Has Research on Working-Class Politicians Excluded Women?
A Response to Barnes, Beall, and Holman

Nicholas Carnes
Duke University
nicholas.carnes@duke.edu

August 7, 2020

Abstract

Does the literature on politicians from the working class define *the working class* in a way that excludes women? Barnes, Beall, and Holman (forthcoming, 1, 6) argue that past work on this topic "has largely focused on blue-collar representatives, who are primarily men" and that "the gendered conceptualization of working-class legislators advanced in previous research results in the near exclusion of working-class women." In this paper, I review the definition of working-class used in past research and re-analyze the data used in every study of working-class politicians cited by Barnes, Beall, and Holman. On average, women are about as well represented among politicians defined as working-class as they are among other politicians. The dataset Barnes, Beall, and Holman analyze—a single year of data on lawmakers in 30 US state legislatures—is not representative of past research, which has used a gender-neutral definition of the working-class.

In "Pink-Collar Representation and Budgetary Outcomes in US States," Barnes, Beall, and Holman (forthcoming) outline a persuasive argument for studying the numerical or descriptive representation of *pink-collar jobs*, occupations that disproportionately employ women. The article notes that many occupations in the US are highly gender-imbalanced, and that politicians who worked in occupations dominated by women might differ from other leaders.

To motivate the study of female-dominated occupations, the article claims that past research on politicians' occupations has mostly focused on lawmakers from working-class jobs, and that most politicians defined as having working-class backgrounds have been men. The article's abstract states that past work "has largely focused on blue-collar representatives, who are primarily men" (Barnes, Beall, and Holman forthcoming, 1). The paper goes on to argue that past research on politicians from the working class "advance[s] an implicitly gendered definition of what it means to be a member of the working class" (ibid., 1) and that "traditional occupational approaches to understanding class representation in political science are implicitly gendered, to the near exclusion of women" (ibid., 27).[1]

If true, this argument would have significant implications for the recent and growing literature on the occupational and social class backgrounds of politicians (e.g., Barnes and Saxton 2019; Dal Bó et al 2017; Kevins forthcoming; Kirkland 2020; Mansbridge 2015;

---

[1] The article also argues that "working-class women are nearly absent from political bodies when we look at traditional categorizations of working-class representation" (Barnes, Beall, and Holman forthcoming, 2), that "by focusing on blue-collar representatives, the literature has been overlooking a larger class of legislators with feminized occupational experiences" (ibid., 2), that "research on class and representation advances an implicitly gendered definition of what it means to be a member of the working class" (ibid., 4), that "much of this research focuses almost exclusively on men" (ibid., 4), that "the gendered conceptualization of working-class legislators advanced in previous research results in the near exclusion of working-class women" (ibid., 6), and that "when scholars classify working class as those holding male-dominated blue-collar jobs, they exclude most working-class women" (ibid., 6).

O'Grady 2018; Pederson, Dahlgaard, and Citi 2019; Pontusson 2015). It would call into question why working-class politicians are the most economically progressive category of officeholders (e.g., Carnes 2012, Carnes 2013), and in turn raise doubts about the theoretical argument that social class differences in politician behavior are extensions of social class differences in public opinion. It would raise questions about whether the finding that voters express greater confidence in government when more working-class politicians hold office (Barnes and Saxton 2019) represents anti-elitism or sexism.

Perhaps most importantly, if working-class politicians "are primarily men," then increases in working-class officeholding could crowd women out of elected office, setting up a normatively thorny tug-of-war between two historically underrepresented social groups that has received almost no scholarly attention to date.[2] If the working class is virtually all male, programs and policies designed to increase working-class representation could threaten the status of women in political institutions, and vice versa. Broadly speaking, if Barnes, Beall, and Holman's critique is correct, scholars would need to fundamentally re-think the literature on politicians from the working class.

But is the definition of *the working class* used in this literature really "implicitly gendered, to the near exclusion of women"? Are "working-class women . . . nearly absent from political bodies when we look at traditional categorizations of working-class representation" (Barnes, Beall, and Holman forthcoming, 2)? The evidence presented below shows that this has not been the case and that Barnes, Beall, and Holman's article seriously mischaracterizes past research on this topic. The most widely-used measure of working-class politicians is, in fact, essentially gender-neutral in practice, meaning that politicians defined as working-class are about

---

[2] But see Carnes (2015).

as likely to be women as politicians defined as white-collar, with some variation in both directions (some datasets that find that working-class politicians are more often female relative to other politicians, and some that find that working-class politicians are more often male). In fact, the working-class category used in past research overlaps substantially with the pink-collar category that Barnes, Beall, and Holman develop.

This essay briefly reviews the definition of working-class used in past research on politicians from the working class, then discusses the limitations of Barnes, Beall, and Holman's empirical analysis, including the narrow scope of the data they study (a single year of data on 30 US state legislatures) relative to the data used in the literature they critique (which has covered the 20th and 21st centuries, multiple levels of government in the US, and legislatures in 20 countries) as well as basic face validity problems that suggest that Barnes, Beall, and Holman may not have coded working-class politicians in a way that was consistent with past research. This paper then analyzes the data used in every study of working-class politicians that Barnes, Beall, and Holman cite and shows that on average women are about as well-represented among politicians defined as working-class as they are among other politicians.

Of course, none of these findings detract from the larger argument that Barnes, Beall, and Holman make. The value of studying pink-collar jobs is beyond dispute: employment is often highly gendered in the United States, and research on politicians from pink-collar jobs is long overdue. To the contrary, the findings presented here suggest that there is substantial overlap between pink-collar and working-class occupations that should itself be the subject of future research.

What is the Working Class?

There is no universally accepted definition of *the working class* (e.g., Carnes and Lupu forthcoming). Social class scholars have debated how to categorize classes for as long as there have been social class scholars, with no end in sight (for a useful introduction, see Lareau and Conley 2008).

In an effort to understand the behavior of politicians from the working class, Carnes (2012) and Carnes (2013) proposed a simple definition rooted in past sociological research. It is this definition that Barnes, Beall, and Holman (forthcoming, 4) argue is to blame for the exclusion of women from scholarly analyses of politicians from the working class:

> The occupational basis of class coding used in the majority of literature on working-class representation is at the core of this gendered conceptualization of class. In his path-breaking research on class representation, Carnes (2012, 2013) develops a coding scheme to operationalize the occupation-based conceptualization of class, categorizing occupations of congressional representatives into groups of farm owners, businesspeople, other private-sector professionals (e.g., doctors and architects), lawyers, service-based professionals (e.g., teachers and social workers), and workers (industrial, farm, and union).

