

Black Politicians Are More Intrinsically Motivated to Advance Blacks' Interests: A Field Experiment Manipulating Political Incentives

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Why are politicians more likely to advance the interests of those of their race? I present a field experiment demonstrating that black politicians are more intrinsically motivated to advance blacks' interests than are their counterparts. Guided by elite interviews, I emailed 6,928 U.S. state legislators from a putatively black alias asking for help signing up for state unemployment benefits. Crucially, I varied the legislators' political incentive to respond by randomizing whether the sender purported to live within or far from each legislator's district. While nonblack legislators were markedly less likely to respond when their political incentives to do so were diminished, black legislators typically continued to respond even when doing so promised little political reward. Black legislators thus appear substantially more intrinsically motivated to advance blacks' interests. As political decision making is often difficult for voters to observe, intrinsically motivated descriptive representatives play a crucial role in advancing minorities' political interests.

"What's the proof that I care about the black community? Every time I get a letter from a black person outside my district, I respond."
—Anonymous Black State Legislator

Politicians are reliably more likely to advance the interests of those who share their personal characteristics, including their gender, race, profession, class, and sexual orientation (e.g., Burden 2007; see next section for review); whether measured by roll-call votes, responsiveness to constituent requests, or policy outcomes, scholars reliably find that descriptive representatives provide greater substantive representation to constituents like them.

However, there have long been two compelling explanations for this robust relationship between descriptive and substantive political representation. On the one hand, this link is often attributed to purely intrinsic motivations politicians are said to have to aid those like them due to feelings of group identification or shared personal preferences (e.g., Mansbridge 1999, 2003; Whitby 1997). On the other, this link is often primarily attributed to politicians' differing electoral incentives (e.g., Canon 1999; Grose 2011, 30–37)—for example, black politicians who expect difficulty winning support from white voters might advance blacks' interests to a greater extent merely out of a strategic calculus.¹

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I thank John Bullock, Dan Butler, Ryan Enos, Sean Gailmard, Don Green, Zoltan Hajnal, Greg Huber, Gabe Lenz, Todd Rogers, Eric Schickler, Chris Skovron, Laura Stoker, Jessica Suits, Rob van Houweling, and the anonymous reviewers for helpful feedback. Eleanor Powell deserves special thanks for her guidance. The interviews discussed were conducted in June–August 2010 during participant observation research with 27 state legislators (14 white, 13 black) who at the time represented majority-minority state legislative districts. Interest group employees and legislative black caucus leaders also provided invaluable advice, information, and assistance during this period. I owe great thanks to these legislators for inviting me into their districts and their homes. I also owe special thanks to Martha Grant, April Lawson, the Bills family, Will and Nicola Wilson, Sara Meacham, and members of Couchsurfing.org for making this participant observation work possible. The Yale College Dean's Office Fellowship in the Social Sciences, the Yale Political Science Department's Frank M. Patterson Grant, and the Jonathan Edwards College Richter Travel Fellowship were all generous in their financial support for these activities. I also acknowledge financial support from the National Science Foundation Graduate Research Fellowship Program. The Yale Institution for Social and Policy Studies and Dan Butler also supported the collection and purchase of the datasets I employ. Replication data are available at the AJPS Dataverse.

¹Much work, including Whitby (1997) and Grose (2011), acknowledges both potential mechanisms.

American Journal of Political Science, Vol. 57, No. 3, July 2013, Pp. 521–536

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DOI: 10.1111/ajps.12018

Both these theories yield predictions fully consistent with scholars' findings; indeed, they typically yield the same predictions. Yet this observational equivalence in existing data leaves open significant questions for the design of representative institutions: to what extent are strong relationships of electoral accountability necessary if politicians are to be expected to advance their group's interests? Or, alternatively, to what extent are political representatives intrinsically motivated to advance their group members' interests even when they do not have strong political incentives to do so?

I present a field experiment that sheds light on these questions by granting a rare look at how politicians behave when their political incentives to advance their group's interests are significantly reduced. In the experiment, which draws on interviews conducted with legislators who represent black-minority districts, I presented state legislators with an ostensible opportunity to improve the welfare of a black person but varied the degree of political incentive they had to do so. Specifically, I emailed all 6,928 U.S. state legislators asking for help filing for unemployment benefits. All the emails came from an ostensibly black alias, Tyrone Washington. I then randomized the legislators into two conditions: in one condition the sender claimed to live in cities in the legislators' districts, while in the other condition the sender ostensibly resided in cities far outside their districts.

