directing of work from the interpersonal context. If a worker does not like how the machine directs work, to whom and how is responsibility for this attached? Finally, the tasks of evaluation, reward, and discipline were carried out through elaborate, negotiated rules between the management of labor and the management of industry. At last, the ability to define a responsible party of deciding how work gets direct, evaluated, and rewarded becomes almost nil.

Just as the actions of management described by Edwards substituted mechanisms and rules as the responsible parties of the exercise of power into the definition of the situation, so have sociologist constructed understandings of power which do the same thing. For example when Clark (1968) and Collins (1982) argue that people can exercise power only within the norms and values of the institution of which they are a part, those over whom power has been exercised are left arguing over the rules. When Murphy (1988) argues that power consists of the ability to constrain and the ability to profit from without defining who is constraining and who is profiting, we are left in the same position as Edwards' assembly line workers facing a machine. Although Becker (1975) deals with a situation in which an individual exercises power in an interpersonal situation, his focus is on the use of rituals which create a context of action and an expectation of a particular response. While an actor who could be responsible for exercising power is a part of the scene, the ritual defines the situation and leaves the person over whom power is being exercised through the ritual dealing with the rules and mechanisms of the ritual. Thus, an interaction which does not include the notion of actor in the definition of a situation hides the actor involved in the exercise of power.

Now consider the consequences of moving from the use of power in institutional terms to the use of power in personal and political terms. In studying clients and public service bureaucracies, Fainstein and Fainstein (1974) found that clients tended to accept the rules which bureaucracies present to them and the right of social workers to interpret the rules. Here, when people did not qualify for help, they were angry but had no way to define who was responsible except the institution. Yet when some clients redefied case workers as public servants who were supposed to be responsive to the public, they defined the case workers as responsible and the will of the people –themselves– and not the institution as having the right to decide who should get help. Demands of the clients then began to be met.

C. Wright Mills (1959) saw that how a sociologist analyzes power has an effect on how people see the propriety of the power arrangement analyzed. The sociologist's work justifies, criticizes, or distracts attention away from the current structural realities of power. Using this insight, Mills (1956) compared the mass society controlled

by the power elite with the social structure necessary for democracy in order to debunk the current social structure. Yet, he conducted his analysis in the taken-for-granted notion of power as an institutional structure. Ironically, Mills saw that it was important to study the structure of society to identify the actors who were responsible for the way things are. Yet, the very notion of power as being rooted in structures by in large absolves any found actors from responsibility.

If one asks in what kind of situation is the term power applied, a look at the notions of power reviewed reveals that it is applied to situations in which some party or arrangement violates the preferences of some other part while the violated party is resisting. Such violations require appropriate justifications if they are to be accepted. If the violated party does not accept the justifications offered, the violated party has a weapon of redressing an appeal to others in terms of justice and responsibility. Both elements are important. Without appropriately framing the violation as unjust, appeals for help will not be accepted. Without defining a responsible party, further action is not possible.

Yet definitions of situations which include actors to whom responsibility could be assigned for the exercise of power do not bring those actors to the front of the situation in the same way. Consider the situation of the actor exercising power in the context of what Scheff (1975) calls absolute responsibility or of what Brown (1983) calls myth. Here, an actor exercises power by using justifications held to be the only possible in the situation. The party over whom power is exercised has the possibility of appealing to the justifications defining the situation to object to the exercise of power and to hold the actor exercising power responsible. Let us call this definition of the situation one of a closed moral universe.

Secondly, Fainstein and Fainstein's welfare recipients were confronted with a situation in which an actor –the social worker– could be held responsible. But the social workers, as in the situation of a closed moral universe, appealed to what they held to be the only justification possible for their exercise of power. The welfare recipients did not try to hold the social workers accountable in terms of the welfare rules. Instead, they substituted a new definition of a closed moral universe into the situation –representative democracy– which redefined the rules of appeal in their favor. Let us call this situation one of a substituted moral universe.