Indeed, Carnes (2012) and Carnes (2013) measure the social classes politicians come from by coding data on the occupations politicians had before they held office. The aim of these studies is to test the idea that:

> on economic questions, the set of issues for which social class seems to matter most in political opinion studies, officeholders from working-class occupations—manual labor and service industry jobs—should tend to have the most liberal preferences, other things equal. Policymakers from professional, profit-oriented occupations—white-collar jobs

that entail a great deal of material security and in which profit is generally the paramount objective for both employer and employee—should tend to be the most economically conservative. And politicians from professional, not-for-profit occupations—white-collar jobs in which profit is not necessarily paramount, such as public-sector work and service-based professions like teaching and social work—should tend to be more liberal than those from profit-oriented professions (since they have fewer incentives to promote the interests of business or the wealthy) but more conservative than policymakers from working-class backgrounds (since those from not-for-profit professions enjoy greater material security and are less invested in issues affecting the welfare of the working class than workers themselves). (Carnes 2012, 11)

To test this hypothesis, Carnes (2012, 11) defines working-class occupations as "manual labor and service industry jobs," and Carnes (2013, 21, 19) defines working-class jobs as "those that provide employees with little material security and that require little capital or formal education" and notes that this category includes "manual laborers, service industry workers, farm laborers, and union officials." Subsequent studies note that this definition of the working class also encompasses clerical jobs and informal sector jobs (e.g., Carnes and Lupu 2016, 832; Carnes 2018, 2). "For the sake of variety," these studies use "the terms *working-class jobs* and *blue-collar jobs* interchangeably" (Carnes 2013, 21, emphasis in original), but the term blue-collar does *not* denote the gender makeup of the group nor a contrast to pink-collar occupations, and the definition of working class is not explicitly designed to capture anything about the gender makeup of the labor force, but rather how lawmakers from different kinds of occupations or social classes might think differently about government interventions in economic affairs.

Carnes (2012) and Carnes (2013) include appendices that describe how the studies sort the occupations listed in legislative datasets into a common seven- to ten-category coding scheme, including which of the occupational categories in the data meet the definition of *working-class jobs*. Carnes (2012, Appendix A) analyzes a dataset that includes the last occupation held by members of Congress who served between 1901 and 1996; just three of the occupational categories in that dataset meet the definition of working-class: laborer, soldier,[3] and labor union officer. Carnes (2013) analyzes original data on members of Congress who held office between 1999 and 2008, data on state legislators and city council members in the 1990s and 2000s, and Miller and Stokes's 1958 *American Representation Study* survey of US House members; across these datasets, three categories of jobs fit the definition of working class: manual laborer, service industry worker, and union employee/official (Carnes 2013, Appendix Table A1; 162, fn 8; 163, fn 14; 166, fn 19).[4]

Subsequent research applies this way of identifying politicians from the working class to data on US state legislators (Carnes 2016; Feigenbaum, Hertel-Fernandez, and Williamson 2019; Hansen and Clark 2020) and state legislative candidates (Carnes 2018), county and local candidates in California (Carnes 2015), CCES respondents who say they ran for public office (Carnes 2018), Labour MPs in Britain (O'Grady 2019), and provincial and national legislators in Latin America (Barnes and Saxton 2019; Barnes and Holman 2020; Carnes and Lupu 2015). When these studies analyze new datasets with different lists of politician occupations, they often simply reference the basic coding rules outlined in Carnes (2012) or Carnes (2013), although

---

[3] Carnes (2013) uses a more elaborate coding scheme that moves military and law enforcement jobs into their own occupational category.

[4] Miller and Stokes's *American Representation Study*, for instance, has just one broad category for politicians who had worked as "laborers."

some include more elaborate lists of the jobs that they count as working-class. Carnes and Lupu (2015, Table A1), for instance, notes that the jobs that appear in its datasets that meet the definition of working-class include skilled worker (machine operator, mechanic, carpenter, electrician, etc.), office worker (secretary, receptionist, cashier, customer service representative, etc.), food vendor, employee in the service sector (hotel worker, restaurant employee, taxi driver, etc.), farmhand (works for others, does not own land), and domestic servant.

Barnes, Beall, and Holman's Analysis

Is this way of identifying politicians who had previously held working-class jobs "implicitly gendered, to the near exclusion of women," as Barnes, Beall, and Holman (forthcoming, 27) claim?

To support this critique, Barnes, Beall, and Holman (forthcoming, 5-6) analyze data from 2012 on "the share of men and women state legislators who hail from 'working-class' occupations (i.e., industrial, farm, and union) across 30 states." The raw occupational data the authors use come "from Hansen and Clark 2020" and are "coded by [Barnes, Beall, and Holman] according to the structure developed by Carnes 2013" (Barnes, Beall, and Holman forthcoming, 6). The Hansen and Clark dataset covers the years 2003 to 2014, but Barnes, Beall, and Holman focus only on the year 2012 in their analysis of the "Sharing [sic] of Working-Class Representatives in State Legislatures" in their Figure 1. They find that women make up 23% of legislators, that workers make up 12%, and that just 1% of all legislators are working-class women, compared to 11% of all legislators who are working-class men. In other words, women

make up 1/12th of politicians from the working-class, or about 8%, whereas women make up one

fourth of non-working-class politicians.[5]

Later in the paper, Barnes, Beall, and Holman (forthcoming, 13-14) also note that they

"develop a new dataset that includes the share of legislators with blue- and pink-collar

backgrounds across 30 state legislatures" using the full 11-year period covered in Hansen and

Clark's data. In this larger dataset, they find fewer working-class politicians overall—7% in this

11-year dataset, compared to 12% in their 2012-only subset of the data—but find a similar

shortage of women from blue-collar jobs: "Whereas 12% of men legislators have a blue-collar

background, only 1% of women do" (ibid., 14). Unlike their 2012-only dataset, however, the

authors do not explicitly state that their coding of the 11-year dataset is intended to be a

replication of the coding procedures used in Carnes (2012) and Carnes (2013), and the coding

rules they outline in their discussion of the 11-year dataset depart significantly from past

practice: they exclude occupations coded as working-class in prior work,[6] they include

occupations that were previously not counted as working-class,[7] and most importantly, they do

---

[5] Their Figure 1 shows that men make up 77% of politicians, but 11% are working-class men, so 66% of politicians are non-working-class men. Women make up 23% of politicians, and working-class women make up 1% of politicians, so 22% of politicians are non-working-class women. If non-working-class women make up 22% of the legislators and non-working-class men make up 66%, then women make up one fourth of all non-working-class legislators.

[6] Barnes, Beall, and Holman do not count the broad category of "food preparation and serving related occupations" as working-class jobs (Barnes, Beall, and Holman forthcoming, Table A1), even though they are exactly the kinds of *service-industry occupations* that have been defined as part of the working class in past research (restaurant servers are even mentioned explicitly as part of the working class; see Carnes 2013, 32).

