

# Visualizing labor and business testimony before Congress

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## Abstract

This paper presents preliminary results on visualizing business and labor lobbying before the U.S. Congress in 1877–1933 based on metadata of witnesses at Congressional committees. It highlights the dominant presence of business representatives even in this most accessible category of lobbying activity.

## 1 Introduction

This paper<sup>1</sup> presents preliminary results on visualizing business and labor lobbying before the U.S. Congress in the late 19th and early 20th century (1877–1933). This period encompasses what were perhaps the most intense battles between capital and labor in American history. Such battles were also reflected in legislative hearings, as the period also saw the rise of a federal government with far greater reach and scope than in the antebellum period.

Lobbying as such is of course a much wider phenomenon than merely testifying at Congressional hearings. Such testimony, however, is the most accessible and the most public part of attempting to influence legislation, and as such, forms an interesting case for examining labor and business presence in lawmaking. In the Gilded Age and Progressive Era, testimony before Congress, as well as Congressional investigations, functioned in some cases as exposés of the seamy underside of American business and politics; in 1902, for example, the famed lawyer Clarence Darrow delivered an acerbic indictment of corporate greed at the Anthracite Coal Commission’s hearings, to “standing-room only crowds” [5, 16, 12]. Moreover, in the early years of the twentieth century, the American Federation of Labor (AFL) made a concerted effort to secure legislative protection against employer efforts to inhibit union activity and to gain an eight-hour law on government contract work [7, 6]. Given the reform impetus and the accessibility of hearings, therefore, one might expect a diversity of representatives at Congressional hearings. At the same time, however, the growing power of the federal government was also of interest to representatives of business. On certain questions, such as the tariff or various kinds of banking regulations, their concern was chiefly to protect their particular business interests. On others, notably the issue of protections for labor unions or limitations of the workday, businessmen launched a significant effort to resist what they termed an unfair attempt by the government “to dictate to a private individual how they shall conduct their business” [1, 15].

The question of who influences legislation has a long and contentious history in the political science literature, dating back at least to E. Pendleton Herring’s 1929 *Group Representation Before Congress* [10, 18, 13, 4]. As Richard A. Harris and Daniel J. Tichenor have pointed out, much of the political science literature focuses heavily on the post-World War II era, particularly on the period from about 1970 forward [17, 8]. In the historical literature, earlier lobbying has received rather more attention [9, 19, 20, 16, 3], yet little has been done to examine the broader patterns of who exactly testified, when, and in what contexts.

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<sup>1</sup>Thanks to Martin Krzywinski for help with improving the images. All aesthetic failings mine.

