Wanting What Is Fair: How Party Cues and Information about Income Inequality Affect Public Support for Taxes

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Income inequality has risen dramatically in the United States. From 1979 to 2007, the incomes of the top 1% of earners grew by 275%, while the incomes of the bottom 20% grew by only 18% (Congressional Budget Office 2011). In California, the share of the state’s income held by the richest 20% of residents increased by 37% from 1980 to 2009, while the share held by the poorest 20% decreased by 65% (Franchise Tax Board 2011). The Occupy Wall Street movement brought rising income inequality to the forefront of the political arena, and the issue was front and center during the 2012 presidential campaign. In a speech in 2013, President Obama called income inequality the “defining issue of our time,” and he used his 2014 State of the Union address to urge Congress to “reverse the tides” of inequality (Obama 2013, 2014). Recently, the federal government and some states have tried to pass redistributive tax policies, but the results have been mixed. In January 2013, Congress raised taxes on those making more than $400,000 per year, but only after rejecting the $250,000 threshold that President Obama advocated. In 2010, voters in Washington state failed to pass an initiative that would have imposed an income tax on those who earn over $200,000 per year. In contrast, California voters narrowly passed an initiative in 2012 that raised income taxes on individuals making more than $250,000 per year in order to fund education and other programs.

What types of information affect public support for redistributive taxes? The answer to this question is of great interest to political scientists, public officials, campaign organizations, and interest groups, all of whom seek to understand public opinion about taxes. It is also of particular concern in states with direct democracy, where citizens make decisions about tax policy directly via the initiative process and where well-funded campaigns seek to influence their opinions (Bowler, Donovan, and Tolbert 1998; Lupia and Matsusaka 2004; Nicholson 2005). As the federal government continues to experience partisan polarization and gridlock, states will increasingly be venues where battles over tax increases and income inequality are fought (Franko, Tolbert, and Witko 2013; Kelly and Witko 2012). However, two prominent claims in political science suggest that influencing citizens’ opinions about taxes

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may be difficult. The first is that citizens are too ignorant to
connect information about income inequality to their opin-
ions on specific taxes (Bartels 2005, 2008). The second is that
citizens ignore substantive information or process it in a bi-
ased way when their party’s positions are known (Rahn 1993;
Taber and Lodge 2006). If either of these claims is true, then
it is not clear how the initiative process will enable citizens
to adopt tax policies that reduce income inequality in their
state.

Our study evaluates these two claims by examining the
influence of political parties’ positions and information about
rising income inequality on public support for redistributive
tax policies. We conduct survey experiments in which respond-
ents express opinions about two tax policies at issue in the
2012 California general election: a progressive income tax and
a regressive sales tax increase. We randomly assign respon-
dents to receive the Democratic and Republican parties’ official
positions (i.e., party cues) on these taxes, information showing
the rising level of income inequality in the state, both party
cues and inequality information, or neither party cues nor
inequality information. We also measure the amount of time
respondents take to express their opinions, as well as their
beliefs about income inequality, in order to shed light on
whether the party cues function as shortcuts (as dual-process
models predict) or prompt respondents to process the in-
equality information in a biased way (as the theory of moti-
vated reasoning suggests).

Our study makes three important contributions to pre-
vious research. First, previous studies of how inequality
affects public support for redistribution are typically observa-
tional (e.g., they examine whether support for redistribution
has increased as inequality has increased). In contrast,
we randomly assign respondents to receive information about
rising income inequality. This enables us to assess how cit-
zizens’ tax policy opinions might change in response to in-
formation about income inequality. Second, we examine how
inequality information affects citizens’ opinions about specific
taxes under active consideration, as opposed to their general
views about redistribution. Third, we apply a psychological
theory of how citizens process information (i.e., dual-process
models) to the study of income inequality and tax policy pref-
erences. This allows us to identify and test conditions under
which inequality information should (and should not) change
citizens’ tax policy opinions.

Our results show that providing information about in-
come inequality can change citizens’ opinions about taxes.
Although respondents are misinformed about the extent of
income inequality, information that corrects their mistaken
beliefs helps them to express tax policy opinions that are
consistent with their preferences for lower levels of inequality.
However, once the inequality information is provided to-
gether with party cues, respondents in the aggregate no
longer respond to it. The amount of time that respondents
take to express their opinions indicates that this is because
they use the party cues as shortcuts. That said, the effects
of the inequality information can persist even when party
cues are present for respondents who are motivated to pro-
cess the inequality information systematically (i.e., who pre-
fer less income inequality than they believe exists). For these
respondents, the inequality information induces them to sup-
port the progressive income tax even though their own party
opposes it. These results identify conditions under which
disseminating information about inequality can increase sup-
port for taxes, even among citizens whose party opposes them.
They also indicate that citizens can objectively process in-
équality information and suggest potential limits to the mo-
tivated reasoning that often biases opinion formation in po-
litical contexts.