[7] Barnes, Beall, and Holman (forthcoming, Table A3) count as working-class several occupations that would *not* have been coded as working-class jobs in past work, but rather would have been coded in other broad occupational categories, including *skilled professionals* (agricultural inspectors, air traffic controllers and airfield specialists, aircraft pilots and flight engineers, and fish and game wardens), *service-oriented professionals* (ambulance drivers and attendants), and *military and law enforcement* (bailiffs, correctional officers, and jailers; detectives and criminal investigators; first-line supervisors of correctional officers). There may

not count as working-class jobs any non-white-collar occupation in which "women make up more than 60% of the employees in the category" (Barnes, Beall, and Holman forthcoming, 7)—an approach that represents a significant departure from past research and generates gender inequality by design (by removing from the definition of working-class any occupation in which women are well-represented). Barnes, Beall, and Holman do not discuss this 11-year dataset in the section of their paper devoted to gender imbalances in past research, so I assume that the 2012-only dataset was "coded by [Barnes, Beall, and Holman] according to the structure developed by Carnes 2013" (Barnes, Beall, and Holman forthcoming, 6), as the authors note, and that the 11-year dataset presented later was coded using different rules and therefore not meant to directly support the authors' critique of how past research defined the working class.[8]

Looking only at the 2012 dataset, there are several indications that Barnes, Beall, and Holman's empirical strategy is not suitable for drawing conclusions about the definition of working-class used in past research. First, although Barnes, Beall, and Holman critique past research for using a gender-biased measure, they do not analyze the data used in past research. Instead, they create an original measure of working-class politicians by independently coding raw occupational data from a new dataset that has, as of this writing, only been used to study working-class politicians in one recent paper (Hansen and Clark 2020).

---

be more of these kinds of occupations, moreover: the list of working-class occupations in Barnes, Beall, and Holman's (forthcoming) Table A3 seems to be truncated. Whereas pink-collar jobs are listed alphabetically from "Animal trainer" to "Word processor and typist," the alphabetical list of jobs they code as blue-collar begins at "Adhesive bonding machine operators and tenders" and ends at "Layout workers, metal and plastic."

[8] The many differences between how Barnes, Beall, and Holman code working-class occupations in their 11-year dataset and how working-class jobs are coded in past research also suggest that the results of their subsequent analysis of state spending cannot be taken as having any direct bearing on past research on the political behavior of working-class politicians, since it uses a vastly different definition of working-class politicians.

Second, the data they use to support their critique are extremely limited—a single year of data on lawmakers in 30 US state legislatures—relative to the scope of the data used in the past research they cite, which has focused on members of the US Congress, candidates and officeholders in all 50 state legislatures, city council members and candidates for local offices, members of the British House of Commons, Argentine local and national legislators, and lawmakers in national legislatures across Latin America. It is simply not appropriate to make generalizations about datasets that span multiple decades, levels of government, and nations around the world on the basis of a single year of data on 30 US state legislatures.

Third, there are indications that Barnes, Beall, and Holman did not successful replicate the measure of working-class used in past research in their 2012-only dataset.[9] Using their new coding of working-class state legislators, the authors find that 12% of state legislators had working-class occupations. This estimate is sharply different from past research and from other independent analyses of the same 2012 data. Past research has found that working-class representation in state legislatures has declined steadily from 5% in the 1970s to 3% in the most recent available datasets (from 2007, 2012, and 2014; e.g., Carnes 2018, Figure 1.2); Barnes, Beall, and Holman's coding of working-class politicians in 2012 finds roughly four times as many workers as the most recent analysis in the literature they are attempting to replicate—and more than twice as many as the highest estimate ever seen in the literature. The estimates Barnes, Beall, and Holman generate from their coding of the Hansen and Clark data are also quite

---

[9] Related to these face validity concerns, the authors write, "Similar to Carnes' coding of workers, which accounts for 30% of all workers in the United States, these pink-collar occupations account for 27% of all workers in the United States." But Carnes's coding of workers accounts for 50% to 60% of the US labor force (e.g., Carnes 2013, 7: "working-class Americans . . . have made up more than 50 percent of the labor force for at least the last hundred years").

different from the estimates Hansen and Clark (2020) themselves generate using the same data. When Hansen and Clark coded the legislative occupations in their data, they found that 2% of state legislators who held office in 2012 came from working-class occupations (and 2% of legislators in their larger 11-year sample as well), an estimate similar to past research.

These are only face validity problems, of course. The difference between Barnes, Beall, and Holman's estimates and Hansen and Clark's could be explained, for instance, if the authors had somehow supplemented Hansen and Clark's dataset with more detailed occupational histories. Even so, the disparities between Barnes, Beall, and Holman's sample and estimate of the incidence of working-class politicians and, on the other hand, the samples and estimates in the extant literature seem to suggest that their original coding of a single year of data from Hansen and Clark's dataset on state legislator biographies is not appropriate for making sweeping generalizations about past research on working-class politicians.[10]

Women and the Working Class in Past Research

Even setting aside these concerns, moreover, Barnes, Beall, and Holman's estimate of the gender imbalance between working-class and other politicians is an outlier relative to the data used in past research.

---

[10] The literature includes some warning signs as well. Silva and Skulley (2019, 343)—cited on page 3 of Barnes, Beall, and Holman (forthcoming)—note that past research has found that "black women legislators in Maryland came from working or middle-class backgrounds." Figure A1 in Barnes and Holman (forthcoming)—cited as Barnes and Holman (2019) on pages 4 and 28 of Barnes, Beall, and Holman (forthcoming)—finds no association between the percentage of women and working-class people in local assemblies in Argentina. And Carnes (2015, 356)—which Barnes, Beall, and Holman do not cite—shows that "contrary to popular images of working-class Americans as white men . . . fully 30% of working-class candidates were women," a figure comparable to the percentage among white-collar candidates, 33%.

The most direct way to test the idea that past research has defined the working class in a way that excludes women would be to look at the data used in past research. Table 1 below re-analyzes the data used in every study cited by Barnes, Beall, and Holman that included a measure of working-class politicians.[11] Each row in Table 1 represent one dataset and notes which of the studies cited in Barnes, Beall, and Holman (forthcoming) analyzed that dataset, the sample and timeframe the dataset covered, the numbers and percentages of women among politicians defined in the dataset as working-class and the numbers and percentages of women among politician defined as white-collar or professional (usually the compliment of working-class; but see note *f*), and the percentage point difference between the percentage of women among white-collar and working-class politicians (where higher values signified more women in the white-collar category).[12] Because some of the datasets listed here are not publicly available, I

---

[11] Hansen, Carnes, and Gray (2019) use the same underlying raw occupational data but do not code working-class politicians. Likewise, Bonica (2017), Lowande, Ritchie, and Lauterbach (2019), Silva and Skulley (2019), and Zeller (1954) do not explicitly identify working-class politicians. Carnes and Sadin (2015) focus on the occupations of politicians' primary caregivers, not politicians themselves. Micozzi (2018) sets aside the working-class coding approach used in past research and focuses instead on union members. O'Grady (2017), Kitschelt and Rehm (2014), and Manza and Brooks (2008) focus on the general public, not politicians. Kerevel and Matthews (2019) may be relevant but is not published or available online to my knowledge.