This treatment was intended to vary the degree of political incentive legislators had to respond to the putatively black individual's request, and the results indicate that it was successful in doing so: legislators were half as likely to respond to the sender who claimed to live in a city outside their district. However, black and nonblack legislators did not react equally to this lessening of their incentives: black legislators were far more likely to continue responding to the request from the out-of-district individual than were their nonblack peers.

This large difference between how black and nonblack legislators reacted to a lessening of their electoral incentives provides unique and strong support for the hypothesis that black legislators are significantly more intrinsically motivated to advance blacks' interests. Importantly, black legislators thus appear to be significantly more likely than their counterparts to work to advance blacks' interests in contexts where political incentives are weak and, as has long been theorized, to therefore engage in significant "virtual" or "surrogate" representation (Mansbridge 2003; Pitkin 1967) of fellow group members beyond the bounds of their official constituencies. These findings have significant implications for the study of descriptive representation, the design of institutions for facilitating minorities' voice in government, and the role

of political representatives' personal backgrounds more generally.

Are Politicians More Intrinsically Motivated to Represent Their Group?

Over the last three decades, an impressive body of evidence has demonstrated that politicians provide greater substantive political representation to those who share their personal characteristics, including their gender, race, profession, class, and sexual orientation. Much of this literature has shown that legislators are more responsive in their roll-call voting to the interests and preferences of those who share their personal characteristics (e.g., Burden 2007; Canon 1999; Carnes 2012; Grose 2005; Hutchings 1998; Tate 2003; Whitby 1997).² Other work shows that this pattern also holds for committee behavior (Gamble 2007; Minta 2009, 2011) and the provision of constituency service (Butler and Broockman 2011; Grose 2011). And crucially, still further research demonstrates that these differences in policymaking behavior also have real effects on substantive outcomes for members of these groups (e.g., Bratton and Ray 2002; Chattopadhyay and Duflo 2004; Haider-Markel 2007; Haider-Markel, Joslyn, and Kniss 2000; Meier and England 1984; Pande 2003; Preuhs 2006).³

Though differences between black and nonblack politicians are the most studied, much work has shown that this link holds for other groups as well (e.g., Carnes 2012). Burden (2007), for example, even finds that legislators who smoke are more likely to vote consistently with the tobacco industry's preferences.

Elites' Extrinsic and Intrinsic Motivations as Mechanisms

Members of many groups have thus been consistently shown to fare better when their fellow group members serve in government. However, *why* this link holds is both unclear from existing evidence and crucially important to designing representative institutions.

On the one hand, scholars often assert that the link between descriptive and substantive representation is driven by politicians' own personal *intrinsic motivation*

²See also Kingdon (1981), Carroll (1994), Hood and Morris (1998), Cobb and Jenkins (2001), Griffin and Newman (2007), Grose, Mangum, and Martin (2007), and Juenke and Preuhs (2012).

³See also Nye, Rainer, and Stratmann (2011), Shayo and Zussman (2011), Iyer et al. (2011), and Franck and Rainer (2012). This large literature is also marked by remarkably few dissenting studies (e.g., Swain 1993).

to promote the welfare of their group or enact the preferences held by their group (e.g., Burden 2007). I follow Ariely, Bracha, and Meier in defining such "intrinsic motivation" as "private preferences for others' wellbeing" (2009, 544). In this sense, a politician motivated to advance the interests of his or her group for intrinsic reasons alone does so "purely [for the] psychic . . . benefits" involved (Citrin and Green 1990, 6). For example, black politicians are often theorized to work to advance other blacks' interests due to a sense of group solidarity with other blacks (Whitby 1997).⁴ More generally, theories of representation have long supposed that legislators' personal preferences and backgrounds importantly influence their behavior (e.g., Burden 2007; Miller and Stokes 1963).

On the other hand, it has also been widely suggested that legislators advance their groups' interests to a greater extent because they face stronger political incentives to do so (e.g., Whitby 1997, 85). The logic for this claim is straightforward. For example, consider Chattopadhyay and Duflo's (2004) analysis of female legislators in India, who they demonstrate are markedly more likely to support policies that benefit women. These female legislators' behavior might result from their greater personal concern for fellow women's welfare (intrinsic motivation), but it may also be that female legislators' best reelection strategy is to focus on securing support with female voters because they expect winning male support will be more difficult in a sexist society (e.g., Fowler and McClure 1989). Likewise, black politicians may be expected to focus on winning blacks' votes because they anticipate comparatively greater difficulty winning whites' (e.g., Grose 2011, 30–37). Politicians' strategic pursuit of reelection could thus perhaps fully explain why they tend to advance their group members' interests to a greater extent.