Third, Goffman (1967) has demonstrated that the maintenance of face is a condition of interaction. Thus in the midst of exercising power with appeals to various moral universes, actors are also engaged in gaining face, saving face, and depreciating others. At any one time, there are simultaneous moral universes being engaged in the exercise of power. Yet, as Schutz (1967) notes, a person can attend to only one of these moral universes at a time. The results of this can be seen in Shaw's (1982) analysis of the exercise of the authority in Christian scripture. Shaw points out that human speakers in scripture can personally benefit by

appealing to divine will. If the persons involved in such an exercise of power attend to the appeal to divine will, the actor making the appeal will vanish in terms of agency and responsibility, but if one attends to how the person using divine speech will benefit from it, an agent appears and a new range of justifications to counter the exercise of power becomes available.

Finally, a fourth approach to a definition of a situation of power involving an identified actor is suggested by Scheff and Brown. In contrast with myth, which makes contingent choice appear as necessity, Brown (1983) contends that seeing theories as metaphors for a given situation keeps the human agency of the origin of metaphors alive. In a similar fashion, Scheff (1975) counters the notion of absolute responsibility with the notion that responsibility is defined in interaction. Here, multiple realities are constructed side by side in the process of negotiation. The consequence of such definitions of the situation for the actors is noted by Scheff: When clients and professionals are aware that the situation is one of negotiated reality, clients gain more control over the resulting definition of the situation. In this definition of the situation –the negotiated moral universe– actors are most fully understood as such and can be held responsible. The moral universes to which actors appeal are more clearly seen as tools selected or constructed by actors in negotiation.

As one glances back, it was seen that the use of institutional and structural notions of power clearly emasculate the use of power as a moral category by making it difficult to define a situation as unjust and by making it difficult to identify a party responsible for the injustice. Now, let us examine these four notions of power that include an actor to whom responsibility for acts can be assigned to see how they either push the actor exercising power to the background behind the moral universe or pull the actor into the foreground where responsibility is visible.

In the situation of the closed moral universe, an actor can be defined as exercising power, but a situation can be defined as unjust only in terms used by the actor to exercise power. Thus, one is essentially in the situation of Edwards' bureaucratic control.

In the situation of a substituted moral universe, an actor can be defined as exercising power. The exercise of that power comes to be seen as problematic when a new closed moral universe is substituted for the one currently being used by the actor attempting to exercise power. Once the substitute moral universe is used to redefine the situation, the responsibility of the actor exercising power becomes clearer. The actor exercising power is choosing a morality rather than obeying one in the definition of the situation.

The situation of the simultaneous moral universe is similar to the substituted moral universe. By shifting attention from one aspect of a situation to another, a new view is gained of the actions of the actor who is attempting to exercise power, but instead of substituting one closed moral universe for another, one substitutes a personal moral universe for a public moral universe. One devalues lofty claims by

redefining the motives of the actor attempting to exercise power in terms of personal, individual interests. Here, the responsibility of the actor attempting to exercise power becomes even more visible because of personal motives make the violation of the preferences of others even more blatantly the act of the one exercising power.

Finally, the situation of the negotiated moral universe clearly places the actors in the exercise of power in the foreground. Here, the actors are not simply responding to moral universes; they are actively selecting or constructing moral universes in interaction. In so doing, the actor attempting to exercise power is manifestly responsible for such acts. Also, the one who is the object of power becomes visible as an active party. In a negotiated situation, the outcome rests on both parties. If one accepts the moral universe offered as justification for a violation of his or her preferences without countering, one bears some responsibility for the outcome. However, if one fails in one's attempts to resist the exercise of power in negotiating the situation, one clearly has an actor responsible for the violation of one's preferences and the morality used by the actor is more easily seen as relative and therefore questionable.

CONCLUSION

The purpose of this paper has not been to claim that concerns about power often discussed under the rubric of structure are not valid. As I sit writing this essay, I know that people are probably making decisions that will violate my preferences. I know that available options and resources affect my ability to deal with such violations.