[12] Barnes, Beall, and Holman focus on a different metric in their Figure 1, namely, the percentage of *all legislators* who are working-class women and working-class men. This approach makes it difficult to determine whether the definition of working class is gender-biased however, because the estimates are not directly comparable—they are the mathematical product of the share of women among workers or professionals (the metrics that directly indicate the gender balance of the working-class measure) times the share of workers overall (which is a separate matter). For example, if the overall gender and class makeup of Barnes, Beall, and Holman's sample had been the same (23% women and 12% workers), but the worker measure had been perfectly gender-balanced (women made up 23% of workers and 23% of non-workers), then female working-class legislators would make up 2.76% of all legislators (23% of the 12% who are working class) and male working-class legislators would make up 9.24% of the sample (77% of the 12% who are working-class). It is doubtful that readers would be able to tell much of a difference between a graph of this gender-balanced working-class measure—which would show working-class women making up 3% of legislators and working-class men making up 9%—and the graph Barnes, Beall, and Holman present, which shows working-class women

also recorded whether the raw occupational data, coded occupational data, and/or summary statistics suitable for estimating the gender breakdowns in this table were publicly available as of the time of this writing. In three pairs of cases, a single dataset was used in two different ways (e.g., to study candidates and then later to separately study the subset of winners); those are denoted with asterisks.

There are also several notes printed below the figure, since several datasets had unique features, as we might expect in a meta-analysis of multiple datasets. In two datasets used in past research, there are no records of individual-level data, only state- and city-level counts of working-class and other politicians, so it is impossible to assess how well women are represented in the working-class category. For one dataset, available replication data were not suitable for this exercise, but it was possible to re-create the authors' dataset from scratch.[13] Of course, the list in Table 1 is not meant to elaborate or defend the coding procedures used in past research; the goal here is simply to assess whether the literature really has defined the working class in a way that results in "the near exclusion of . . . women."

---

making up 1% of legislators and working-class men making up 11%. A better approach to testing whether the measure of working-class legislators is gender biased is to simply compare the representation of women among politicians coded as workers and other politicians.

[13] Barnes and Saxton (2019)'s replication data did not include the individual-level datasets that they used to generate country-level estimates of working-class representation in national legislatures. As such, I simply replicated those individual-level analyses from scratch using the same surveys of Latin American legislators. My replication, however, differs from their analysis in two respects: for three of the 28 surveys Barnes and Saxton analyzed, the survey house no longer posts the raw survey data on its website. For five additional surveys, my independent coding of working-class occupations produced a different country-level working-class percentage than what Barnes and Saxton reported in their replication file (even after I attempted a handful of plausible adjustments). Omitting these five surveys did not change the results in Table 1. I describe the procedure I used to replicate their individual-level data in more detail in Appendix Table A2 and the accompanying text.

Table 1: The Representation of Women among Working-class and White-collar Politicians

| Dataset	Cited Studies	Sample	Timeframe	Women from working-class jobs	Women from white-collar jobs	Gender gap (pp)	Raw Data Avail?	Coded Data Avail?	Summ. Data Avail?
Roster of US Con Officehold	Carnes 2012; 2013; 2018	US Congress	1901-1997	0/70 (0%)	173/5,232 (3%)	3%	yes	no	no
CLASS Dataset	Carnes 2013; 2018	US Congress	1999-2008	4/13 (31%) [a]	108/769 (14%)	-17%	yes	yes	yes [b]
III/NCSL	Carnes 2013, 2016, 2018	US state legislatures	1979, 1993, 1995, 2007	n/a [c]	n/a [c]	n/a	n/a	n/a	no
ICMA	Carnes 2013	US city councils	1996, 2001	n/a [c]	n/a [c]	n/a	n/a	n/a	no
American Represen. Study	Carnes 2013	US House members	1957	0/4 (0%)	4/148 (3%)	3%	yes	no	no
Univ. of Salamanca	Carnes and Lupu 2015	Latin American legislators	late 1990s, early 2000s	13/173 (8%)	207/1,391 (15%)	7%	yes	yes	no
Argentine lawmakers	Carnes and Lupu 2015	Argentina Chamber of Deputies	2000-2001	6/20 (30%)	108/419(26%)	-4%	yes	yes	no
*Broockman et al 2012/2014	Carnes 2018	US state legislature *candidates	2012, 2014	15/104 (14%)	875/2,768 (31%)	17%	no	no	yes [b]
*Broockman et al 2012/2014	Carnes 2018	US state legislature *winners	2012, 2014	8/41 (20%)	426/1,327 (32%)	13%	no	no	no
*LEAP	Carnes 2018	Calif. local *candidates	1995-2011	758/2,472 (31%) [d]	21,912/63,357 (35%) [d]	4%	no	no	yes [b]
*LEAP	Carnes 2018	Calif. local *winners	1995-2011	129/319 (41%) [d]	7,118/18,276 (39%) [d]	-2%	no	no	yes [b]
CCES	Carnes 2018	self-reported candidates	2012	175/546 (32%)	324/1247 (26%)	-6%	yes	no	no
Labour MPs	O'Grady 2019	Labour MPs in British House of Commons	1987-2015	1/28 (4%)	50/173 (29%)	25%	yes	yes	no
Univ. of Salamanca	Barnes and Saxton 2019	Latin American legislators	2008, 2010	20/117 (17%) [e]	369/2,005 (18%) [e]	1%	yes	yes	no
Directorio Legislativo	Barnes and Holman 2020	10 Argentine provincial legislature chambers	2006-2014	na/na (30%) [f]	na/na (19%) [f]	-12%	yes	yes	no
*Hansen and Clark 2020	Hansen and Clark 2020	30 US state legislatures	*2003-2014	19/214 (9%) [g]	2287/10,130 (23%) [g]	14%	no	no	no
*Hansen and Clark 2020	Barnes, Beall, & Holman forthco.	30 US state legislatures	*2012	41/493 (8%) [h]	904/3,617 (25%) [h]	17%	yes	yes	yes
Averages (by dataset, ignoring Barnes, Beall, and Holman forthcoming)				**19%**	**22%**	**3%**			
* averaging duplicate entries for Broockman et al and LEAP				**18%**	**20%**	**3%**			

(additional notes below)

Notes

a. Working-class here was defined as having spent more than 25% of one's pre-professional career in a working-class job. Among all women, the percentage of career time spent in working-class jobs was 3%, compared to 1% for men.

b. Summary provided in Carnes (2015).

c. The underlying data were aggregated separately by occupation and gender; individual-level data do not exist.

d. Gender was coded probabilistically based on Census first name data (see Carnes 2015). Numerators here are the product of the number of workers and the average probability that worker respondents are female; the percentages listed here are average percentages from the data.