Why Intrinsic Motivation Has Been Difficult to Identify and Why It Matters

Why have scholars had difficulty distinguishing between these explanations, and why does it matter that we do?

⁴Some of this research uses the term "linked fate," a concept typically associated with a sense of shared destiny among blacks in the mass public (e.g., Dawson 1994; Gay 2004). I choose not to employ the term because it is sometimes used to refer to a somewhat self-interested motivation group members have for advancing their group's interests because they believe their group's fate is linked to their own. This mechanism is sometimes hypothesized to underlie elites' behavior, though the explanation I seek to investigate in this article is a strictly altruistic one. (Interested readers are directed to McClain et al. 2009 for a thorough review of the distinctions between various concepts related to group membership, identity, consciousness, and linked fate.)

Defining these claims formally can help elucidate these theories' observational equivalence in existing data despite their differing substantive implications. For ease of reading and consistency with the empirical sections, I use blacks and nonblacks as an example, though the framework could generalize to any setting where legislators have the opportunity to improve the welfare of a person or group.

Suppose when deciding whether to advance blacks' interests in some form (e.g., by answering a letter from a black person, or by casting a supportive roll-call vote on a civil rights issue), a legislator expects to gain both benefits that aid her in winning reelection, which I call *extrinsic benefits* and denote E , and psychic benefits that are completely separate from expected tangible rewards, *intrinsic benefits* denoted I . A politician's expected utility for performing an act that advances blacks' interests is thus given in total by the accounting identity $EU = E + I$,⁵ it is determined by motivations that are extrinsic and intrinsic, depending on to what extent they either facilitate the receipt of some outside reward (E) or confer psychic benefits (I).

The thesis that descriptive representation leads to greater substantive representation for blacks holds that, all else equal, black legislators place higher *overall* value on advancing blacks' interests than nonblack legislators do. To denote this counterfactual formally, let E_B and E_W respectively refer to the extrinsic political rewards black and nonblack legislators expect to receive from performing an identical act to advance blacks' interests and I_B and I_W to their respective expected intrinsic rewards for the same.

In these terms, existing evidence regarding the link between descriptive and substantive representation shows us that black politicians are more motivated to advance blacks' interests overall, $E_B + I_B > E_W + I_W$, though this could be for intrinsic or extrinsic reasons. In turn, the intrinsic motivation hypothesis explains this statement with the more specific claim that black legislators have greater intrinsic motivation to advance blacks' interests than do nonblack legislators, $I_B > I_W$, while the extrinsic motivation hypothesis claims that black legislators perceive greater extrinsic incentives to advance blacks' interests, $E_B > E_W$.

Crucially, note that the observation that black politicians advance blacks' interests to a greater extent ($E_B + I_B > E_W + I_W$) does not directly imply that black politicians are more intrinsically motivated to do so, $I_B > I_W$,

⁵Assuming that nonpolitical costs (like the time it takes to answer a letter) are identical across legislators for identical acts and so can be ignored for the sake of parsimony.

unless one makes assumptions about black and nonblack politicians' political payoffs, E_W and E_B : black legislators clearly find greater reason to vote liberally on civil rights issues, but this observation alone does not tell us if they do so out of a personal commitment to these issues or a perceived strategic imperative to win blacks' votes. This observational equivalence problem likely extends to all the activities scholars have measured; indeed, roll-call votes, constituency service provision, constituency communication, and committee behavior—the key variables in most studies of descriptive representation—have all long been recognized to be central to legislators' efforts to pursue reelection (e.g., Mayhew 1974). Political incentives alone could thus explain patterns of behavior such as that observed by Butler and Broockman (2011) that white and black Democrats are both more responsive to inquiries from copartisan constituents of their race.

Yet intrinsic motivation matters precisely because politicians are often not strongly incentivized to perform a variety of acts that still matter a great deal: they make many decisions concerning groups that pay little attention to their actions (Delli Carpini and Keeter 1996), in contexts that are difficult (or impossible) for voters to observe (Arnold 2009; Hall 1996), and concerning the interests of those beyond the boundaries of their constituencies (Mansbridge 2003). The decisions politicians make when their political incentives are weak clearly have consequences, yet we cannot reliably infer what they do in such settings from what they do in salient public behavior.

Intuition for Identification Strategy

As the above discussion suggests, researchers would thus ideally identify politicians' intrinsic motivation by observing how they act when they have no political incentives whatsoever.⁶ We might refer to this intuition as the fact that a politician's intrinsic motivation would be laid bare when he "thinks nobody is watching."⁷ Of course, existing literature has had difficulty pinning down intrinsic motivation precisely because there are few observable environments where politicians are likely to believe they face no political consequences for their actions.

