Economic Inequality and Class Consciousness*

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Abstract

Do contexts of greater income inequality spur the disadvantaged to achieve a class consciousness vital to contesting the fairness of the economic system and demanding more redistribution? One prominent recent study, Newman, Johnston, and Lown (2015), argues that simple exposure to higher levels of local income inequality lead low-income people to view the United States as divided into haves and have-nots and to see themselves as among the have-nots, that is, to become more likely to achieve such a class consciousness. Here, we show that this sanguine conclusion is at best supported only in analyses of the single survey presented in that study. There is no evidence that higher levels of income inequality produce greater class consciousness among those with low incomes in other similar but neglected surveys.

One of the most important questions underlying recent research on economic inequality and democracy is whether inequality in democratic contexts is self-correcting. Rational-choice arguments have long maintained that, where economic inequality is higher, the benefit of more redistributive policies to the median voter and to those with below-median incomes is greater, so they will demand and achieve the adoption of higher taxes and more government spending to ameliorate unequal conditions between those with higher and lower incomes (see, e.g., Meltzer and Richard 1981).

There is reason for skepticism. The path from objective inequality to demands for greater equality is fraught, requiring the disadvantaged to perceive the inequality, understand that it affects their condition, deem it illegitimate, and feel sufficiently outraged to make demands (Dahl 1971, 95). Moreover, as Gaventa (1980, 17) notes, where inequality is greater, poorer people are less likely to recognize their situation and embrace a collective identity to struggle against it than to suffer "a greater susceptibility to the internalization of the values, beliefs, or rules of the game of the powerful as a further adaptive response." In fact, Kelly and Enns (2010) provides powerful evidence that, over time, rising income inequality in the United States has worked to *reduce* the demand for redistribution among lower-income Americans.

Nonetheless, a prominent recent study, Newman, Johnston, and Lown (2015, hereafter NJL), appears to provide new justification for optimism that economic inequality will prove self-correcting. It concludes that mere exposure to high levels of local income inequality prompts those with lower incomes to become more likely to view the United States as divided into haves and have-nots and to see themselves as among the have-nots, that is, to become more likely to achieve a class consciousness vital to contesting the fairness of the economic

system and demanding more redistribution.[1]

NJL reaches this conclusion on the basis of analyses of the September 2006 Pew News Interest Index Survey, which it describes as "containing a unique set of questions tapping perceptions of economic hierarchy and inequality and respondents' perception of their own position within such a hierarchy" (p.336). These questions, however, were not at all unique to the 2006 survey: they were in fact included in *six* Pew surveys during the period examined in the study, 2005 to 2009. Given the longstanding admonition to maximize the number of observations used to test a theory's implications (see, e.g., King, Keohane, and Verba 1994), this is a surprising oversight, one that may be expected to affect the conclusions reached.[2]

To examine the extent to which the choice of data affect the results presented in NJL, we first reproduce Table 2 from that article using the 2006 Pew survey alone, which presents results regarding views of the United States as divided into 'haves' and 'have-nots.' The NJL reproducibility materials do not reproduce these results exactly (Newman, Johnston, and Lown 2016), though we confirm that in this case the differences between the published results and those that can be reproduced are indeed quite small.[3] Next, we replicate this analysis

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[1]NJL also purports to show that lower-income people are more likely to reject, and higher-income people are more likely to accept, the meritocratic ideal that hard work leads to success when living in contexts of greater local income inequality. Solt et al. (2016), however, documents how this conclusion is not in fact supported by the results presented in NJL but instead is based on a crucial misinterpretation of a multiplicative interaction term (see Brambor, Clark, and Golder 2006). In an independent replication that brings more and better data to the question, Solt et al. (2016) finds that those with lower incomes are actually *less* likely to reject meritocracy where income inequality is greater.