e. As footnote 13 explains, these estimates are from my independent replication of Barnes and Saxton's (2019) individual-level data. My replication differs from their analysis in two respects: for 3 of the 28 surveys Barnes and Saxton analyzed, the survey house no longer posts the raw survey data on its website, and for 5 additional surveys, my independent coding of working-class occupations produced a different country-level working-class percentage than what Barnes and Saxton reported in their replication file (even after I attempted a handful of plausible adjustments). When I omit these 5 surveys, women make up 15 of 89 working-class legislators (17%) and 302 of 1,368 professional legislators (18%); these percentages are almost identical to those listed in the table.

f. The authors also identify a category of political jobs; women make up 26% of that category.

g. Just focusing on members who held office in 2012, women make up 7 of 92 working-class legislators (8%) and 943 of 4,018 professional legislators (23%).

h. Their Figure 1 shows that working-class women are 1% of all legislators and that working-class men are 11%, therefore the share of women among the working class should be 1/12, or 8.3%, roughly. The graph shows that women are 23% of the legislature overall, which suggests that 22% of the legislature is professional women; the graph shows that men are 77% of legislators overall, which suggests that women make up about 25% of professional legislators. To generate the case counts reported here, I multiplied these percentages by the total number of state legislators in Hansen and Clark's dataset in 2012 (4,110). When Barnes, Beall, and Holman reported that 1% of all state legislators were working-class women, for instance, I multiplied 4,110 by 1% to estimate that they found approximately 41 female working class state legislators.

Viewed this way, several features of the literature Barnes, Beall, and Holman cite immediately stand out. First, the datasets used in past research span a wide range of samples and timeframes. Of those datasets, second, there are two studies in which women *are* absent from the working-class category. Both are datasets on the US Congress, one covering most of the 20th century and using a coarse measure of members' occupational backgrounds (the last job a member held before being elected to public office), and one focusing on a sample of US House members who served in the late 1950s. In both datasets, women are only a little better-represented among professionals; they make up just 3% of non-working-class jobs. These datasets sharply contrast the more recent, higher-quality data on Congress listed in Table 1—the CLASS dataset, which was created in response to the shallowness of the Roster of US Congressional Officeholder dataset's occupational measure (see Carnes 2013); in these newer data, women are actually better-represented among members of Congress with more experience in working-class jobs than among those with less working-class experience (see also note *a*). Together, these three datasets on the US Congress suggest that it may be the time period or the quality of the occupational data—not the definition of working-class occupations itself—that leads to the exclusion of women from data on politicians from the working class.

There are, of course, many datasets in the literature in which women are present among working-class politicians but better-represented among politicians coded as white-collar. In five datasets, however, women are actually better-represented among working-class politicians, and in another four datasets the share of women among professionals is less than five percentage points higher than the share among working-class politicians. In the literature Barnes, Beall, and Holman cite, there are many dataset in which women are almost as well-represented among politicians defined as working-class, and several where they are actually better-represented.

17

Figure 1: Gender Gaps in the Data used in Past Research on Working-class Politicians
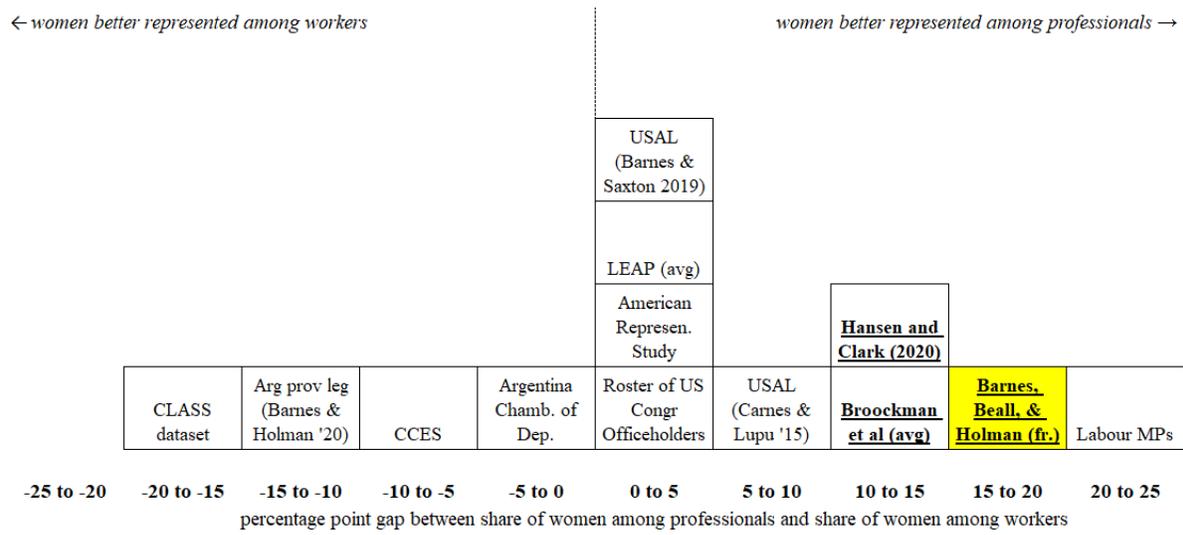
Averaging across the datasets used in past research (that is, excluding Barnes, Beall, and Holman's own original analysis), women made up 19% of the average dataset's working-class category and 22% of the average dataset's white-collar category, a modest three percentage point difference more consistent with the idea that the definition of working-class used in the literature is gender-neutral than the idea that past research advances a "gendered conceptualization of working-class legislators" that "results in the near exclusion of working-class women."

Figure 1 plots the datasets listed in Table 1 visually, grouping them according to the percentage point gender gap, that is, the difference between the percentage of women among the politicians researchers coded as professionals and the percentage they coded as working-class. Datasets that focused on state legislatures in the US—the institutions Barnes, Beall, and Holman analyzed—are printed bolded and underlined; Barnes, Beall, and Holman's study is shaded yellow as well. Curiously, these datasets on US state legislatures have three of the four most male-dominated working-class samples in the literature; in recent data on US state legislatures, women are unusually poorly represented among working-class politicians. Women are better represented (further to the left) in data on Latin American national legislatures (the two different

18

USAL-based datasets), in Argentina's national legislature and its provincial legislatures, in the US Congress, and in the CCES, a large-scale, nationally-representative survey of US citizens that asked respondents whether they had ever run for elected office at any level.

As Figure 1 illustrates, the working-class measure that Barnes, Beall, and Holman (forthcoming) create in their 2012-only dataset is not representative of the data used in the literature they critique. To the contrary, their measure is more relatively-male-dominated than the measures used in every dataset in the literature but one.

In short, the data used in past research suggest that the definition of working-class in the literature is essentially gender-balanced; it usually includes women at almost the same rate that they hold office in legislature as a whole, with some variation in either direction. It is probably more accurate, then, to think of the definition of working-class used in past research as gender-neutral, not gendered or biased against women in the ways Barnes, Beall, and Holman assert.