But, I am saying that, in the everyday world of action, the exercise of power involves a violation of preferences. As such, it is a moral problem which requires the identification of a responsible party for remedy. Thus, the examination of social structure, resources, and options must be done for the purpose of making manifest responsible actors and relevant moralities. Otherwise, social analysis emasculates the fundamental moral resources available to the party over whom power has been exercised.

Finally, not all definitions of a situation which include actors and moralities equally bring the responsibility of the actor who exercises power to the foreground. In the situation of the closed moral universe, the commonly held morality used in the exercise of power hides the actor exercising power. In the situation of substituted moralities, actors use two different moralities as masks for acting. In the situation of simultaneous moralities, one actor will wrap himself or herself in a shared morality to condemn another actor defined as acting from a personal morality. Only in the negotiated moral universe do actors clearly stand responsible for their acts as they create and select moralities in the struggle for dominance.

References

Becker, E. 1975. "Socialization, Command of Performance, and Mental Illness." Pp. 292-301 in *Life as Theater*, edited by D. Brissett and C. Edgley. Chicago: Aldine.

Berndtson, A. 1970. "The Meaning of Power." *Philosophy and Phenomenological Research* 31:73-84.

Brown, R.H. 1983. "Theories of Rhetoric and the Rhetorics of Theory: Toward a Political Phenomenology of Sociological Truth." *Social Research* 50:127-157.

Burke, K. 1954. *Permanence and Change*. Berkeley: University of California Press.

Clark, T.N. 1968. "The Concept of Power." Pp. 45-81 in *Community Structure and Decision-Making: Comparative Analyses*, edited by T.N. Clark. San Francisco: Chandler.

Collins, R. 1982. *Sociological Insight*. Oxford: Oxford University Press.

Dahl, R. A. 1960. *Who Governs?* New Haven: Yale University Press.

Douglas, J. 1975. "Deviance and Respectability: the Social Construction of Moral Meaning." Pp. 261-275 in *Life as Theater*, edited by D. Brissett and C. Edgley. Chicago: Aldine.

Durkheim, E. 1982. *The Rules of Sociological Method*. NY: Free Press.

------. 1984. *The Division of Labor in Society*. NY: Free Press.

Edwards, R.C. 1984. "Forms of Control in the Labor Process: an Historical Analysis." Pp. 109-142 in *Critical Studies in Organization and Bureaucracy*, edited by F. Fischer and C. Sirianni. Philadelphia: Temple University Press.

Fainstein, N.I. and S.S. Fainstein. 1974. *Urban Political Movements*. Englewood Cliffs, NJ: Prentice-Hall.

Garfinkel, H. 1956. "Conditions of Successful Degradation Ceremonies." *American Journal of Sociology* 61:420-424.

Goffman, E. 1967. *Interaction Ritual*. Chicago: Aldine.

Hawley, W.D. and F.M. Wirth. 1968. "Introduction." Pp. 1-4 in *The Search for Community Power*, edited by W.D. Hawley and F.M. Wirth. Englewood Cliff, NJ: Prentice-Hall.

Hobbes, T. 1971. "Identify." Pp. 163-168 in *Identity, Power, and Change*, edited by M.A. Weinstein. Glenview, IL: Scott, Foresman.

Hunter, F. 1953. *Community Power Structure*. Chapel Hill: University of North Carolina Press.

Kitahara, M. 1986. "Commodore Perry and the Japanese: a Study in the Dramaturgy of Power." *Symbolic Interaction* 9:53-65.

Mills, C.W. 1956. *The Power Elite*. Oxford: Oxford University Press.

------. 1959. *The Sociological Imagination*. Oxford: Oxford University Press.

Murphy, R. 1988. *Social Closure*. Oxford: Clarendon Press.

Rosen, M. 1985. "Breakfast at Spiro's: Dramaturgy and Dominance." *Journal of Management* 11(2):31-48.

