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Discussion

Margo Anderson[1]

Kenneth Prewitt's Morris Hansen Lecture provides us with a provocative analysis of the importance of what he calls the "contract houses" for the production of high quality, scientific, credible official statistics. His larger subject is the relationship between social science and social policy, or social science and politics. He focuses on the development of the contract houses of the past half century and how they function as boundary organizations supporting the integrity and productivity of scientific knowledge, that is, its quality and usefulness for policy and politics.

As an historian, I found myself asking whether the growth of the contract houses was a logical development in the larger development of democratic policy making, or whether there was something special about Morris Hansen in particular, something of a butterfly effect that is actually a bit of a surprise. I will suggest that the connection between the development of social science and American political development is linked. We should not be surprised.

Let me break the world of politics in two, though in practice they don't really separate that well. Merriam-Webster (2013) has several definitions:

(1) "the art or science of government;"
(2) "the art or science concerned with guiding or influencing governmental policy;" and
(3) "the art or science concerned with winning and holding control over a government."

Let's lump the first and second definitions together, and leave the third definition aside for the moment while we embark on a quick American history lesson.

In the 1770s, the Americans who declared independence from Britain had to establish a structure for their revolutionary government (Morgan 1988; Wood 1998). The foundational documents they drafted, the Declaration of Independence, the various state constitutions, the Articles of Confederation, and the 1787 Constitution, articulated the theory of the state at the time, and developed mechanisms for providing for governing. Chief among the principles were that the power of government derives from the "consent of the governed." Government should, in the language of the 1787 Constitution, "establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity."

These documents do not derive political authority or power from God, ancient traditions, a monarch, or an established nobility or propertied class. The Declaration of

[1] University of Wisconsin, Milwaukee, History Department, Milwaukee, WI 53201, U.S.A.
Email: margo@uwm.edu

Independence famously posits the self- evident "truth. . .that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness." God may "endow" rights, but "Governments are instituted among Men."

Operationalizing these tenets was no easy task. Accordingly, accompanying the documents themselves is a huge literature of interpretation, advocacy, and argumentation. The founding "fathers" or framers mandated that government function in public. Since government derived its authority from the "people," a vigorous free press and institutions of public debate became essential to the functioning of the state. "People" had to make the system go, and the support of the "people" were metrics of success, which led to the development of both the art and science of policy making and the art and science of democratic electioneering. Governing and policy-making involved embracing the goal of developing knowledge, or "science" – ultimately "social science."

Americans came to count and describe the "people" in the census (Anderson 1988). The constitutional requirement for open records and public debate, and a 'state of the union' report from the President to Congress, resulted in the availability of national public records of governance, finance, taxation and expenditure. By the early nineteenth century, they could be compiled into time series of data, published by both the government in official documents and privately in almanacs and statistical compilations. Serendipitously, detailed, regular, relatively reliable, public data poured out of the new government, revealing the dynamics of social life (Anderson 2010).

The big story of the United States in the nineteenth century was growth and expansion. The population grew from 3.9 million in 1790 to 76 million in 1900. The population growth rate was 30–35% a decade until 1880. The nation expanded to the Pacific coast. The concomitant expansion of the economy was also well documented in the data. Though nineteenth century Americans did not yet have a concept of GDP, they knew that economic growth was explosive. Historians now estimate that per capita GDP grew (in 1996 dollars) from $1,163 in 1790 to $4,204 in 1900 to $32,579 in 2000 (Carter et al. 2006, Part C, Ch Ca, Series Ca9–19). Within this context of growth and expansion, a number of historical examples of the interplay of social science and politics reveal the longer trajectory that frames Prewitt's analysis.

1. Measuring Race, Ending Slavery

This growth and expansion was not without controversy and crisis. Most notably, the foundational documents of the American revolutionary era left the problem of race-based slavery for future generations. Americans have wrestled with issues of race and inequality ever since. Both abolitionists and the defenders of slavery turned to statistics and the social sciences to inform and justify their policy recommendations. "Race science," a theory designed to defend the institution of slavery, was a response to the political crisis of the future of the nation, and has not held up as "science" in later years.

For example, the 1840 census seemed to show dramatically higher rates of insanity among free blacks in the North than among slaves in the South. Secretary of State and South Carolinian John C. Calhoun oversaw the administration of the census and claimed the results demonstrated why slave emancipation was impossible. Northerners accused

him of fudging the numbers. Massachusetts physician and statistician Edward Jarvis undertook a detailed examination of the local census results to understand what had occurred in the enumeration. He prepared an analysis showing that the data were faulty, though they were never officially corrected (Cohen 1982).

Interestingly, Congress responded in the late 1840s by improving the census, passing new legislation for the 1850 census to assure the errors would not be repeated, and investing in technical innovation and new statistical agencies (Anderson 1988). As Prewitt notes, Americans have been able to use the "shared information base" for fighting over contentious policy differences. Even by the middle of the nineteenth century in the terrible days leading up to the Civil War, all politicians had come to recognize that the half century of data generated by the American state was valuable for the nation.