⁶As we cannot apply the standard approach of inducing or exploiting variation in intrinsic motivation in order to directly observe its effects. (Potentially see Washington 2008 for such a design, though note that having a daughter might affect legislators' own personal benefit from various policy outcomes or degree of knowledge about their likely effects, not just their degree of intrinsic motivation to advance women's interests.)

⁷One might likewise recall the proverb (attributed to Malcolm Forbes) that one can "judge the character of a man by how he treats those who can do nothing for him."

However, we can still attempt to *extrapolate* how politicians would behave if they faced no political incentives by observing what happens when their political incentives change in magnitude. Though no scholar has formally defended this practice, the literature on race and politics contains notable examples of this logic. Hutchings (1998), for example, considers congresspeople's votes on the Civil Rights Act of 1990. He finds that southern Democrats were highly responsive to constituency pressures on the well-publicized final passage of the bill, though far less responsive on an important amendment with lower public salience. Hutchings interprets this pattern as indicating that legislators act more in line with their extrinsic incentives when they believe they are under great scrutiny but that less-scrutinized behavior reveals something about their true preferences. Similarly, Minta (2009, 2011) analyzes the degree to which legislators participate in oversight hearings, which he argues they expect few political rewards for doing and therefore implies that they are intrinsically motivated.

A black legislator I interviewed best laid out the intuition for this reasoning (in so doing inspiring the experiment to be described) when I pressed him for evidence that he was more intrinsically motivated to advance black's interests than his nonblack colleagues. He responded:

"What's the proof that I care about the black community? Every time I get a letter from a black person outside my district, I respond. The white [legislators] don't do that."

To express these scholars' and this legislator's intuition formally, suppose β is a term bounded by $0 \leq \beta$ that captures the degree to which a legislator perceives a political incentive to perform a particular act—that is, the degree to which a legislator's expected utility might be affected by voters or other actors capable of exercising political accountability rewarding (or punishing) him or her for a particular act. Higher values of β would correspond to situations where accountability is greater, such as, following from Hutchings (1998), a roll-call vote on a very salient bill. In turn, low values of β might be associated with acts like asking questions during oversight hearings (Minta 2009, 2011) or engaging in closed-door negotiations with other legislators.

Taking β into account, legislators' expected utility would be described by $EU = \beta E + I$, such that legislators expect fewer extrinsic benefits from advancing their groups' interests in situations where β is lower. Even though we can never really observe what politicians do when they "believe *no one* is watching" (i.e., when $\beta = 0$), we thus still might *extrapolate* what might occur when

$\beta = 0$ (and thus make inferences about I alone) by comparing how politicians' behavior changes when β changes—for example, following Hutchings's (1998) logic, when the salience of a roll-call vote declines.⁸ The black state legislator quoted above appealed to this very logic: he claimed to be less sensitive than his white peers to whether he will receive political rewards for advancing blacks' interests, which he argued was evidence that his motivations must be more intrinsic than theirs.⁹

Watching how politicians change their behavior when their political incentives are reduced can thus help us infer their degree of intrinsic motivation, an important task precisely because politicians often act in situations where their political incentives are weak. The next section applies this intuition to the experimental design.

Experimental Design

Consistent with the intuition developed above, I designed and implemented an experiment attempting to grant a rare look at how politicians change their behavior when their electoral incentives are significantly weakened. Specifically, drawing on my interview with the black state legislator quoted above, I sent every state legislator in the United States serving in mid-November 2010 ($N = 6,928$) an email asking for help enrolling in state unemployment benefits. The emails all came from the alias Tyrone Washington, which strongly signals being black.¹⁰ The text of the email appears in Box 1.

Crucially, Tyrone purported to live in, randomly, either a city in each legislator's district or a city far from each legislator's district. This manipulation was designed to vary legislators' incentives to respond, β in the framework developed previously, consistent with the intuition developed by the black state legislator quoted.

To implement this manipulation, I first assigned each legislator the names of two cities using ArcGIS: a city

Box 1 Text of Email Sent to State Legislators

From: Tyrone Washington
Subject: unemployment benefits in [TREATMENT CITY NAME]
Text: Dear [Mr./Ms.] [STATE REPRESENTATIVE'S LAST NAME],
 My name's Tyrone Washington and I live in [TREATMENT CITY NAME]. Can you tell me how to get unemployment benefits? I lost my job but nobody will tell me where to get them and I don't know what to do.
 Thank you
 Tyrone Washington

within each legislator's district (e.g., for a legislator representing Dallas, Texas, "Dallas") and a well-known city located far outside their district but within their state (e.g., for a Dallas-based legislator, "Houston"). I then randomly assigned each legislator to the in- and out-of-district treatment groups with block randomization on state, party, and race. The online supporting information details a randomization check that indicates this was successful, shows a map of the out-of-district cities I used for each state, and fully elaborates the technical details of the city assignment process.