RISING INEQUALITY AND PUBLIC SUPPORT
FOR TAXES

An important theoretical model of the relationship between
rising income inequality and citizens’ preferences for redis-
tribution is Meltzer and Richard’s (1981) model. In the model,
the voter with the median income determines the amount of
taxation and redistribution under majority rule. In light of
their self-interest, voters whose incomes are below the median
support higher taxes and more redistribution. In contrast,
voters whose incomes are above the median prefer lower taxes
and less redistribution. The key insight of the model is that
when income inequality increases (i.e., the mean income rises
relative to the median income of the decisive voter), demand
for taxation and redistribution also rises. This occurs because
a larger proportion of citizens benefits from redistribution
and, thus, has an incentive to support it.

Despite this theoretical relationship between rising in-
come inequality and support for redistribution, empirical
studies show that American citizens have not increased their
demand for redistribution to the extent they would if they
acted in their economic self-interest (Kelly and Enns 2010;
McCall and Kenworthy 2009). This is surprising not only in
light of citizens’ self-interest but also in light of survey evi-
dence showing citizens’ widespread concern about inequality
and preference for reducing it (Kluegel and Smith 1986;
McCall 2013; Norton and Ariely 2011; Osberg and Smeeding
2006; Page and Jacobs 2009). Given that citizens prefer less
inequality, it is curious that they oppose progressive income
taxes (like the one proposed in Washington state in 2010)
and support regressive tax cuts (like the Bush tax cuts). Why
are citizens’ tax policy opinions not more consistent with their preference for less inequality?

Scholars provide different answers to this question. One is that citizens are ambivalent about inequality (Hochschild 1981; Kluegel and Smith 1986). For example, they oppose inequality in political and social realms but accept it in the economic realm. Another answer is that citizens want to reduce inequality but prefer to do so by expanding educational opportunities, as opposed to using redistributive taxes (McCall 2013; McCall and Kenworthy 2009). Yet another answer invokes citizen ignorance. Scholars show that citizens are unaware of the extent of inequality (Norton and Ariely 2011; Osberg and Smeeding 2006; Page and Jacobs 2009). Others suggest that even if citizens are aware of the extent of inequality, they are too ignorant to connect information about inequality to their views on specific taxes (Bartels 2005, 2008). Still others argue that citizens are incapable of making trade-offs and, thus, fail to support taxes that fund desired government programs (Sears and Citrin 1982). Together, these findings indicate that the theoretical relationship between income inequality and tax policy preferences that Meltzer and Richard (1981) identify might not hold empirically.

However, empirical studies of why citizens’ tax policy opinions are not more consistent with their preferences for less inequality have important limitations. One is that many studies do not measure citizens’ opinions about specific redistributive taxes under active consideration. Rather, they use general questions or indexes. For example, Kelly and Enns (2010) measure support for redistribution with an index of public mood liberalism or a general question about welfare spending. McCall (2013) uses questions from the General Social Survey that ask, for example, whether the federal government should reduce income differences between rich and poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor, or whether it should not concern itself with reducing these differences. Given the ideological nature of these questions, it is not surprising that answers to them are at best weakly related to rising inequality. Importantly, the few studies that examine specific redistributive tax policies that will actually affect citizens (as Meltzer and Richard [1981] assume) find that citizens’ views about inequality are related to their support for these taxes. They show that citizens who think that inequality is bad were more likely to support the progressive income tax proposed in Washington state (Franko et al. 2013) and less likely to support the regressive Bush tax cuts and estate tax repeal (Krupnikov et al. 2006; Lupia et al. 2007).

Another limitation is that most studies on this topic are observational. That is, they either examine whether support for redistribution has increased as actual levels of inequality have increased (e.g., Kelly and Enns 2010; McCall 2013), or they compare the opinions of citizens with different information levels (Bartels 2005; Lupia et al. 2007). While this approach allows scholars to observe how existing perceptions of inequality shape policy preferences, it does not enable them to address whether, when, and how citizens’ tax policy opinions might change if given information about rising income inequality.

Consequently, many studies on this topic lack a psychological theory about how citizens process and respond to information about income inequality. Such a theory is important because it can identify conditions under which inequality information should change citizens’ tax policy opinions and conditions under which it should not. For example, citizens may respond to inequality information when it is provided in isolation but not when other types of political information are present. Certain types of citizens may also be more likely to process inequality information than others. Thus, the weak relationship between inequality and support for redistribution that scholars observe in the aggregate may mask important variation in citizens’ responses to inequality information. It is difficult to assess these propositions with observational studies. However, experiments that systematically manipulate information about income inequality and other types of political information can shed light on these questions.

Our study contributes to this debate by incorporating a psychological theory and using experimental methods to understand how citizens process and respond to information about income inequality. Specifically, we derive predictions from dual-process models about the conditions under which inequality information should induce citizens to change their tax policy opinions. We test these predictions by conducting survey experiments that randomly assign respondents to receive information about rising income inequality (either by itself or together with party cues) before expressing their opinions about progressive and regressive tax policies. Importantly, we ask respondents their opinions about specific redistributive tax policies under active consideration, as opposed to general questions about redistribution. In doing so, we clarify whether and when inequality information influences citizens’ tax policy opinions.