[2]It is perhaps even more surprising in light of the fact that one of these additional surveys, Pew's April 2009 Values Survey, was included in NJL's analyses of meritocratic beliefs even though it did *not* ask the same item as other surveys pooled in those analyses (see NJL, p.331; Solt et al. 2016, 8).

[3]In reproducing the results directly from the original 2006 survey, we discovered two additional minor issues. First, although NJL describes its model as including a control for unemployment (p.331), the survey

Figure 1: Local Inequality and the Perception of America as Divided into 'Haves' and 'Have-Nots': Results Using All Available Data
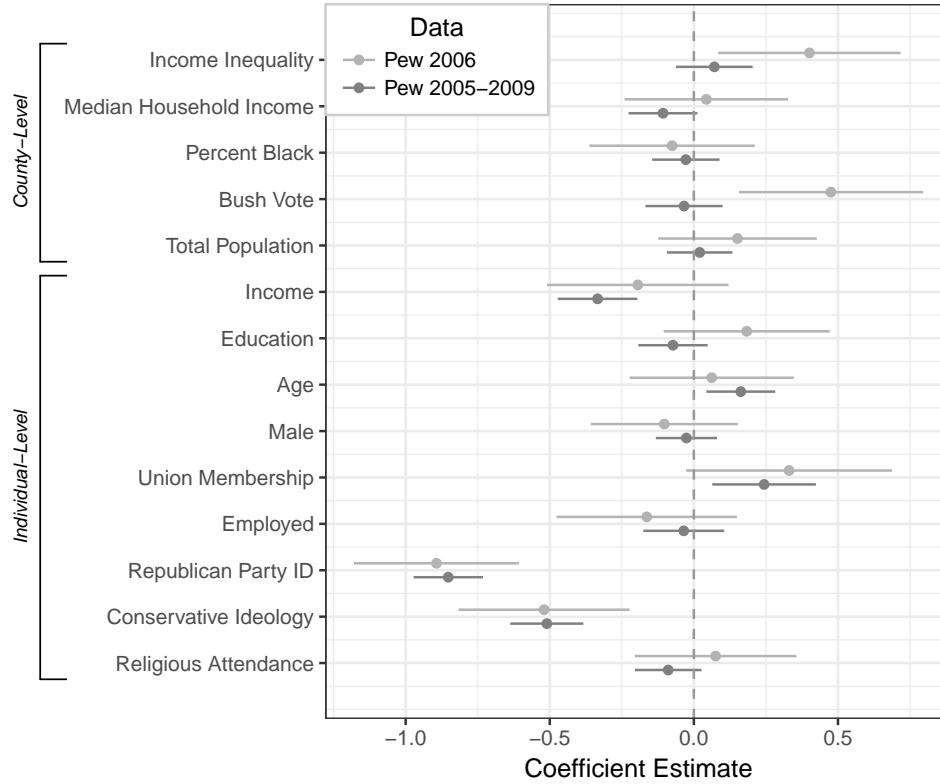
Notes: The dots represent the estimated change in the logged odds of believing the United States to be divided into 'haves' and 'have-nots' for a change of two standard deviations in the independent variable; the whiskers represent the 95% confidence intervals of these estimates. The statistically significant result for county income inequality in the 2006 survey presented in Table 2 of Newman, Johnston, and Lown (2015) is not evident when all of the available data are examined.

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only includes an item regarding *employment* status; that is, the unemployed cannot be distinguished from students, retirees, and others not in the workforce in these data. We therefore simply more accurately label this variable as "Employed;" this of course does not change the results, only their interpretation. Second, missing data in the survey appear to have been singly imputed in the reproducibility materials using an undocumented procedure. Following the advice that *multiple* imputation is the best way to preserve observations with missing data without understating the uncertainty due to missing values (see, e.g., Rubin 1987), we use the R package mi to deal with this issue (Su et al. 2011). This change did not yield substantial

using all six of the available Pew surveys pooled together.[4] We follow NJL in measuring the local context of income inequality with county-level Gini coefficients from the 2005-2009 American Community Survey and examining only views among white respondents.[5]