A second example from the Civil War illustrates that commitment to information-based policy making. In this sesquicentennial year of the Emancipation Proclamation, one might want to visit the U.S. Senate galleries and see Francis Bicknell Carpenter's painting, *First Reading of the Emancipation Proclamation of President Lincoln*. Off in the corner in the painting, on the right on the floor is a map. It is a population density map of the slave states, showing the density of the slave population by county. Cartographers in the U.S. Coast Survey drew it in September 1861, four months into the Civil War, using the recently compiled 1860 census data. The map had a place of honor in Abraham Lincoln's office throughout the war, and played a major role in his conceptualization of military strategy and emancipation. The painting and the map were reproduced and sold popularly throughout the war, and provide powerful visual knowledge of the challenges of emancipation (Schulten 2012).

> The painting may be viewed at the U.S. Senate website:
> http://www.senate.gov/artandhistory/art/common/image/Painting_33_00005.htm
> The map may be viewed at the Library of Congress website:
> http://hdl.loc.gov/loc.gmd/g3861e.cw0013200
> Schulten (2012) has created a companion site to her study with additional copies and information on these maps and the development of statistical mapping:
> http://www.mappingthenation.com/
> The Civil War maps are in Chapter 4:
> http://www.mappingthenation.com/index.php/chapter/index/4

So what do these developments say about the role of social science and policy?

First, professional social science organizations, starting with the American Statistical Association founded in 1839, were always both knowledge producers and advocates for high quality official statistics and data systems. Social scientists were prominent in the founding of the American Association for the Advancement of Science (1848). The American Geographical and Statistical Society (now AGS) was founded in 1851. The men who founded these organizations also joined international efforts. Joseph C. G. Kennedy, Census Superintendent in 1850 and 1860, for example, was a prominent participant in the early meetings of the International Statistical Institute of the 1850s. Organizations of economists, political scientists, and sociologists followed from the 1880s through the early 1900s.

Second, the advisory board of experts is also an old institution. Congress created a "Census Board" in 1848 to devise new methods for the 1850 census. Then Congressman and future President James Garfield convened a study of census methods in 1869 in preparation for rewriting census legislation for 1870. The early twentieth century saw Congress or the White House create numerous study commissions, for example, the Industrial Commission (1898–1902), Immigration Commission (1907–1911), and a Commission on Industrial Relations (1913–1916), with social science expertise. A permanent Census Advisory Committee, with members from the American Statistical Association and American Economic Association, was established in 1919. It has served as the model for additional committees and has functioned since.

Third is the creation of the "spinoff organization" by the 1920s. Whether for lack of funding, or simply because the social science was still untested, officials within government began to create structures outside the state where the knowledge work could continue. By the early 1900s, young social scientists took positions within government and then moved to or returned to permanent university or research positions to continue the work. Walter Willcox, for example, was already on the Cornell University faculty when he took the position of Chief Statistician for Methods and Results for the 1900 census. He returned to Cornell and remained involved in census policy and a prominent advisory committee member for the rest of his career. He lived to 103 and was still advising on census matters in 1960! Wesley Mitchell, another young census staff in the early 1900s, was a founder of the National Bureau of Economic Research in the 1920s.

My last example, on the development of the measurement of unemployment, illustrates the work of those precursors.

The problem of unemployment measurement presented very new challenges when it emerged as an economic and social issue in the late nineteenth century (Duncan and Shelton 1978). See Figure 1 which displays the pattern from 1890–1990. Before the late

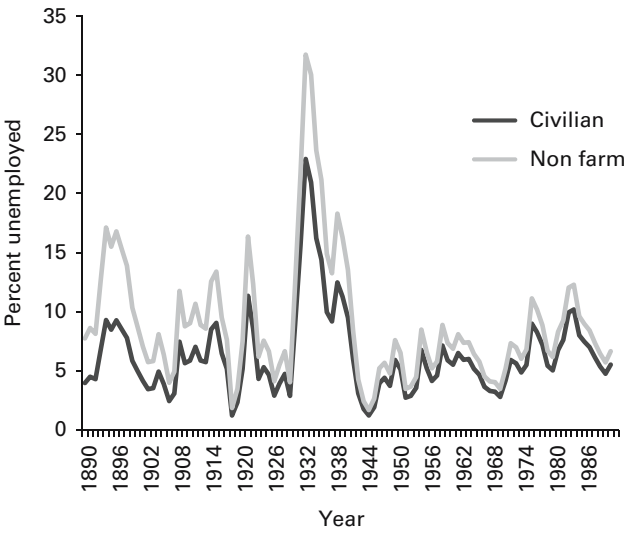

Fig. 1. U.S unemployment rate 1980–1990

1930s, there was no credible official measure of unemployment in the United States, and the data points in this figure for the years before 1935 are estimates developed by historians retrospectively (Carter et al. 2006, Part B, Ch Ba, Series Ba470–477). Data on unemployment, we know now, requires rapid and repeated measurement because the underlying phenomenon is volatile. The graph reveals ragged swings of unemployment after 1890, and more dramatic swings in the non-farm labor force which was growing rapidly as a proportion of the overall economy.