THEORY AND HYPOTHESES
The theoretical framework for our study is dual-process models of attitude change (specifically, the heuristic-systematic model; Chaiken and Trope 1999; Eagly and Chaiken 1993; Giner-Sorolla and Chaiken 1997). This model is based on the premise that citizens’ cognitive capacities are limited and that
they, therefore, cannot scrutinize every new piece of information. Rather, citizens process information differently depending on the amount of effort they want to exert. The more effortful form of processing, known as systematic processing, involves scrutinizing the substance of information and weighing arguments for and against it. The less effortful form of processing, known as heuristic processing, involves using simple decision rules and cues instead of spending time and energy to process the information itself. Given that most citizens lack interest in politics (Delli Carpini and Keeter 1996), they are typically thought to engage in heuristic processing when exposed to political information. For example, studies show that citizens tend to rely on party cues, as opposed to substantive information, when making political decisions (Cohen 2003; Rahn 1993). This leads us to make the following prediction:

**H1.** When citizens are exposed to party cues, they will be more likely to support tax policies that their party supports and oppose tax policies that their party opposes.

However, dual-process models also state that heuristic processing can only occur when the relevant heuristic is available in memory and accessible in citizens’ minds (Chaiken andTrope 1999). Salient party cues trigger heuristic processing because they make a partisan heuristic (i.e., “I should follow my own party’s position”) accessible in the minds of citizens. In the absence of such cues, citizens are less likely to engage in heuristic processing and may systematically process other available information (Chaiken and Trope 1999; Rahn 1993). In our context, if citizens systematically process information about rising income inequality when party cues are absent, then we expect such information to increase support for redistribution. This is because Meltzer and Richard’s (1981) model predicts an aggregate increase in support for redistribution as income inequality rises. This occurs because a larger proportion of citizens benefits from redistribution as income inequality increases and, therefore, has an incentive to support it.¹ Thus, we make the following prediction:

**H2.** When citizens receive information about rising income inequality in the absence of party cues, they will be more likely to support a progressive tax and oppose a regressive tax.

Of course, other studies of the relationship between income inequality and support for redistribution suggest that we will observe different results. For example, McCall (2013) emphasizes that citizens prefer to reduce inequality by expanding educational opportunities, not by using redistributive taxes. Bartels (2005, 2008) argues that citizens are too ignorant to connect information about inequality to their opinions on specific tax policies. If either of these claims is true (or if citizens fail to process the inequality information systematically), then we should not observe support for hypothesis 2.

When citizens are exposed to both cues and substantive information, dual-process models predict that citizens, in general, will rely on the cues and ignore the substantive information in political contexts. This is because the cues are easier to process than the more detailed substantive information and because citizens are typically uninterested in political issues.² Thus, when both types of information are available, citizens tend to default to the less effortful heuristic processing (Cohen 2003; Rahn 1993). Thus, we make the following prediction:

**H3.** When citizens are exposed to both party cues and information about rising income inequality, they will rely on the party cues and ignore the inequality information.

It is important to note that even if we find support for hypothesis 3 (i.e., that inequality information has no effect over and above the effect of party cues), this finding is observationally equivalent to what a competing theory of information processing predicts. Specifically, the theory of motivated reasoning posits that citizens interpret new information as consistent with their existing views, regardless of whether this interpretation is accurate (Taber and Lodge 2006). Thus, when substantive information competes with

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¹ This self-interest prediction stems from the assumption that citizens accurately perceive their position in the income distribution. We lack the data to test this assumption here. Elsewhere, we show that citizens’ perceptions of their position in the income distribution are inaccurate and prevent them from acting in their economic self-interest but that such inaccuracy can be corrected under certain conditions (Boudreau and MacKenzie 2016). Note also that Benabou (2000) shows that increases in inequality can reduce support for redistribution if the aggregate welfare enhancement from redistribution is not large enough to overcome opposition from those negatively affected (whose numbers grow as inequality increases). If this condition is not met, Benabou (2000) yields the same prediction as Meltzer and Richard. It is not clear that this condition is met in our context.

² Theoretically, citizens’ tendency to rely on party cues when other information is available may vary with their need to evaluate or need for cognition. In the appendix, available online, we break our results down by political interest and education (crude indicators of these constructs) and show that party cue effects are largely similar for those with different levels of interest and education.
their own party’s position, citizens exert effort to generate counterarguments. The result of such counterarguing is that citizens discount or ignore information that is at odds with their party’s position. In this way, the theory of motivated reasoning predicts a similar outcome as dual-process models but offers a different explanation for why substantive information has no effect in the presence of party cues.

One way to distinguish between these two explanations is to compare the length of time that citizens take to express their opinions when they receive only inequality information and when they receive both party cues and inequality information. Indeed, research indicates that response latencies when party cues are present versus absent enable scholars to distinguish motivated reasoning from the cue-taking that dual-process models predict. If citizens generate counterarguments when the inequality information conflicts with their party’s position, they should take longer to express their opinions than when party cues are absent. Alternatively, if citizens use party cues as shortcuts to avoid processing the inequality information systematically, this should decrease the time and effort needed to express their opinions (Bolsen, Druckman, and Cook 2014; Petersen et al. 2013). Thus, we make the following prediction:

**H4.** If citizens engage in the cue-taking that dual-process models predict, then they should express their opinions more quickly when exposed to both party cues and inequality information than when exposed to only inequality information.