Scheff, T. 1975. "Negotiating Reality: Notes on Power in the Assessment of Responsibility." Pp. 205-218 in *Life as Theater*, edited by D. Brissett and C. Edgley. Chicago: Aldine.

Shaw, G. 1982. *The Cost of Authority*. Philadelphia: Fortress Press.

Toulmin, S. 1970. *Reason in Ethics*. Cambridge: Cambridge University Press.

Tucker, R.C., ed. 1978 *The Marx-Engles Reader*. NY: W.W. Norton.

Wasielewski, P.L. 1985. "The Emotional Basis of Chrisma." *Symbolic Interaction* 8(2):207-222.

Weber, M. 1978. *Economy and Society*. Edited by G. Roth and C. Wittich. Berkeley: University of California Press.

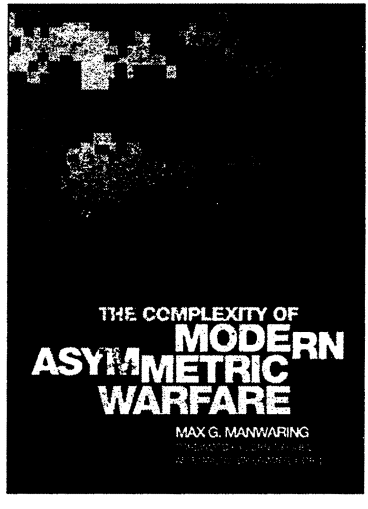
Weinstein, M.A. 1971. "Introduction." Pp. 1-26 in *Identity, Power, and Change*, edited by M.A. Weinstein. Glenview, IL: Scott, Foresman.

The Complexity of Modern Asymmetric Warfare
By Max G. Manwaring
ISBN: 978-0806142654

Today more than one hundred small, asymmetric, and revolutionary wars are being waged around the world. This book provides invaluable tools for fighting such wars by taking enemy perspectives into consideration. The third volume of a trilogy by Max G. Manwaring, it continues the arguments the author presented in Insurgency, Terrorism, and Crime and Gangs, Pseudo-Militaries, and Other Modern Mercenaries. Using case studies, Manwaring outlines vital survival lessons for leaders and organizations concerned with national security in our contemporary world.

The insurgencies Manwaring describes span the globe. Beginning with conflicts in Algeria in the 1950s and 1960s and El Salvador in the 1980s, he goes on to cover the Shining Path and its resurgence in Peru, Al Qaeda in Spain, popular militias in Cuba, Haiti, and Brazil, the Russian youth group Nashi, and drugs and politics in Guatemala, as well as cyber warfare.

Large, wealthy, well-armed nations such as the United States have learned from experience that these small wars and insurgencies do not resemble traditional wars fought between geographically distinct nation-state adversaries by easily identified military forces. Twenty-first-century irregular conflicts blur traditional distinctions among crime, terrorism, subversion, insurgency, militia, mercenary and gang activity, and warfare.



Manwaring's multidimensional paradigm offers military and civilian leaders a much needed blueprint for achieving strategic victories and ensuring global security now and in the future. It combines military and police efforts with politics, diplomacy, economics, psychology, and ethics. The challenge he presents to civilian and military leaders is to take probable enemy perspectives into consideration, and turn resultant conceptions into strategic victories.

AUTHOR'S MANUSCRIPT SUBMISSION FORM

EDITOR, FREE INQUIRY IN CREATIVE SOCIOLOGY
OKLAHOMA STATE UNIVERSITY
DEPARTMENT OF SOCIOLOGY
431 MURRAY HALL
STILLWATER, OK 74078 email: jean.van_delinder@okstate.edu

AUTHORS: Please send manuscript copies to freeinquiryemail@ou.edu or mail a copy saved on a CD to the address above. Note: Please provide all tables and graphics in separated source files. Also note where to place tables and graphics in the manuscript.