Pink- and Blue-Collar Legislators

Why is it that women are almost as well-represented among politicians from working-class jobs on average as they are among politicians from white-collar jobs? First, most jobs are working-class jobs. In the US, more than half of the labor force qualifies as working-class (Carnes 2018). In Latin America, working-class jobs make up 65 to 90 percent of the labor force (Carnes and Lupu 2015). And in any country where men experience advantages in the labor market that allow them to capture more professional jobs (a phenomenon I suspect is nearly universal around the world), women should be better-represented among working-class jobs than they are in the labor force as a whole.

Indeed, about half of the occupations that Barnes, Beall, and Holman (forthcoming, Table A3) code as *pink-collar jobs*—49 of their list of 102 female-dominated occupations—would have been coded as working-class jobs in past research, including numerous service industry occupations (e.g., barbers; baggage porters, bellhops, and concierges; childcare workers) and clerical jobs (e.g., file clerks; hotel, motel, and resort desk clerks; dispatchers; secretaries and administrative assistants). Table A1 reports the complete list. In the labor force, most occupations are working-class jobs, and women are well-represented in many working-class occupations relative to their numbers in the labor force as a whole.

Of course, in many times and places, women may not be well-represented in the labor force overall. And, as Barnes, Beall, and Holman (forthcoming, 6; see also Crowder-Meyer 2020) note, "working-class women" may face "marginalization on both their gender and their class" that disproportionately screens them out of the pipeline of new candidates and officeholders. The three percentage point gender imbalance in the average dataset on working-class and white-collar candidates documented in Table 1 is consistent with this argument. The definition of working-class used in past research usually does not exclude women at the high rates that Barnes, Beall, and Holman claim, but past research suggests that women are a little less well-represented among working-class politicians, when they should be a little better-represented. This phenomenon seems like an important opportunity for future research.

Overall, however, the data do not seem to suggest that the literature on the social class backgrounds of politicians needs to be fundamentally re-thought in the ways that Barnes, Beall, and Holman's critique would suggest. If working-class jobs had been defined as mostly male jobs, the literature on the shortage of workers—no matter how carefully it controlled for gender effects—would be fundamentally about more than simply social class differences. Its basic

assumptions about work and policy preferences would need to be revisited to account for the fact that gender imbalances were built into its measurement strategies. Its findings regarding the effects of politicians' classes on voter preferences or trust in government would take on a different interpretation. Above all, any discussions of increasing working-class officeholding would need to be seriously reevaluated, since those increases would risk displacing women from elected office. If the measurement issue raised by Barnes, Beall, and Holman were accurate, the growing literature on class and officeholding would need to be reconsidered from the ground up.

The evidence presented in this paper suggests, however, that past research on working-class politicians does not exclude women in the ways that Barnes, Beall, and Holman claim. Far from being a boys' club, the working-class politicians identified in past research are often women, and the working-class jobs identified in past work are often pink-collar jobs, too. Future research should conceptualize pink-collar and working-class jobs not as distinct or competing categories, but as the heavily-overlapping groups that they are.

Bibliography

Barnes, Tiffany D., and Gregory W. Saxton. 2019. "Working-Class Legislators and Perceptions of Representation in Latin America." *Political Research Quarterly* 72: 910–28.

Barnes, Tiffany D., and Mirya R. Holman. 2020. "Gender Quotas, Women's Representation, and Legislative Diversity." *The Journal of Politics*.

Barnes, Tiffany D., Victoria D. Beall, and Mirya R. Holman. Forthcoming. "Pink-Collar Representation and Budgetary Outcomes in US States." *Legislative Studies Quarterly*.

Bonica, Adam. 2017. "Professional Networks, Early Fundraising, and Electoral Success." *Election Law Journal* 16: 153-171.

Carnes, Nicholas, and Meredith L. Sadin. 2015. "The 'Mill Worker's Son' Heuristic: How Voters Perceive Politicians from Working-Class Families—and How They Really Behave in Office." *The Journal of Politics* 77: 285–98.

Carnes, Nicholas, and Noam Lupu. 2015. "Rethinking the Comparative Perspective on Class and Representation." *American Journal of Political Science* 59: 1–18.

Carnes, Nicholas, and Noam Lupu. 2016. "Do Voters Dislike Working-Class Candidates? Voter Biases and the Descriptive Underrepresentation of the Working Class." *American Political Science Review* 110(4): 832-844.

Carnes, Nicholas, and Noam Lupu. Forthcoming. "The White Working Class and the 2016 Election." *Perspectives on Politics*.

Carnes, Nicholas. 2012. "Does the Numerical Underrepresentation of the Working Class in Congress Matter?" *Legislative Studies Quarterly* 37(1): 5-34.

Carnes, Nicholas. 2012. *White-Collar Government: The Hidden Role of Class in Economic Policy Making*. Chicago, Illinois: University of Chicago Press.

Carnes, Nicholas. 2013. *White-Collar Government: The Hidden Role of Class in Economic Policy Making*. Chicago, Illinois: University of Chicago Press.

Carnes, Nicholas. 2015. "Does the Descriptive Representation of the Working Class 'Crowd Out' Women and Minorities (And Vice Versa)? Evidence from the Local Elections in America Project." *Politics, Groups, and Identities* 3(2): 350-365.

Carnes, Nicholas. 2016. "Why Are There So Few Working-class People in Political Office? Evidence from State Legislatures." *Politics, Groups, and Identities* 4(1): 84–109.

Carnes, Nicholas. 2018. *The Cash Ceiling: Why Only the Rich Run for Office–and What We Can Do about It.* Princeton, New Jersey: Princeton University Press.

Crowder-Meyer, Melody. 2020. "Baker, Bus Driver, Babysitter, *Candidate*? Revealing the Gendered Development of Political Ambition Among Ordinary Americans." *Political Behavior* 42: 359-384.

Dal Bó, Ernesto, Frederico Finan, Olle Folke, Torsten Persson, and Johanna Rickne. "Who Becomes A Politician?" *The Quarterly Journal of Economics* 132(4): 1877-1914.

Hansen, Eric R., and Christopher J. Clark. 2020. "Institutional Barriers to Diversity in Party Leadership: Evidence from State Legislatures." State Politics & Policy Quarterly 20: 81–107.

Hansen, Eric R., Nicholas Carnes, and Virginia Gray. 2019. "What Happens When Insurers Make the Insurance Laws? State Legislative Agendas and the Occupational Makeup of Government." *State Politics and Policy Quarterly* 19 (2): 155–79.

Kerevel, Yann P., and Austin S. Matthews. 2019. "The Gendered Dynamics of Working Class Representation: Evidence from Germany." Women in Subnational Politics Workshop. Tulane University, February 22-23.