Another way of distinguishing these two explanations is to compare the opinions of citizens who are and are not motivated to process the inequality information systematically when party cues are present. Dual-process models predict that these two types of citizens will behave differently, while the theory of motivated reasoning does not. Because systematic processing is costly in terms of time and effort, dual-process models predict that citizens will only engage in it instead of simple cue-taking when they are motivated to do so (Chaiken and Trope 1999). One condition that should motivate systematic processing is a conflict between one’s values and the cues that one receives (Giner-Sorolla and Chaiken 1997). In our context, citizens who value greater equality (i.e., prefer less income inequality than they believe exists) should experience such a conflict when their own party’s position is at odds with this value. Thus, they should be motivated to process the inequality information systematically when their own party’s position conflicts with their value. Citizens who do not hold this value will not experience such a conflict and, therefore, should lack this motivation. Thus, we offer the following prediction:

**H5.** If dual-process models explain citizens’ responses, those who value greater equality should process and respond to the inequality information when their party’s position conflicts with this value. Citizens who do not hold this value should rely on the party cues.

**METHODS**

The progressive and regressive tax policies at issue in the 2012 California general election provide a unique opportunity to test our hypotheses. In the election, Democratic Governor Jerry Brown campaigned for a progressive income tax and a general sales tax increase. Governor Brown bundled these taxes in a single ballot measure because he believed that the sales tax would emphasize the measure’s “shared sacrifice” while keeping the California Chamber of Commerce from opposing it. In campaign appearances, Brown described the measure as “taking money from the most blessed and giving it to the schools” (York 2012).

Not surprisingly, the Democratic and Republican parties took conflicting positions on these taxes. Indeed, the two parties frequently advertise their positions on initiatives and contribute financially to campaigns. In this election, the Democratic Party supported Governor Brown’s measure because they wanted to avoid $6 billion in cuts to state education programs. Thus, the Democratic Party supported a regressive sales tax, in part, because of its redistributive component. The sales tax was also modest in size and temporary. In contrast, the Republican Party opposed both taxes. While Republicans made several arguments against the measure, one highlighted the regressive nature of the sales tax in an attempt to appeal to a statewide electorate where Republicans are a minority. We take advantage of these two types of taxes, the parties’ opposing positions, and citizens’ different beliefs about income inequality to assess how information about income inequality affects tax policy opinions.

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3. “Self-defining concepts [such as] values, attitudes, and beliefs that are closely tied to central aspects of the self-concept” are thought to influence such processing (Giner-Sorolla and Chaiken 1997, 85). Valuing equality is one such self-defining concept or core value (Goren 2001).
Survey design
We begin our survey by measuring respondents’ beliefs about income inequality. We first ask them to estimate the actual level of income inequality in California, as well as their ideally preferred level of income inequality in the state. We follow Norton and Ariely (2011) by asking respondents to estimate the percentage of California’s total income that is actually held by five groups: the richest 20% of Californians, the second richest 20%, the middle 20%, the second poorest 20%, and the poorest 20%. To ensure that respondents understand this task, we provide a concrete definition of what “income” includes, as well as sample income distributions to illustrate maximum equality or inequality (Norton and Ariely 2011). For example, respondents are told that if income were distributed completely equally, the richest 20% would hold 20% of the total income, the second richest 20% would also hold 20% of the total income, and so on. They are also told that if income were distributed completely unequally, the richest 20% would hold 100% of the total income and others would hold 0%. After estimating the percentage of the state’s total income that is actually held by each group, respondents are asked to indicate the percentage of California’s total income that they believe ideally should be held by people in each group.5 (See the appendix for the exact wording.)

After measuring respondents’ beliefs about actual and ideal levels of income inequality, we provide short descriptions of the progressive income tax and sales tax increase at issue in California. To give respondents some context for thinking about these issues, we also provide arguments that supporters and opponents made. Those randomly assigned to the control group receive only this information, while those assigned to the treatment groups also receive party cues, information about rising income inequality in California, or both types of information.

In the control group, respondents are asked to express their opinions in the neutral manner used in the American National Election Study to elicit “real” opinions. On the progressive income tax,6 control group respondents read the following description: “Recently, state leaders proposed raising California’s sales tax by one-quarter of a penny for four years. Supporters say raising the sales tax would reduce the need to make further cuts to state health and welfare programs. Opponents argue that raising the sales tax will hurt efforts to reduce unemployment and that it is unfair because poor residents are taxed at the same rate as rich residents.” After each description, respondents are asked whether they strongly support, somewhat support, somewhat oppose, or strongly oppose the tax increase or whether they do not know.

In the “party cue” treatment group, respondents receive the Democratic and Republican parties’ official positions on these tax policies, as opposed to the positions of “supporters” and “opponents.” Thus, respondents are told that “members of California’s Democratic Party support this tax increase” before reading the supporting arguments for the progressive income tax and sales tax increase. They are also told that “members of California’s Republican Party oppose this tax increase” before reading the opposing arguments for these tax policies.