MANUSCRIPT FEE: Authors who are current subscribers submit a $25 (US$) fee. Authors who are not current subscribers submit a $40 (US$) fee, which includes a current subscription. Send check or money order made payable to: University of Oklahoma Foundation.

MANUSCRIPT TITLE: _____

_____

NAME: _____

UNIVERSITY: _____

DEPARTMENT: _____

POSTAL ADDRESS: _____

CITY, ST, ZIP+4: _____

PHONE: _____ **FAX:** _____

EMAIL: _____

Free Inquiry in Creative Sociology: Sociologists convey discoveries, ideas and research findings to students, colleagues and lay readers interested in social processes. Policy objectives: readability, creativity, diversity, and economy. **READABILITY** demands persuasive, interesting and lucid writing understandable to the literate layperson. It is lively enough to sustain interest and sufficiently supported with evidence and logic to convince the skeptical reader. **CREATIVITY** demands inventive, innovated and venturesome approaches to problems, propositions, questions, structures, datasets, theory and social phenomena. Strange creatures are welcome if their outlines are clear. **DIVERSITY** calls for a persistent spread of material in all areas of sociology and social sciences, giving voice to all fields, positions and technologies. Cross-cultural studies and manuscripts from foreign authors are most welcome.

Preparation Checklist for ASA Manuscripts

This checklist is intended to help you prepare your manuscript for publication in ASA journals. It covers some details of presentation and style that will be checked in copy editing if your manuscript is accepted for publication. Paying attention to these details now may save you time in the production process when time can get tight, so please address all items on this list. If you have any questions not answered here, refer to the *American Sociological Association Style Guide* (2d ed.), available from the ASA Executive Office, 1307 New York Avenue NW, Suite 700, Washington, DC 20036 ($5 for ASA members; $10 for non-members).

MANUSCRIPT FORMAT

- ☐ All pages must be typed or printed (10-point type size preferred), **double-spaced** (including footnotes and references) on 8.5 by 11 inch white paper.
- ☐ **Margins** must be at least 1.25 inches on all four sides to allow room for Editor's notes.
- ☐ **Page limit** for submission is twenty-five (25) pages excluding references, notes or figures. Tables should be integrated into the text.
- ☐ Please do not hyphenate words in your submission. Hyphenation will be added as needed in the journal.

TITLE PAGE

- ☐ Includes the full **title** of the article, the **author(s)'s name(s) and institution(s)** (listed vertically if there is more than one author), a **running head** (60 characters or less), the approximate **word count** for the manuscript, and a title footnote.
- ☐ An asterisk (*) by the title refers to the **title footnote** at the bottom of the title page. The title footnote includes the name and address of the corresponding author, credits, acknowledgements, and/or grant numbers.

ABSTRACT

- ☐ View the abstract as your written "invitation" to your readers to read your entire article. The abstract appears on a separate page headed by the title. It should be **brief** (one paragraph of 150-200 words), **descriptive** (a summary of the most important contributions in your paper), and **accessible** (jargon-free and clear to the general reader). A good test of the quality of your abstract is to ask yourself if it could serve as a press release about your research.

TEXT

- ☐ ***Content.*** As you make changes in your text, read it objectively from your reader's point of view. **Use terminology consistently** throughout your text. Referring to a variable by one name at one time and by another name later or in your tables can confuse your readers. And remember, **"active"**

writing ["I discovered that..."] is more concise, accurate, and interesting than "passive" writing ["It was discovered that..."].