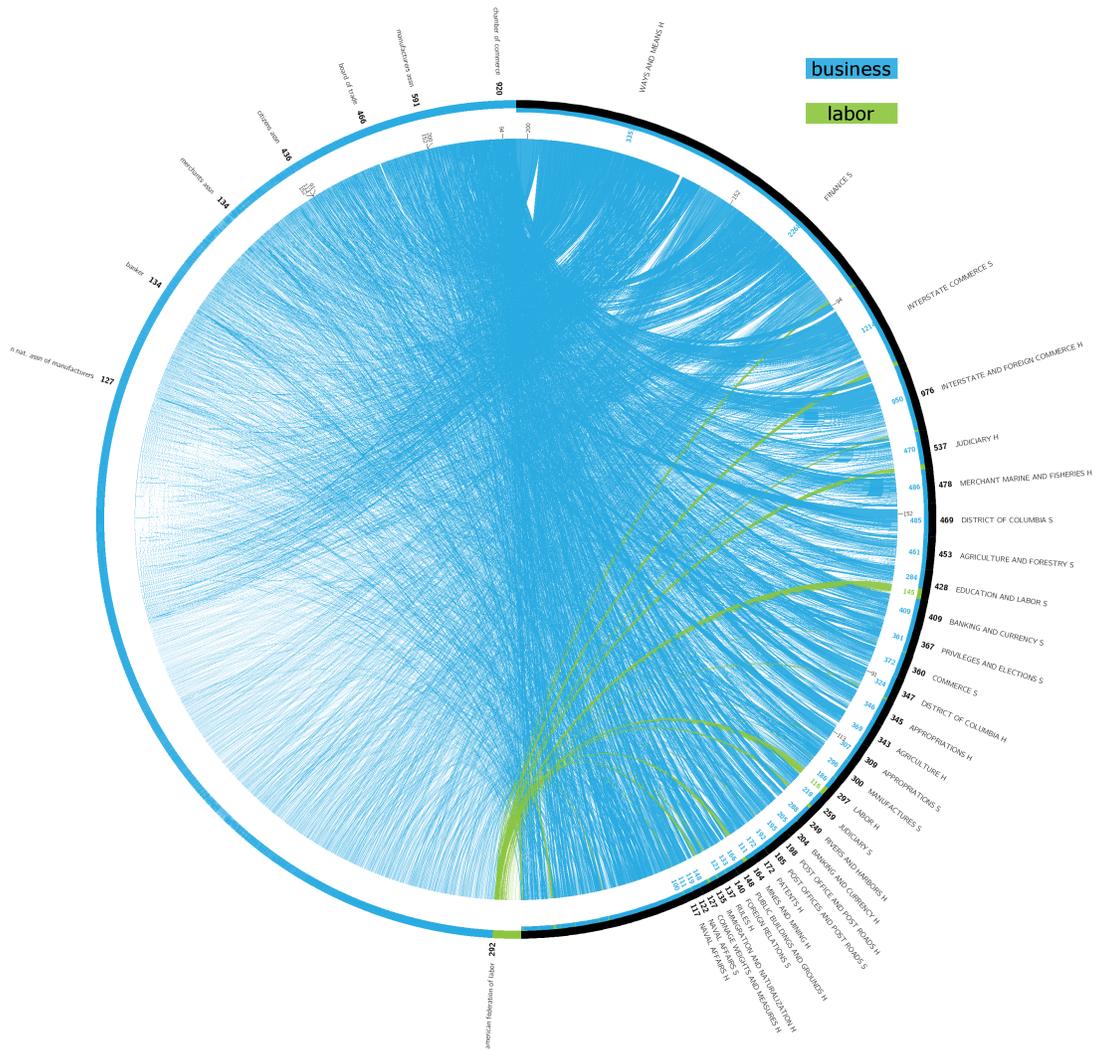


Figure 1: Business and labor witnesses at Congressional hearings, 1877–1933. Committees where at least 50 witnesses appeared included; witness groups with more than 100 appearances labeled. Multiple local groups collapsed into one for all named business witnesses except National Association of Manufacturers. Numbers are total testimonies (totals per committee and by group). = House, S = Senate.

## 2 Dataset

The dataset consists of metadata on testimony before the U.S. Congress between 1877 and 1933 (44th through 72nd Congresses), extracted by scraping the metadata pages of the ProQuest collection on Congressional hearings and processing the information (e.g. hearing, date, Congressional committee, witness name, affiliation if listed, and position in the organization represented if listed) into a spreadsheet format. There were a total of 13,137 separate hearings and a total of 139,074 individual testimonies, for an average of 10.6 testimonies per hearing.

The spreadsheet thus obtained was then further processed (using regular expression match-