In the “inequality information” treatment group, respondents receive information showing the dramatic increase in income inequality in California. We use graphs of data from the Franchise Tax Board of California to demonstrate the extent to which the income of the richest 20% of Californians has increased and the income of the poorest and second poorest 20% has decreased (see fig. 1). We present the inequality information in this way because it corresponds to the two questions respondents answer at the beginning of the survey about the percentage of income they think these groups actually hold and ideally should hold. Thus, they can compare the estimated and ideally preferred levels of income inequality that they previously expressed to actual levels of

5. Follow-up analyses indicate that the beliefs respondents express about their ideal income distribution are meaningful and that this measure has strong construct validity (see the appendix).

6. Prompting respondents in each group to think about a discrepancy between actual and ideal levels of income inequality should make it more difficult to observe a difference between our control and “inequality information” groups. We also randomly assigned half of our respondents to answer other questions after they expressed their beliefs about inequality but before they received our treatments. Our results for these respondents are similar to those we report here (see the appendix). This gives us confidence that respondents’ reactions to the inequality information are not a function of being “primed” to think about their beliefs about inequality.

7. Although these taxes were bundled together in the election, we present them separately to examine how inequality information affects support for progressive and regressive taxes.
As Kuklinski et al. (2000) demonstrate, presenting factual information in this way is essential for correcting mistaken beliefs. We also use this information because it should provide a reason for supporting the progressive income tax and opposing the regressive sales tax increase if citizens prefer less inequality.8

In the “party cue + inequality information” treatment group, respondents receive both the party cues and the inequality information provided in the other treatment groups. Hence, respondents receive inequality information that either reinforces or conflicts with their own party’s positions. For example, Democratic respondents in this treatment group receive reinforcing information on the progressive income tax because the Democratic Party supports this policy and the inequality information provides a reason for supporting it. However, Republican respondents receive conflicting information because the Republican Party opposes the progressive income tax, but the inequality information provides a reason for supporting it. Conversely, Democratic respondents receive conflicting information on the sales tax increase (because the Democratic Party supports it, but the inequality information provides a reason for opposing it), and Republican respondents receive reinforcing information (because the Republican Party opposes the sales tax increase, and the inequality information provides a reason for opposing it). We take advantage of this natural variation in whether the inequality information reinforces or conflicts with respondents’ own party’s positions to test our hypotheses about whether and when such information affects opinions even when party cues are present.

Participants
Our survey experiment was administered by YouGov from May 22 to June 15, 2012, approximately five months before citizens would vote on these tax increases. YouGov is a survey research service that recruits samples of adults via the Internet. The 1,000 Californians who participated were drawn from the YouGov panel, which is opt in. Our results use unweighted data but are similar when weighted on the basis of known marginals for California.

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8. We characterize the sales tax as regressive because citizens are taxed at the same rate regardless of their income. If respondents view this tax as redistributive, this should bias us against the negative effect we predict the inequality information will have on support for it.
Our sample resembles California’s population in several ways, including gender, age, and income. As with most opt-in Internet samples, our sample is more highly educated than the population. Our sample includes a smaller percentage of respondents with no high school diploma than the state’s population (2.8% vs. 18.5%) and a larger percentage of respondents with some college (39.3% vs. 29.1%). Our sample more closely resembles registered voters in California, 8% of which have no high school diploma and 36% of which have some college (Public Policy Institute of California 2012). These differences are relevant when assessing the generalizability of our results. When evaluating our main effects, however, it is worth noting that education is not correlated with assignment to treatment and control groups.

Measurement and data analysis
To measure respondents’ beliefs about income inequality, we use responses to our survey questions that ask respondents to indicate the percentage of the state’s total income that different groups of Californians (e.g., the richest 20%, second richest 20%) actually and ideally should hold. We calculate the average percentage of income that respondents assign to each group in response to the actual and ideal versions of the question. These averages enable us to measure the extent of misinformation about and dissatisfaction with income inequality in California.9

At the individual level, the percentages that respondents assign to each group enable us to identify respondents who predict will be motivated to process the inequality information systematically when party cues are also present (i.e., those who value greater equality). We measure this construct by examining respondents who believe that the poor have less income than they ideally should (i.e., ideally prefer the poorest and second poorest 20% to hold a greater percentage of income than they believe these groups actually hold). Other respondents who do not hold this value should simply rely on the easier-to-use party cues.

To test our hypotheses, we calculate the percentage of Democrats and Republicans who support each tax policy in the control and treatment groups. The dependent variable, Support, is coded as 1 for respondents who “strongly support” or “somewhat support” and 0 for respondents who “somewhat oppose” or “strongly oppose” each tax policy.10 This enables us to assess whether respondents are on the same side of an issue as their party.11 We conduct difference of means tests to examine whether a larger percentage of Democratic and Republican respondents support or oppose these tax policies when they receive party cues, information about income inequality, or both. We then examine the amount of time that respondents take to express their opinions to shed light on whether they engage in motivated reasoning or cue-taking when both party cues and inequality information are provided. We also examine whether respondents who ideally prefer less income inequality than they believe exists process the inequality information systematically and respond to it when their party’s position conflicts with this value.