- ☐ ***Subheadings.*** Generally, three levels of subheadings are sufficient to indicate the organization of the content. See recent journal issues for subheading formats.
- ☐ ***Text citations***. Include the last name of the author and year of publication. Include page numbers when you quote directly from a work or refer to specific passages. Cite only those that provide evidence for your assertions or that guide readers to important sources on your topic. Examples follow:
  - If author's name is in the text, follow the name with the year of publication in parentheses–"...Duncan (1959)"; if author's name is not in the text, enclose both the last name and year in parentheses–"...(Gouldner 1963)."
  - Pagination follows the year of publication after a colon–"... (Ramirez and Weiss 1979:239-40)."
  - Give both last names for joint authors–"...(Martin and Bailey 1988)."
  - For works with three authors, list all last names in the first citation in the text; thereafter use "et al."–"...(Carr, Smith, and Jones 1962)"; and later, –"...(Carr et al. 1962)." For more than three authors, use "et al." throughout.
  - For institutional authorship, supply minimum identification from the complete citation–"... (U.S. Bureau of the Census 1963:117)."
  - Separate a series of references with semicolon–"... (Burgess 1968; Marwell et al. 1971)."
  - For unpublished materials, use "forthcoming" to indicate material scheduled for publication. For dissertations and unpublished papers, cite the date. If no date, use "n.d." in place of the date–"...Smith (forthcoming) and Jones (n.d.)."
  - For machine-readable data files, cite authorship and date–"...(Institute for Survey Research 1976)."
- ☐ ***Equations.*** Equations in the text should be typed or printed. Use consecutive Arabic numerals in parentheses at the right margin to identify important equations. Align all expressions and clearly mark compound subscripts and superscripts. Please clarify all unusual characters or symbols. Use italic type for variables in equations and in the text; use bold type for vectors.
- ☐ ***Numerical Values.*** Use a preceding zero for numbers less than zero. Ex: $p<0.06$

FOOTNOTES/ENDNOTES

- ☐ **Use footnotes/endnotes only when necessary**. Notes, in

general, and long notes, in particular, distract the reader and are expensive to print. As alternatives, consider (a) stating in the text that information is available from the author, or (b) adding an appendix.

- ☐ Begin each note with the superscript numeral to which it is keyed in the text. Notes can (a) explain or amplify text, or (b) cite materials of limited availability.
- ☐ Notes should be typed or printed, **double-spaced**, either as footnotes at the bottom of the page or in a separate "ENDNOTES" section following the references.

REFERENCE LIST

- ☐ All references cited in the text must be listed in the reference list, and vice versa. Double check spelling and publication details– **ASA journals are not responsible for the accuracy of your reference list**.
- ☐ List references in **alphabetical order** by authors' last names. Include full names of all authors' use first name initials only if the author used initials in the original publication.
- ☐ For multiple authorship, only the name of the first author is inverted (e.g., "Jones, Arthur B., Colin D. Smith, and Barrie Thorne").
- ☐ For two or more references by the same author(s), list them in order of the year of publication. Use six hyphens and a period (------.) in place of the name when the authorship is the same as in the preceding citation.
- ☐ To list two or more works by the same author(s) from the same year, distinguish them by adding letters (a, b, c, etc.) to the year or to "Forthcoming" (e.g., 1992a, Forthcoming a). List in alphabetical order by title.

A few examples follow. See recent journal issues for further examples:

Books

Bernard, Claude. [1865] 1957. *An Introduction to the Study of Experimental Medicine.* Translated by H.C. Greene. NY: Dover.

Mason, Karen O. 1974. *Women's Labor Force Participation and Fertility.* Research Triangle Park, NC: National Institute of Health.

U.S. Bureau of the Census. 1960. *Characteristics of Population.* Vol. 1. Washington, D.C: U.S. Government Printing Office.

Periodicals

Conger, Rand D. Forthcoming. "The Effects of Positive Feedback on Direction and Amount of Verbalization in a Social Setting." *Sociological Perspectives.*

Goodman, Leo A. 1947a. "The Analysis of Systems of Qualitative Variables When Some of the Variables Are Unobservable. Part I- A Modified Latent Structure Approach." *American Journal of Sociology* 79:1179-1259.

------. 1947b. "Exploratory Latent Structure Analysis Using Both Identifiable and Unidentifiable Models.' *Biometrika* 61:215-31.