Kevins, Anthony. Forthcoming. "Race, Class, or Both? Responses to Candidate Characteristics in Canada, the UK, and the US." *Politics, Groups, and Identities*.

Kirkland, Patricia A. 2020. "Mayoral Candidates, Social Class, and Representation in American Cities." *Journal of Political Institutions and Political Economy* 1(1): 105-136.

Kitschelt, Herbert, and Philipp Rehm. 2014. "Occupations as a Site of Political Preference Formation." *Comparative Political Studies* 47: 1670–1706.

Lareau, Anette, and Dalton Conley. 2008. *Social Class: How Does it Work?* New York: Russell Sage Foundation.

Lowande, Kenneth, Melinda N. Ritchie, and Erinn Lauterbach. 2019. "Descriptive and Substantive Representation in Congress: Evidence from 80,000 Congressional Inquiries." *American Journal of Political Science* 63: 644-659.

Mansbridge, Jane. 2015. "Should Workers Represent Workers?" Swiss Political Science Review 21(2): 261-270.

Manza, Jeff, and Clem Brooks. 2008. "Class and Politics." In *Social Class: How Does It Work?,* eds. Annette Lareau and Dalton Conley, 201-232. New York: Russell Sage Foundation.

Micozzi, Juan Pablo. 2018. "Division or Union of Labor? Analyzing Workers' Representation in the Argentine Congress." *Latin American Politics and Society* 60: 93–112.

O'Grady, Tom. 2017. "How Do Economic Circumstances Determine Preferences?" *British Journal of Political Science* 49: 1381-1406.

O'Grady, Tom. 2019. "Careerists Versus Coal-Miners: Welfare Reforms and the Substantive Representation of Social Groups in the British Labour Party." *Comparative Political Studies* 52: 544-578.

Pedersen, Rasmus T., Jens Olav Dahlgaard, and Manuele Citi. 2019. "Voter Reactions to Candidate Background Characteristics Depend on Candidate Policy Positions." *Electoral Studies* 61.

Pontusson, Jonas. 2015. "Introduction to the Debate: Does Descriptive Misrepresentation by Income and Class Matter?" Swiss Political Science Review 21(2): 207-212.

Silva, Andrea, and Carrie Skulley. 2019. "Always Running: Candidate Emergence among Women of Color over Time." *Political Research Quarterly* 72: 342–59.

Zeller, Belle. 1954. *American State Legislatures*. New York: Thomas Y Crowell.

Appendix

Table A1: About half of Barnes, Beall, and Holman's pink-collar occupations would have been coded as working-class jobs in past research

Pink-collar job category in Barnes, Beall, and Holman (forthcoming, Table A3)	Working-class sub-category
Animal trainers	
Archivists, curators, and museum technicians	
Baggage porters, bellhops, and concierges	service
Barbers	service
Bill and account collectors	
Billing and posting clerks	
Bookkeeping, accounting, and auditing clerks	
Brokerage clerks	
Cargo and freight agents	manual
Childcare workers	service
Clergy	
Communications equipment operators, all other	clerical
Computer operators	clerical
Correspondence clerks	clerical
Counselors	
Couriers and messengers	service
Court, municipal, and license clerks	clerical
Credit authorizers, checkers, and clerks	clerical
Customer service representatives	clerical
Data entry keyers	clerical
Dental assistants	
Desktop publishers	
Directors, religious activities and education	
Dispatchers	clerical
Elementary and middle school teachers	
Eligibility interviewers, government programs	
Embalmers and funeral attendants	
File clerks	clerical
Financial clerks, all other	clerical
First-line supervisors of gaming workers	
First-line supervisors of office and administrative support workers	
First-line supervisors of personal service workers	

Gaming cage workers	manual
Gaming services workers	manual
Hairdressers, hairstylists, and cosmetologists	service
Healthcare support workers, all other, including medical equipment preparers	service
Hotel, motel, and resort desk clerks	clerical
Human resources assistants, except payroll and timekeeping	
Information and record clerks, all other	clerical
Insurance claims and policy processing clerks	clerical
Interviewers, except eligibility and loan	
Librarians	
Library assistants, clerical	clerical
Library technicians	
Loan interviewers and clerks	
Mail clerks and mail machine operators, except postal service	clerical
Massage therapists	service
Medical assistants	
Medical transcriptionists	clerical
Meter readers, utilities	manual
Miscellaneous community and social service specialists, including health educators and community health workers	
Miscellaneous entertainment attendants and related workers	service
Miscellaneous personal appearance workers	service
Morticians, undertakers, and funeral directors	
Motion picture projectionists	service
New accounts clerks	
Nonfarm animal caretakers	manual
Nursing, psychiatric, and home health aides	
Occupational therapy assistants and aides	
Office and administrative support workers, all other	clerical
Office clerks, general	clerical
Office machine operators, except computer	clerical
Order clerks	clerical
Other education, training, and library workers	clerical
Other teachers and instructors	
Payroll and timekeeping clerks	
Personal care aides	
Personal care and service workers, all other	service
Pharmacy aides	
Phlebotomists	
Physical therapist assistants and aides	
Postal service clerks	clerical

Postal service mail carriers	manual
Postal service mail sorters, processors, and processing machine operators	manual
Postsecondary teachers	
Preschool and kindergarten teachers	
Probation officers and correctional treatment specialists	
Procurement clerks	
Production, planning, and expediting clerks	
Proofreaders and copy markers	
Receptionists and information clerks	clerical
Recreation and fitness workers	service
Religious workers, all other	
Reservation and transportation ticket agents and travel clerks	clerical
Residential advisors	
Secondary school teachers	
Secretaries and administrative assistants	clerical
Shipping, receiving, and traffic clerks	clerical
Social and human service assistants	
Social workers	
Special education teachers	
Statistical assistants	
Stock clerks and order fillers	clerical
Switchboard operators, including answering service	service
Teacher assistants	
Telephone operators	service
Tellers	service
Tour and travel guides	
Ushers, lobby attendants, and ticket takers	service
Veterinary assistants and laboratory animal caretakers	
Weighers, measurers, checkers, and samplers, recordkeeping	
Word processors and typists	

Source: Barnes, Beall, and Holman (forthcoming, Table A3), author's coding.