RESULTS
Our results indicate that respondents are misinformed about the actual level of income inequality in California. However, when given information about the true extent of income inequality, they use it to express tax policy opinions that are consistent with their preference for lower levels of inequality. Once the inequality information is provided together with party cues, however, respondents in the aggregate no longer respond to it. Their response latencies indicate that, rather than engage in motivated reasoning, respondents appear to use party cues as shortcuts as dual-process models predict. Also consistent with dual-process models is our finding that the effects of the inequality information persist even when party cues are present for respondents who are motivated to process the inequality information systematically (i.e., those who prefer less inequality than they believe exists). For these respondents, the inequality information induces them to support the progressive income tax even though their own party opposes it.

Actual and ideal levels of income inequality
Our results show that Democratic and Republican respondents are misinformed about the true extent of income inequality in California. Specifically, our measures of respondents’ beliefs about inequality suggest that they underestimate the percentage of income that the richest 20% of Californians hold and overestimate the percentage of income that the second poorest 20% and poorest 20% of Californians hold. As figure 2 shows, the richest 20% of Californians actually hold 61.3% of the state’s income. However, Democrats estimate that this group holds only 42.6% of the state’s income, and Republicans estimate that it holds only 32.4%. Conversely, the poorest 20% of Californians actually hold only 2.2% of the

9. Psychologists debate whether these and other measures yield accurate estimates of perceptions of and preferences for income inequality (Chambers, Swan, and Heesacker 2014; Eriksson and Simpson 2012). We discuss this debate and its implications for our study in the conclusion.

10. We omit Independents, those who fail to answer, as well as “don’t knows” and nonresponses.

11. Our results are similar when using a four-valued indicator of support (see the appendix).
state’s income, but Democrats estimate that this group holds 9.7%, and Republicans estimate that it holds 11.6%.

Our measures also show that Democratic and Republican respondents ideally prefer less income inequality than actually exists in their state. As figure 2 shows, Democrats ideally prefer the richest 20% of Californians to hold 25.7% of the state’s income, in contrast to the 61.3% that they actually hold. Republicans ideally prefer the richest 20% to hold 28.3% of the state’s income. With respect to the poorest 20% of Californians, Democrats ideally prefer them to hold 13% of the state’s income, and Republicans ideally prefer them to hold 9.9% (in contrast to the 2.2% they actually hold). Given these preferences for less inequality than actually exists in California, we examine whether party cues, information about income inequality, or both help respondents to express tax policy opinions that are consistent with those preferences.

**Connecting inequality information to specific tax policies**

The results of our survey experiment show that, despite respondents’ misinformation about the extent of income inequality, they connect factual information about income inequality to their views on specific tax policies when given it. Consider first the results for the progressive income tax. As figure 3A shows, only 26% of Republicans support this tax policy in the control group and, only 24% support it in the “party cue” treatment group. These percentages are not significantly different and indicate that Republicans are in lock step with their party even without an explicit signal of their party’s opposition to the progressive income tax. In contrast, when Republicans receive information about the true extent of income inequality in the state, they increase their support for the progressive income tax. Specifically, 40% of Republicans support the progressive income tax in the “inequality information” treatment group, which is a significant increase relative to the control group ($p < .05$). However, when the conflict between their party’s position and the inequality information is made explicit in the “party cue + inequality information” treatment group, the positive effect of the inequality information mostly disappears. Only 29% of Republicans support this tax policy in this treatment group, which is not significantly different from the control group.

The results for Democratic respondents on the progressive income tax also indicate that these respondents are in lock step with their party’s position. As figure 3B shows, 91% of Democrats support the progressive income tax in the control group. Similarly, 93% of these respondents support the progressive income tax in the “party cue” treatment group, 88% support it in the “inequality information” treatment group.

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12. These results are consistent with Sears and Citrin (1982), who show that Republicans and conservatives are more likely to support limiting taxes in California.

13. This could occur because party cues induce respondents to ignore inequality information or to prefer other ways of reducing inequality (e.g., expanding educational opportunities; McCall 2013).

14. Our results are similar when broken down by ideology instead of partisanship (see the appendix).
and 92% support it in the “party cue + inequality information” treatment group. These percentages are not significantly different from the control group. Given the high level of support in the control group and given that the Democratic Party and the inequality information both provide reasons for supporting this policy, it is not surprising that neither type of information has large effects on Democrats.

On the regressive sales tax increase, however, the inequality information reinforces the Republican Party’s opposition and conflicts with the Democratic Party’s support. Thus, we observe the opposite pattern of results for this tax policy. While the inequality information has minimal effects on Republicans, it has a substantial effect on Democrats. Figure 3D shows that 67% of Democrats support the sales tax
in the control group and 66% support it in the “party cue” treatment group. These percentages are not significantly different and again indicate that these respondents agree with their party to begin with. However, when Democrats receive the inequality information, their support for this regressive tax increase drops. Indeed, only 55% of Democrats support this tax policy in the “inequality information” treatment group, which is significantly lower than in the control group (p < .05). As before, however, the effect of the inequality information disappears once it is paired with these respondents’ own party’s conflicting position. Specifically, 71% of Democrats support this tax policy in the “party cue + inequality information” treatment group, which is not significantly different from the control group.