Figure 1 displays the results as a dot-and-whisker plot (see Kastellec and Leoni 2007; Solt and Hu 2015a), with the dots representing the estimated change in the logged odds of the dependent variable for a change of two standard deviations in the independent variable and the whiskers representing the 95% confidence intervals of these estimates. The upper, lighter lines depict the results obtained using only the 2006 survey as in NJL; the lower, darker lines are those obtained using all of the available surveys. There are many similarities: in both sets of results, most of the estimates do not reach statistical significance, but Republicans and conservatives are less likely to view the United States as divided and union members are more so. The differences, however, are telling. The counterintuitive finding in the 2006 data that people in counties where George W. Bush won a larger share of the vote in 2004 were more likely to see a divide between haves and have-nots evaporates when all of the available surveys are examined. Also, the surprising null result for income gives way to the expected strongly negative relationship. Most importantly, while the estimate for the context of local income inequality in the 2006 data is positive and statistically significant, this evidence that "income inequality and relative economic comparisons will become more salient among

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differences from the results reported in NJL.

[4]Items for three control variables were not asked in all six surveys: union membership (omitted in July 2007 and October 2008), employment (July 2007), and church attendance (October 2008). To deal with this issue, we pooled the surveys before multiply imputing the missing data (see Gelman, King, and Liu 1998).

[5]We make no judgment here on NJL's argument that white people are particularly sensitive to economic inequality (p.335-336), but restrict our analysis to white respondents to provide the most favorable test of the article's claims.

citizens residing in high- than low-inequality contexts" (NJL, p.337) disappears when all of the available surveys are included in the sample.

Moreover, consider Figure 2. It is a "secret weapon" plot (see Gelman 2008, 198) that displays the result for income inequality when the NJL model is fit to each of the six available Pew surveys separately. The coefficient for income inequality is estimated to be positive and statistically significant *only in the 2006 survey employed in NJL*. Not one of the other five datasets yields a statistically significant coefficient, and in three of them the point estimate is actually negative. "We should be willing", King, Keohane, and Verba (1994, 31) advises, "to take whatever information we can acquire so long as it helps us learn about the veracity of our theory." In neglecting to examine more than a single survey, NJL reaches a conclusion that is not supported by the available evidence.