Collections

Clausen, John A. 1972. "The Life Course of Individuals." Pp. 457-514 in *Aging and Society,* vol. 3, *A Sociology of Age Stratification*, edited by M.W. Riley, M. Johnson, and A. Foner. New York: Russell Sage.

Elder, Glen H. 1975. "Age Differentiation and the Life Course." Pp. 165-90 in *Annual Review of Sociology*, vol. 1, edited by A. Inkeles, J. Coleman, and N. Smelser. Palo Alto, CA: Annual Reviews.

Dissertations

Charles, Maria. 1990. "Occupational Sex Segregation: A Log-Linear Analysis of Patterns in 25 Industrial Countries." Ph.D. dissertation, Department of Sociology, Stanford University, Stanford, CA.

Machine Readable Data File

American Institute of Public Opinion. 1976. *Gallup Public Opinion Poll* #965 [MRDF]. Princeton, NJ: American Institute of Public Opinion [producer]. New Haven, CT: Roper Public Opinion Research Center, Yale University [distributor].

Foreign Language Books, Journals and Articles

Kardelj, Edvard. 1960. *Razvoj Slovenackog Nacionalnog Pitanja* (Development of the Slovenian national question). Beograd, Yugoslavia: Kultura.

BIOGRAPHY

- ☐ Include a short biography (five or six lines) for each author. Each biography should include the author's name, title, department, institution, and a brief description of current research interests, publications, or awards.

APPENDICES, FIGURES, and TABLES

Include appendices, figures, and tables only when they are critical to the reader's understanding. As an alternative, consider inserting a statement in the text stating that the information is available from the author.

Tables

Throughout the text, number tables consecutively. Type or print each table on a separate page at the end of your paper. Insert a note in the text to indicate table placement (e.g., "TABLE 2 ABOUT HERE").

- ☐ Each table must include a descriptive title and headings for all columns and rows (see recent journal issues for examples).
- ☐ Do not submit a picture or image of your table. Have the table in an editable format so it can be resized as needed for the journal while remaining legible.
- ☐ For clarity, always use the same variable names in your tables as you use in your text. Standard errors, standard deviations, *t*-statistics, and so on, should appear in parentheses under the means or coefficients in the tables.
- ☐ Gather general notes to tables

as "*Note:*" or "*Notes:*" at the bottom of the table; use a, b, c, etc., for table footnotes.

- ☐ Use asterisks *, **, and/or *** to indicate significance at the $p<0.05$, $p<0.01$, and $p<0.001$ levels, respectively; note if tests are one-tailed or two-tailed. Generally, only those results significant at the $p<0.10$ level or better should be indicated as significant in tables or text.

Figures and Other Artwork

- ☐ Number figures or illustrations consecutively throughout the text. Each should include a title. Insert a note in the text to indicate placement (e.g., "FIGURE 1 ABOUT HERE").
- ☐ If at all possible, do not submit a picture or image of your figures. Have the figure in an editable format so it can be resized as needed for the journal while remaining legible.
- ☐ If your manuscript is accepted for publication, you must submit figures and illustrations in camera-ready form or on diskette. Camera-ready artwork must be produced by computer or by a graphic artist in black ink on white paper with clear lines. All labels on figures and illustrations must be typeset.
- ☐ ***IMPORTANT***: Before you submit a figure or illustration for publication, please contact the journal editorial office to discuss size specifications and/or disk and file formats. All artwork and type must be legible when reduced or enlarged to fit one or two column widths, 2.3 and 3.65 inches wide respectively.

Author(s) must secure permission to publish any copyrighted figure, illustration, or photograph.

Appendices

- ☐ Appendices appear at the end of your article and should be labeled "Appendix A", "Appendix B", etc.

SPELLCHECK YOUR MANUSCRIPT

- ☐ When you have completed the final changes to your manuscript, run your computer spellchecker to correct misspelled words. You can also use the spellchecker to cross-check author names cited in your text with author names in the reference list.