**Testing the mechanism: Dual process versus motivated reasoning**

We now examine Democrats’ and Republicans’ response latencies in the “inequality information” and “party cue + inequality information” treatment groups to shed light on why they no longer respond to the inequality information when party cues are also present. Consider first the results for Republicans on the progressive income tax (where the inequality information conflicts with their party’s position). In the “inequality information” treatment group, these respondents take 34.28 seconds to express their opinions.15 When they also receive their party’s conflicting position in the “party cue + inequality information” treatment group, they take 31.41 seconds, which is not significantly different. The results for Democrats on the sales tax (where the inequality information conflicts with their party’s position) are similar. In the “inequality information” treatment group, these respondents take 25.02 seconds to express their opinions. When they also receive their own party’s conflicting position, they take 22.23 seconds, which is not significantly different. Given that there is an extra piece of information to consider in the “party cue + inequality information” treatment, these results indicate that respondents are not spending additional time generating counterarguments against the inequality information. If anything, their somewhat faster response latencies suggest that they use party cues as shortcuts.

Further support for dual-process models comes from the response latencies and opinions of respondents who should be motivated to process the inequality information systematically: those who believe that the poor have less income than they ideally should.16 Respondents who hold this belief spend more time processing the inequality information than those who do not. Among Republicans, those who believe that the poor have less income than they should spend 41.95 seconds, compared to only 28.28 seconds among those without this belief (p = .07). Among Democrats, those who believe that the poor have less than they should spend 27.84 seconds, compared to only 18.41 seconds among those who do not have this belief (p = .01). Consistent with this pattern, respondents who believe that the poor have less income than they ideally should change their opinions in response to the inequality information. Those without this belief do not.

Importantly, for Republicans who believe that the poor have less income than they ideally should, the inequality information affects their opinions even when paired with their own party’s conflicting position. Figure 4A shows that only 27% of these Republicans support the progressive income tax in the control group, but 50% of them do so in the “inequality information” group (p < .05). In the “party cue + inequality information” group, 45% of these respondents support the progressive income tax, which is not significantly different from the “inequality information” group and is a significant increase relative to the control group. This pattern does not hold for Republicans who lack this belief. These respondents do not respond to the inequality information (either by itself or when party cues are present), and they spend somewhat less time processing the information when party cues are present (29.44 seconds, compared to 34.71 seconds among Republicans who believe that the poor have less than they should, although this difference is not significant). This pattern also does not hold for Democrats who believe that the poor have less than they should, but for a different reason: they support the progressive income tax at high levels in all treatment and control groups (over 90% support).17

On the sales tax increase, we again observe the opposite pattern of results for Democratic and Republican respondents. This is because the inequality information reinforces the Republican Party’s opposition to this tax increase and conflicts with the Democratic Party’s support. As figure 4C shows, the inequality information has minimal effects on Republicans because they largely already oppose this tax policy. However, it decreases support for this tax among Democrats who believe that the poor have less income than they ideally should.

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15. Following psychology research, we omit latencies that are 2 standard deviations longer than the mean. We also analyze these data with a Cox proportional hazards model (see the appendix).

16. Sixty-three percent of Democrats and 40% of Republicans believe that the poor have less income than they ideally should. This yields a sufficiently large sample size within each group.

17. Our results are similar if we examine respondents who believe that the richest 20% have more income than they ideally should (see the appendix).
Figure 4 shows that 62% of these respondents support the sales tax increase in the control group, but only 50% of them do so in the "inequality information" treatment group, which is a significant decrease. In contrast to what we observed among Republicans on the progressive income tax, this effect of the inequality information disappears once it is paired with the Democratic Party’s conflicting position.

Specifically, 72% of these respondents support the sales tax increase in the “party cue + inequality information” treatment group, which is a significant increase in support for a regressive tax. One explanation for this unexpected result is that Democrats may simply defer to their party when its position conflicts with more abstract inequality information, perhaps because they view it as standing for equality or
representing the working class (Hacker and Pierson 2010; Kelly 2009; Nicholson and Segura 2012). It is also possible that Democrats resolve this conflict by connecting the inequality information to their party’s emphasis on the progressive aspects of this tax (i.e., that it would reduce the need for cuts to state health and welfare programs). In contrast, Democrats who believe that the poor have as much or more income than they ideally should do not react to the inequality information when it is presented by itself or together with party cues. They also have higher levels of support for this tax overall.

CONCLUSION

The results of our study show that providing information about income inequality can change citizens’ opinions about taxes. Although respondents are misinformed about the extent of income inequality, they connect information about income inequality to their opinions about specific tax policies when given it. The effects of inequality information can also persist even when party cues are present. Among Republicans who believe that the poor have less than they ideally should, the inequality information increases support for a progressive income tax that the Republican Party opposes. In contrast, Democrats with this belief appear to treat the Democratic Party’s position as a signal of equality and weigh it against the inequality information. These results indicate that citizens do not necessarily ignore substantive information when easier-to-use party cues are available. Rather, those who are motivated to process the inequality information systematically may (re)consider their party’s position in light of this information. While these results are at odds with traditional accounts of party cues, they contribute to a growing literature that identifies conditions under which substantive information outweighs partisanship (e.g., Boudreau and MacKenzie 2014; Bullock 2011; Slothuus and de Vreese 2010).