Figure 2: Local Inequality and the Perception of America as Divided into 'Haves' and 'Have-Nots': Results Using Each Available Dataset
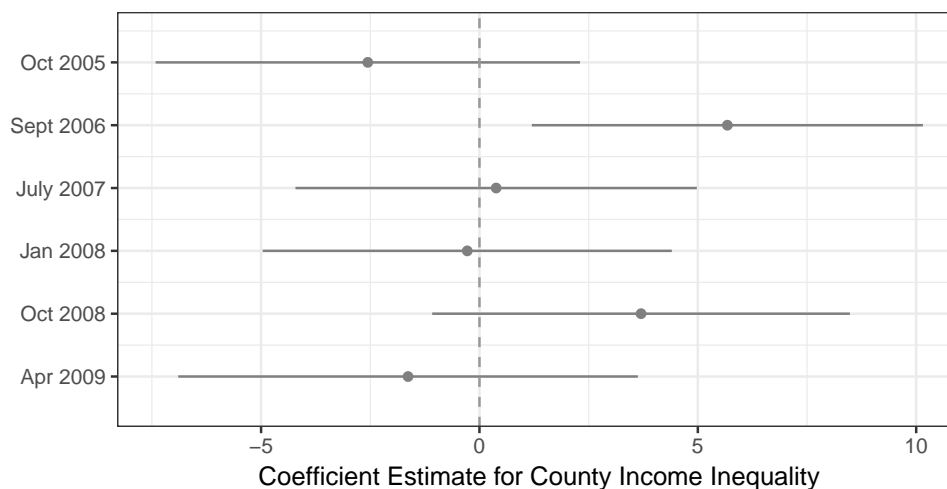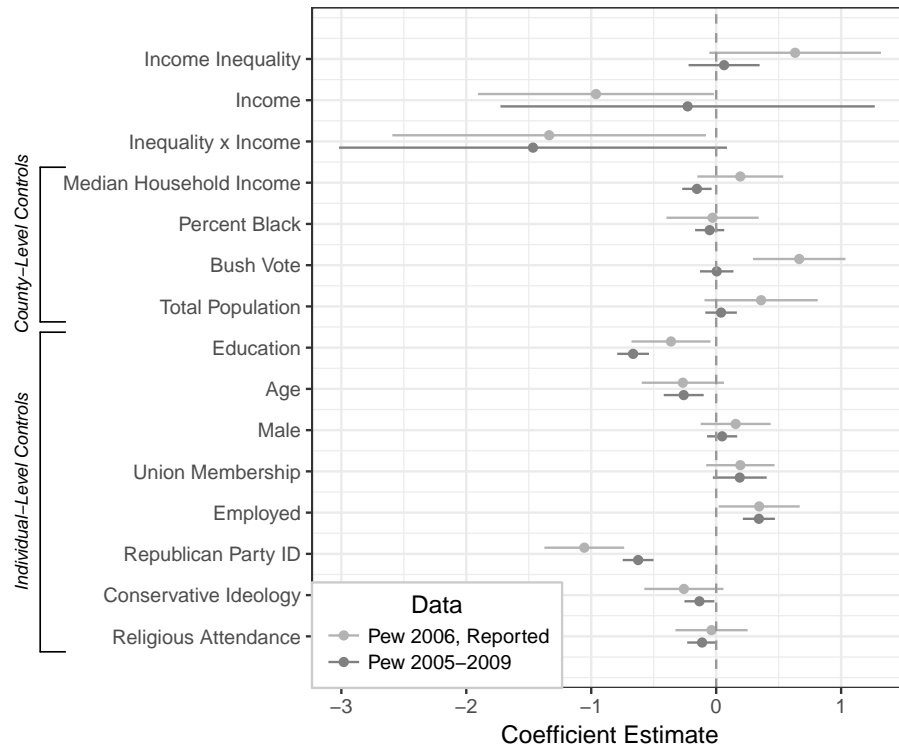

Notes: Dots represent the estimated change in the logged odds of believing the United States to be divided into 'haves' and 'have-nots' for a change of two standard deviations in county income inequality; whiskers represent 95% confidence intervals. The only one of the six available surveys conducted in the time period NJL examines that yields a statistically significant result is the 2006 survey that article presents.

NJL also seeks to address whether lower-income citizens living in localities with more income inequality are more likely to see themselves as have-nots. Its analysis of this question, presented in that article's Table 3, cannot be reproduced very closely even by the article's authors; in recently provided materials, Newman, Johnston, and Lown (2016) instead offer six alternate specifications that yield a wide variety of results, none of which support the conclusion that people with even the lowest incomes are more likely to consider themselves have-nots when they live in contexts of higher income inequality. Figure 3 therefore simply displays the original NJL results for reference, alongside the results obtained by estimating the model using all six Pew surveys that asked respondents if they identified themselves as among the have-nots.

Note that the NJL model includes a multiplicative interaction term between county-level income inequality and individual income. For this reason, the coefficients of these variables are not interpretable directly; instead, to understand how these variables relate to self-identification as a have-not, their conditional effects must be calculated and plotted (see, e.g., Brambor, Clark, and Golder 2006). Using the R package `interplot` (Solt and Hu 2015b), we present these conditional effects in Figure 4.