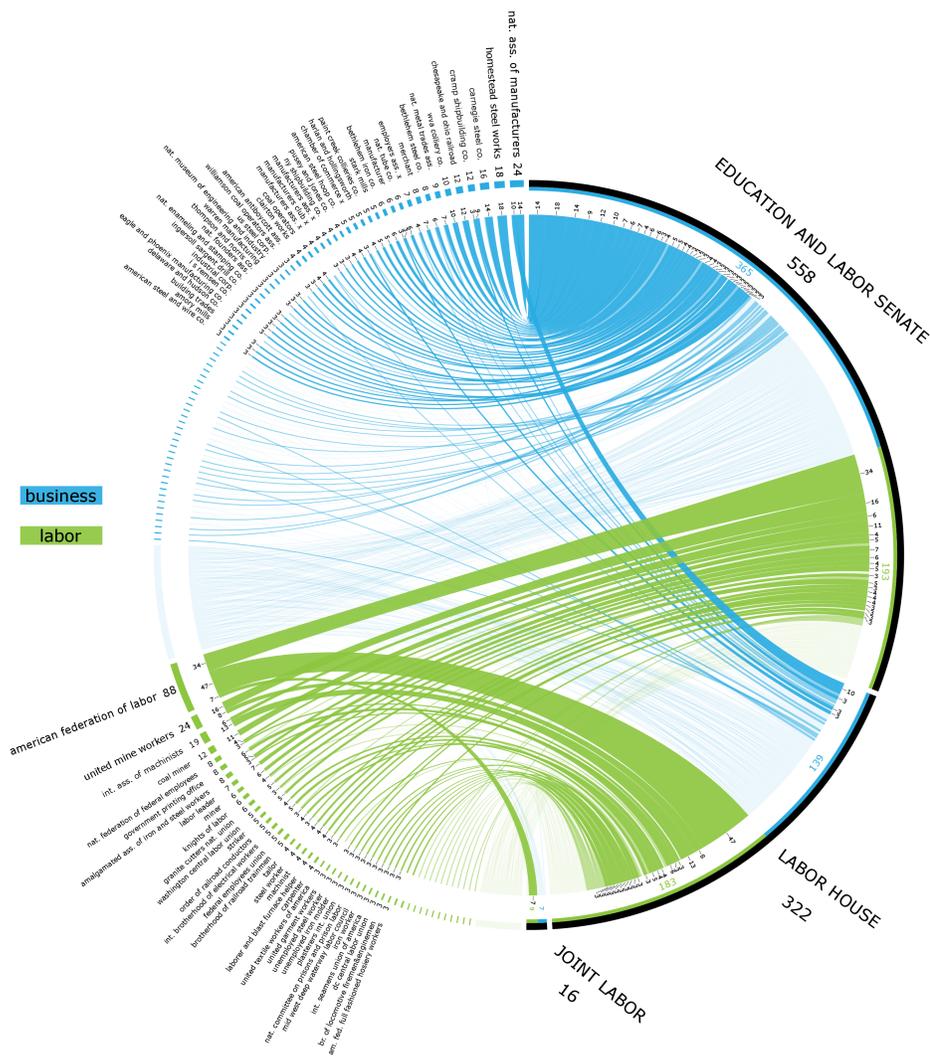


Figure 2: Business and labor witnesses before Congressional committees on labor, 1877–1933. Numbers are total testimonies (totals per committee and by group).

ing on affiliations and positions, e.g. company name or occupation) to identify representatives of business, labor, public-interest groups, government bureaucracy, and politicians.<sup>2</sup> Such classifications were obtained for 58% of the witnesses. Accuracy was not formally tested, but manual examination indicates about a 90%–95% precision rate that seems applicable to both the business and labor categories. A total of 26,073 witnesses were identified as having a business affiliation and a total of 4,550 witnesses as having a labor affiliation (i.e., less than one labor witness for each 5 business witnesses).

<sup>2</sup>In classifying employees of companies, the occupational category trumped organizational affiliation: i.e., a coal miner would be classified as a worker, not a representative of the mining company.

### 3 Visualizations

While a number of visualization strategies could be profitably applied to the data (graphs tracking different witness groups over time, say, or the shifts in subjects of hearings), as a first pass, this paper focuses on viewing the hearings in aggregate and on comparing labor and business groups. For these visualizations, the software package *Circos* was used. Originally developed for visualizing genomic data, *Circos* is increasingly used for visualizing other types of relationships as well [11].

### 4 Business, labor, and Congressional testimony

As is clear from figure 1, business representatives appeared before Congress routinely and concerned themselves with a wide variety of Congressional activity. Not only did business generally have a heavier presence, but the greater variety also probably gave business representatives a familiarity with Congressional procedure as well as individual Congressmen far surpassing that of most smaller unions, let alone individual workers, echoing classic theories of uneven influence due to differential costs of information and action [14, 2]. At the same time, business witnesses also concerned themselves keenly with labor issues at Congress: in fact, the individual hearings that drew the greatest number of business witnesses concerned the eight-hour day on government contract work (213 business witnesses, 39 labor witnesses).

Figure 2 investigates further business and labor witnesses before Congressional committees on labor. As it demonstrates, the presence of business looms large even here. It is also worth noting that while labor witnesses dominate at the less powerful House committee, business dominates in the Senate. Another point of interest is how heavily the labor presence relies on the umbrella organization American Federation of Labor; clearly, business could draw upon a far larger number of relatively powerful witnesses.