Our study has important methodological, normative, and practical implications. Methodologically, it contributes to the scholarly debate about how best to measure beliefs about income inequality. While our study, fielded in 2012, uses Norton and Ariely’s (2011) measures to assess beliefs about inequality in California, other scholars have developed alternative measures and reached different conclusions about citizens’ beliefs about actual and ideal levels of inequality (Chambers et al. 2014; Eriksson and Simpson 2012). In particular, Eriksson and Simpson (2012) suggest that, when faced with a complex decision about allocating percentages of wealth across five groups, respondents may anchor on an equal distribution (where each group gets 20% of the wealth) and then make incremental adjustments to these percentages. Such anchoring and adjustment may induce respondents to express more equitable distributions of wealth than they believe actually exist and than they ideally prefer.\footnote{18} Consistent with this notion, Eriksson and Simpson’s (2012) alternative measure (which asks respondents to estimate the average wealth of households within quintiles in dollars, not percentages) shows that respondents overestimate the true extent of income inequality and that their preferences are less egalitarian than Norton and Ariely (2011) and our results indicate.

Whether respondents’ beliefs about inequality might change using these other measures is an important question for future research. To date, these alternative measures have not been used in California, where inequality is significantly greater than it is nationally, or in other states. It is possible that other measures would find more accurate beliefs about inequality, greater tolerance for it, or larger differences between partisans than we observe. In light of research showing the effects of local inequality (e.g., in one’s county or state) on citizens’ beliefs (e.g., Newman, Johnston, and Lown 2015), it is important to examine perceptions of inequality at the state level with different measures. Nonetheless, two considerations suggest that our main conclusions would be similar had we measured respondents’ beliefs differently. First, regardless of how beliefs are measured, existing studies find that citizens are misinformed about inequality and ideally prefer less inequality than they believe exists. Second, if anything, our use of Norton and Ariely’s (2011) measures in our experimental analyses should bias us against finding effects of inequality information among respondents who believe that the poor have less than they ideally should. If our measures encourage use of the anchoring and adjustment heuristic, then respondents should express more egalitarian preferences than they actually hold, and our individual-level measure of respondents’ beliefs may not distinguish between those who believe that the poor have less than they ideally should and those who do not. In actuality, our measure distinguishes between these two types of respondents quite well, with the former responding to the inequality information in predictable ways and the latter not responding to it.\footnote{19}

\footnote{18. The pie charts we used to convey the inequality information might also induce anchoring, making respondents’ preferences more liberal than they otherwise would be. Apart from the question of how best to measure perceptions of inequality, understanding how different ways of conveying its growth and extent might influence opinion is an important area for future research.}

\footnote{19. One reason our measure succeeds in identifying those who value equality (and why other measures would likely identify the same individuals) is because it simply requires one to allocate more to the poor than one believes they earn. Whether one is allocating shares of income or...}
Normatively, our study indicates that citizens can objectively process information about income inequality and suggests potential limits to the motivated reasoning that often biases opinion formation in political contexts. Specifically, our study provides empirical support for two factors that are thought to reduce motivated reasoning: (1) presenting factual information in a way that prevents it from becoming a divisive symbol of political identity (Kahan 2013) and (2) motivating citizens to form accurate opinions (Bolsen et al. 2014; Druckman 2012). In our study, the inequality information is attributed to a neutral expert (the Franchise Tax Board of California), as opposed to a partisan or ideological source. It also simply conveys the facts, as opposed to a policy recommendation, about inequality at the state level, where respondents’ group identities may be weaker than at the national level. Our study also asks respondents to consider real information about policies on which they will have an opportunity to vote. This may motivate them to process the information objectively and form accurate opinions. In this way, our results suggest potential limits to motivated reasoning and help allay concerns about citizens’ ability to fulfill their responsibilities in direct democracy settings.

Finally, our results suggest lessons for public officials, campaign organizations, interest groups, and others who want to build support for tax policies or reduce income inequality. Our results indicate that the usual strategy of circulating slate mail with a party’s endorsements will have limited effects. Most partisans’ views on taxes are already in line with those of their party. There is, however, a receptive audience among voters in both parties for information that helps them connect their preferences for lower levels of inequality to tax policies that might address it. Identifying these voters and providing them with factual information from a trusted source is likely to be more effective than overt partisan or ideological appeals.

Above and beyond our experimental results, the success of Governor Brown’s simple message of “taking money from the most blessed and giving it to the schools” underscores the impact that appeals based on fairness and equality can have in helping garner support for tax policies that address inequality.

Whether these results are good or bad for democracy or the fiscal health of the polity is difficult to say. What we can say is that, in an era where partisan polarization and gridlock have hindered efforts at the federal level to address budget deficits, growing indebtedness, and income inequality, state and local governments will need to develop their own solutions to these issues. In states and localities with direct democracy, initiatives are frequently used and sometimes required to decide important tax policy issues. These initiatives are typically decided by narrow majorities. In such environments, public officials, parties, interest groups, and others will continue their attempts to inform electorates about the consequences of tax policies. For those who wish to reduce inequality, our findings suggest that they would be wise to help citizens connect their concerns about rising inequality to the specific tax policies they are considering.

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actual dollars, the ordering of estimated and ideal income is unlikely to change across measures.