The left panel of the figure shows that the estimated conditional effect of income is negative and statistically significant across the entire observed range of county income inequality. The center panel, however, shows that the estimated coefficients of income inequality are statistically significant only for those with incomes greater than $50,000: among those with lower incomes, the estimates do not reach statistical significance. The right panel presents predicted probabilities of identifying as a have-not for people with various incomes but otherwise median characteristics across the observed range of income inequality.

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Figure 3: Local Inequality and Self-Identification as a 'Have-Not': Results Using All Available Data
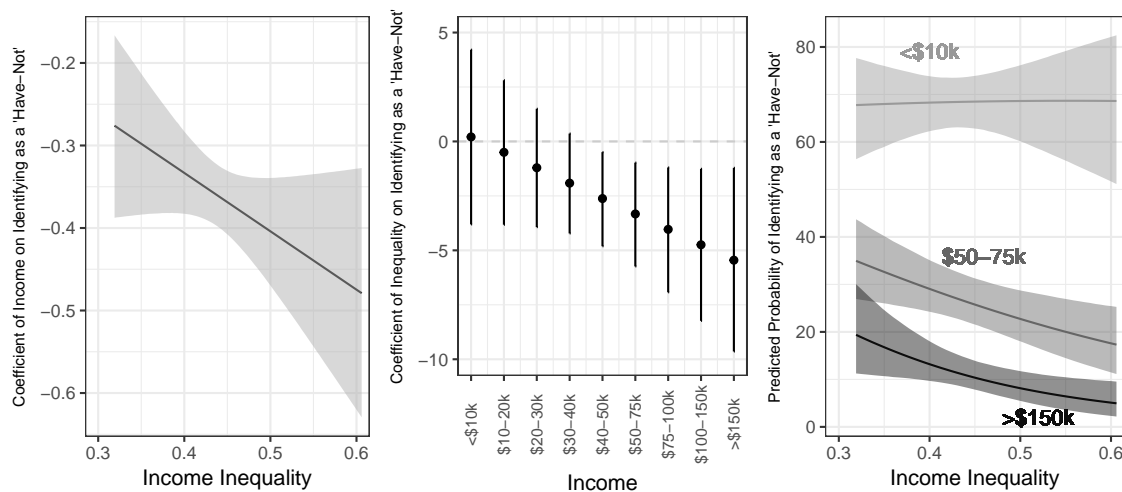

Notes: Dots represent the estimated change in the logged odds of self-identifying as a 'have-not' for a change of two standard deviations in the independent variable; whiskers represent 90% confidence intervals corresponding to NJL's one-tailed tests.

The large effect of income on self-identification as a have-not is readily evident in these predicted probabilities: otherwise typical people with incomes below $10,000 are predicted to have about a seven-in-ten chance of so identifying, while their counterparts with incomes over $150,000 are predicted do so at rates below two in ten. But it is equally evident that, among those with even the lowest incomes, there is no sign that local income inequality "raises the salience of one's own relative position in the economic hierarchy" as NJL (p.336) argued. Their predicted probability of adopting a class identity so measured is flat.

The NJL claim that class consciousness is spontaneously generated among those with low

Figure 4: Conditional Effects of Income and Local Inequality on Self-Identification as a 'Have-Not'

Notes: Dots and solid lines represent the estimated change in the logged odds of the dependent variable for a change of two standard deviations in the independent variable; whiskers and shaded regions represent 95% confidence intervals. Income is estimated to have a negative effect on identifying as a have-not that is strong, statistically significant, and larger in magnitude as local income inequality increases. There is no support for the conclusion reached in NJL that lower income people are more likely to identify as have-nots when they live in contexts of greater income inequality.

incomes by high levels of income inequality has important political implications. If it were true, advocates for greater redistribution could remain subdued, secure in the knowledge that the votes for their preferred policies would soon materialize. The fact that the available evidence provides no support for this claim, on the other hand, suggests that if change is to occur, it will only result from concerted effort, from the difficult and much-constrained work of organization and mobilization. Those who favor a more egalitarian society have no grounds for complacency.

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