### 5 Discussion and further research

Even without the content of testimony, the metadata of who testified at which Congressional committees makes Congressional hearings an important window into who influences Congressional policymaking. This dataset is still preliminary and requires further processing along with manual postcorrection, but with such improvements, it would allow a reasonably fine-grained examination of the character and historical development of various interest groups before Congress.<sup>3</sup>

From even this partial set, however, the strong presence of business groups and companies is evident. Further examination of this data is needed to determine how the relative presence of business and labor evolved over time, and to better understand the distribution of witnesses within the broad business/labor categories (for instance, railroads are particularly heavily represented and could be examined more carefully). One could also examine specific topics in greater detail (strikes, hours legislation, etc.)

Another interesting further area of research concerns the testimony itself. While it would probably be quite labor-intensive to extract individual testimonies from the compilations of Congressional testimony, even an approximate way of doing so in a manner that allows for

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<sup>3</sup>There is also apparently an effort under way to create a more carefully curated dataset partly culled from the index to Congressional hearings and partly from other sources on lobbyists [17], but information on this is lacking.

text mining might prove quite useful in analyzing such questions as how long the testimonies of witnesses representing business versus labor were, or whether and how their topics and language differed from each other.

## References

- [1] Charles M. Jarvis to Louis E. McComas. Records of the United States Senate, *Record Group 46*, Dec 9, 1902. 57th-63rd Congresses.
- [2] Randall Bartlett. *Economic Foundations of Political Power*. Free Press, New York, 1973.
- [3] Elisabeth S. Clemens. Organizational repertoires and institutional change: Women's groups and the transformation of U.S. politics, 1890-1920. *American Journal of Sociology*, 98(4):755-798, 1993.
- [4] W. Douglas Costain and Anne N. Costain. Interest groups as policy aggregators in the legislative process. *Polity*, 14(2):249-272, 1981.
- [5] Dimitra Doukas. Corporate capitalism on trial: The hearings of the Anthracite Coal Strike Commission, 1902-1903. *Identities*, 3(3):367-398, 1997.
- [6] William E. Forbath. *Law and the Shaping of the American Labor Movement*. Harvard University Press, Cambridge, MA, 1991.
- [7] Julie Greene. *Pure and Simple Politics: The American Federation of Labor and Political Activism, 1881-1917*. Cambridge University Press, New York, 1998.
- [8] Richard A. Harris and Daniel J. Tichenor. The rise of modern interest group politics: Progressive-Era origins. In Richard A. Harris and Daniel J. Tichenor, editors, *A History of the U.S. Political System: Ideas, Interests, and Institutions*, volume 2, pages 127-147. ABC-CLIO, 2009.
- [9] Robert Harrison. *Congress, Progressive Reform, and the New American State*. West Nyack, NY, 2004.
- [10] E. Pendleton Herring. *Group Representation Before Congress*. Johns Hopkins University Press, Baltimore, MD, 1929.
- [11] Martin I Krzywinski, Jacqueline E Schein, Inanc Birol, Joseph Connors, Randy Gascoyne, Doug Horsman, Steven J Jones, and Marco A Marra. Circos: An information aesthetic for comparative genomics. *Genome Research*, 2009.
- [12] Mordecai Lee. *The Philosopher-Lobbyist: John Dewey and the People's Lobby, 1928-1940*. SUNY Press, January 2015.
- [13] Kevin M. Leyden. Interest group resources and testimony at Congressional hearings. *Legislative Studies Quarterly*, pages 431-439, 1995.
- [14] Mancur Olson. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard University Press, Cambridge, Mass., 1965.
- [15] Chad Pearson. *Reform or Repression: Organizing America's Anti-Union Movement*. University of Pennsylvania Press, Philadelphia, 2015.
- [16] Shelton Stromquist. *Reinventing "The People": The Progressive Movement, the Class Problem, and the Origins of Modern Liberalism*. University of Illinois Press, Urbana, 2006.
- [17] Daniel J. Tichenor and Richard A. Harris. The development of interest group politics in America: Beyond the conceits of modern times. *Annual Review of Political Science*, 8(1):251-270, 2005.
- [18] Jack L. Walker. The Origins and Maintenance of Interest Groups in America. *The American Political Science Review*, 77(2):390-406, 1983.
- [19] James Weinstein. Big business and the origins of workmen's compensation. *Labor History*, 8(2):156-174, 1967.
- [20] Olivier Zunz. *Making America Corporate, 1870-1920*. University of Chicago Press, Chicago, 1990.