We know Morris Hansen played a major role in the development of the sampling methods used in the 1937 unemployment census, and then improved in the Monthly Report on the Labor Force, now the Current Population Survey.

But let's back up to some earlier developments to see who else was involved.

Here is Mary Van Kleeck (1923, pp. 344–362, quotation at 344) reporting in *Business Cycles and Unemployment*, an NBER report from the President's Conference on Unemployment. This report was prepared after the short intense business depression at the end of World War I:

> If the facts [data on employment and unemployment] are to be useful . . . they must be widely enough scattered geographically not to be over-influenced by condition which may be merely local in one section of the country; they must be made available by some central agency which can correlate and interpret them; and, perhaps most important of all, they must be made public with sufficient promptness to be approximately true measures of the state of employment at the time when they are issued. Thus the problem of extending and improving employment statistics is less statistical in its nature than it is administrative. It demands a machinery strong enough and simple enough to work smoothly and rapidly without breakdowns.

This is quite a mandate. The data have to be current; accurate; credible; geographically distributed to reflect national diversity. Van Kleeck proposed data collections on payrolls and number of employees from employers in manufacturing, trade, mining, railroad transport, utilizing state labor-reporting mechanisms where they existed. She recognized that such a method would omit large portions of the labor force, but had no mechanism to reach the remaining portions of the economy. She sacrificed coverage for efficiency and speed of reporting. Unfortunately, once the economy improved, the pressure to develop the statistics waned. When the next spike in unemployment hit in 1929, the data systems and statistical theory had not advanced.

Then the political problems of improving the statistics hit the statistical system with a vengeance. Government budgets were cut, including those in statistical agencies. For almost eight years, neither President Herbert Hoover nor President Franklin Roosevelt could see any political benefit in developing a statistic that would highlight the administration's failures. So they obfuscated. Roosevelt was famous for confusing journalists by pointing out that when the "breadwinner" lost his job, perhaps his wife or children went looking for work. Three or more people might be looking for work, when all that was really needed was to put the head back to work (see, for example, Roosevelt 1938).

Employer reports failed provide the necessary information. The conceptual definition of what needed to be measured sharpened. Over time, debate shifted to measuring the household situation, which in turn required surveying a much larger respondent base.

Morris Hansen and his colleagues at the Census Bureau recognized they could solve the respondent universe problem with sampling, and they knew it several years before they received authorization from the White House for the 1937 unemployment census. They had to wait out the 1936 presidential election cycle before Roosevelt would authorize the survey.

Now what are the lessons for our discussions of the contract houses?

The social scientists worked independently of the policy makers. In the unemployment case, a parallel process was securing the funding for the new survey.

The policy makers did not necessarily know what they needed. Indeed, they sometimes resisted developing the information and dreaded the analysis they would get.

In all these cases, the social science knowledge creators were relatively unknown to the political establishment or the general public.

In sum, when Morris Hansen came to the Census Bureau in 1935, there were a wide array of extant structures supporting the interaction of social science and federal public policy. Outside government, a statistical revolution was underway, which had yet to penetrate the day to day activities of the statistical agencies or the administrative agencies that produced large amounts of quantitative information. The environment was ripe for new structures, and by the 1940s, the new contract houses appeared on the scene.

Those organizations also benefited from the presence of social scientists and statisticians, like Morris Hansen, who remained within the federal statistical system. He arrived at the Census Bureau at the age of 24, remained for a 30 + year career, joined Westat in 1968 and started another two decades of work. He was in the room, so to speak, with the founders of the contract houses – at professional meetings, and founding new professional organizations such as the American Association of Public Opinion Research, AAPOR (Sheatsley and Mitofsky1992), or when the staff of the contract houses served on federal agency advisory committees. There were models for upholding professional integrity at hand, as well as social scientists who had had interactions with policy agendas in the crucial post-World War II years when the contract houses were getting established.

Prewitt concludes that the social science/government research environment is now facing new challenges, from "big data" and, I might add, from the emergence in the United States of more overtly partisan social science think tanks in the 1970s and 1980s (Smith 1991; Ricci 1993; Rich 2004). This new organizational form has added that third definition of politics to the social science and policy intersection, that of gaining and maintaining control over the apparatus of government, rather than simply providing policy guidance for legislators. Both big data and the rise of the partisan think tank will challenge social scientists and government policy makers alike to rethink the issues of integrity and productivity that Prewitt described. But there is a rich tradition from which to draw to address these new challenges.

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