Table A2: Summary of My Replication of Barnes and Saxton's (2019) Individual-Level Data

Country	LAPOP Year	PELA Study #	PELA Year	Estimate in Data	Vers1	Vers2	Vers3	Vers4	Notes
Argentina	2008	67	2008	6.36	3.64	4.55	4.55	6.36	
Argentina	2010	73	2010	4.41	5.88	0	0	4.41	
Bolivia	2008	62	2006	16.67	17.71	11.46	11.46	16.67	
Brazil	2008	55	2004	2.31	--	--	--	--	occupation variable not included in only survey that matched timing; dataset likely missing
Brazil	2010	75	2010	3.1	0.78	0.78	0.78	3.1	
Chile	2008	60	2006	3.33	0	0	0	3.33	
Chile	2010	77	2010	1.16	11.63	0	0	1.16	
Colombia	2008	59	2006	3.77	1.89	0.94	0.94	3.77	
Colombia	2010	83	2010	2.22	0	0	0	2.22	
Costa Rica	2008/10	78	2010	1.78	0	1.79	1.79	1.79	
Dominican Republic	2008	64	2006	4.35	4.35	2.17	2.17	4.35	
Dominican Republic	2010	82	2010	2.63	1.32	1.32	1.32	2.63	
Ecuador	2008	65	2008	1.02	1.02	0	0	1.02	
Ecuador	2010	72	2009	2.1	--	--	--	--	dataset missing from USAL website
El Salvador	2008	58	2006	5.88	4.17	1.39	1.39	1.39	difference > 1 percentage point
Guatemala	2008	52	2004	1.65	9.92	1.65	1.65	1.65	
Guatemala	2010	68	2008	4.12	6.19	4.12	4.12	4.12	
Honduras	2008	57	2006	3.3	2.2	1.1	1.1	3.3	
Honduras	2010	74	2010	13.19	0	2.2	2.2	13.19	
Mexico	2008	63	2006	5.21	5.47	0.78	0.78	5.47	difference < 1 percentage point
Nicarauga	2008/10	66	2007	2.9	8.7	1.45	1.45	8.7	difference > 1 percentage point
Panama	2008	53	2004	4.41	0	1.47	1.47	4.41	
Panama	2010	71	2009	7.81	0	6.25	6.25	7.81	
Paraguay	2008	49	2003	5.36	0	1.79	1.79	5.36	
Peru	2008/10	31(listed as 132 in data)	2001	4.3	4.82	4.82	4.82	4.82	difference < 1 percentage point
Uruguay	2008	54	2005	12.19	4.71	0	0	12.94	difference < 1 percentage point
Uruguay	2010	76	2010	11.54	15.38	3.85	3.85	11.54	
Venezuela 2008	2008	35	2000	3.1	--	--	--	--	dataset missing from USAL website

Notes on Table A2

I began by creating one row in Table A2 for each survey listed in Barnes and Saxton's (2019) Appendix Table A3 ("List of Countries and Survey Waves Included in the Analysis").

The USAL website no longer lists surveys using the PELA wave numbers listed in Barnes and Saxton's Table A3, so I simply found relevant USAL surveys based on their dates (and Barnes and Saxton's description of how they counted surveys conducted shortly before and after the public opinion surveys they used to compute their dependent variable).

For three of the survey waves, I could not find a corresponding survey on the USAL website that included the necessary variables.

For each survey I found, I recorded the static PELA survey number and the year it was conducted.

Next, using the replication data accompanying Barnes and Saxton's paper, I recorded the country-level percentage of working-class legislators Barnes and Saxton had estimated (in the "Estimate in data" column in Table A2). I ignored 15 surveys from the years 2012 and 2014 that appeared in the replication data file but not in Barnes and Saxton's Appendix Table A3.

Barnes and Saxton's paper does not list the exact occupations they coded as working-class in each survey, so in addition to following their stated directions in the paper ("Vers4" in Table A2), I also coded the working-class variable three other ways ("Vers1" through "Vers3"), although none of them routinely produced country-level averages that matched the averages in Barnes and Saxton's replication data. Version 1 used a list of country-specific working-class codes I had emailed to Barnes and Saxton prior to their work on the study, which I created using PELA Wave 2 surveys (in case they had simply used those numerical codes in subsequent surveys). They did not (nor should they have; PELA changes the numbers and labels associated with occupations from survey to survey, even within a single country). Version 2 did the same, this time pooling all of the occupation titles I had sent Barnes and Saxton in the aforementioned list; this, too, was not the coding strategy they used. Version 3 repeated Version 2, this time addressing elipses that sometimes appeared in occupation titles when using Stata; this also was not the approach they used.

The occupations I coded as working-class were the following: ADMINISTRADOR DE EMPRESA; ADVOGADO TRABALHISTA; ALBAñIL/OBRERO; CAMIONERO; CONSTRUCTOR; DIRIGENTE CAMPESINO; DIRIGENTE CAMPESINO, SINDICAL, ORGANIZACIóN; DIRIGENTE GREMIAL; DIRIGENTE SINDICAL; DIRIGENTE SINDICAL, AGRARIO; DIRIGENTE SINDICAL, AGRARIO, SOCIAL; DIRIGENTE SINDICAL, AGRARIO...; ELECTRECISTA; ELECTRICISTA; EMPLEADO; EMPLEADO (SIN ESPECIFICAR); EMPLEADO DE EMPRESA; EMPLEADO EMPRESA; EMPLEADO PúBLICO-FUNCIONARIO; EMPLEADO SIN ESPECIFICAR; FLETERO; METALúRGICO; MINERO; OBRERO O EMPLEADO SIN ESPECIFICAR; OBRERO SECTOR PRIMARIO; PANADERO; SASTRE; SERENO; SETOR PúBLICO; SINDICALISTA / PRESIDENTE DO

SINDICATO DOS FERROVIáRIOS E CUT/RIO DE JANEIRO; SINDICATO (PRESIDENTE); TAXISTA/CONDUCTOR; TELEFONISTA; and TRANSPORTISTA.

In English, these were: ENTERPRISE ADMINISTRATOR; LABOR ADVOCATE; MASON / WORKER; TRUCK DRIVER; BUILDER; PEASANT MANAGER; PEASANT MANAGER, TRADE UNION, ORGANIZATION; UNION LEADER; TRADE UNION DIRECTOR; TRADE UNION LEADER, AGRARIAN; TRADE UNION, AGRARIAN, SOCIAL LEADER; TRADE UNION LEADER, AGRARIAN ...; ELECTRICIAN; ELECTRICAL TECHNICIAN; EMPLOYEE; EMPLOYEE (NOT SPECIFIED); COMPANY EMPLOYEE; EMPLOYEE COMPANY; PUBLIC-OFFICIAL EMPLOYEE; UNSPECIFIED EMPLOYEE; FOR HIRE; METAL WORKER; MINER; UNSPECIFIED WORKER OR EMPLOYEE; PRIMARY SECTOR WORKER; BAKER; TAILOR; DISPATCHER; PUBLIC SECTOR; TRADE UNIONIST / PRESIDENT OF UNION FOR RAILWAYS / RIO DE JANEIRO; TRADE UNION (PRESIDENT); TAXI DRIVER; TELEPHONIST; and CARRIER.

In all but five surveys, my independent coding produced the same percentage of working-class legislators as the estimate listed in Barnes and Saxton's replication data. I note those five surveys in Table A2 above, and as I note in Table 1 in the paper, excluding those five surveys does not affect the substantive interpretation of my findings.