The names of the cities appeared in the subject and the first line of the email's text, as shown in the "treatment city name" field in Box 1. Each legislator only received one email.

I chose to ask about signing up for unemployment benefits for three reasons. First, the objective interests of the letter's sender were clear: receiving a response would improve his welfare. Rather than measuring how responsive legislators are to constituency service requests in a general sense, therefore, the experiment putatively presents politicians with an opportunity to tangibly improve the welfare of a black person in their state though at a cost of time and effort, one of the very same opportunities they have when deciding whether to advance blacks' interests in the context of making policy (Hall 1996). Choosing unemployment benefits (along with the letters' errors in grammar and diction) also minimized the political benefits legislators might have perceived from answering the out-of-district email. Last, because requests for help filing for unemployment benefits are so commonplace, I ensured that the costs associated with answering the letter would be both relatively equal between legislators and,

⁸See Lee, Moretti, and Butler (2004), Gailmard and Jenkins (2009), Snyder and Stromberg (2010), and van Houweling (2012) for examples of similar logic being applied elsewhere. However, note that actors besides voters (e.g., interest groups) may succeed in altering politicians' incentives for action under the conditions these works analyze.

⁹Likewise, another black legislator interviewed accused a white colleague who represents a black district of not being "sincere" in his representation of his black constituents, offering as evidence his weaker efforts on his constituents' behalf behind closed doors.

¹⁰Essentially no whites are named Tyrone (Fryer and Levitt 2004), and 89.9% of those with the last name Washington are black (Word et al. n.d.). Though it is not certain that every legislator thought Tyrone Washington was black, any patterns to the contrary would bias the results toward zero.

TABLE 1 Formal Summary of Identification Strategy

	In-District Letters	Out-of-District Letters	Difference
Black Legislators	$B + \beta_C E_B + I_B$	$B + \beta_T E_B + I_B$	$(\beta_C - \beta_T) E_B$
Nonblack Legislators	$\beta_C E_W + I_W$	$\beta_T E_W + I_W$	$(\beta_C - \beta_T) E_W$
	<i>Difference-in-Differences: $(E_B - E_W)(\beta_C - \beta_T)$</i>		

consistent with ethical considerations (see below), relatively low.

Identification Strategy

Legislators thus all received a letter from a putatively black individual who purported to live either within or far from their district. Table 1 summarizes how this manipulation shed light on legislators' degree of extrinsic and intrinsic motivation for responding. The entries in Table 1 refer to the determinants of legislators' response rates consistent with the expected utility function described previously. β_C refers to the degree that responding is electorally incentivized in the condition where they received a letter from a putative constituent and β_T when they received a letter from a putative nonconstituent. The difference $\beta_C - \beta_T$ thus captures the degree to which the treatment lessened legislators' expected political rewards for responding between conditions.

Though I wish to infer whether black politicians are more intrinsically motivated to advance blacks' interests than are nonblacks ($I_B > I_W$), as discussed, this is not straightforward: intrinsic motivation to improve the welfare of blacks, denoted I , is equally present in all conditions, as is some degree of extrinsic motivation, E . Moreover, there is also selection bias, denoted B , that prevents inferences based on direct comparisons of how likely black and nonblack legislators are to respond to the out-of-district letter.

However, as the interviewed state legislator suggested, the experiment allows for an indirect comparison of legislators' intrinsic motivation, I , as follows. First, in words, note that if nonblack legislators are more likely to cease responding because their extrinsic incentives decrease, this would suggest that their extrinsic motivations compose a larger share of their reasons for responding when they do. Formally, as shown in Table 1, the experimental difference-in-differences estimates the quantity $(E_W - E_B)(\beta_C - \beta_T)$. A positive value of this coefficient would suggest that nonblack legislators advance blacks' interests for reasons that are to a greater extent extrinsic than are black legislators' (assuming $\beta_C - \beta_T$, the relative incentive for responding to a constituent, is greater than zero).

If this proves to be the case, we can then draw inferences about politicians' intrinsic motivation, I , so long as one final assumption is satisfied. As this article seeks to understand a mechanism for the link between descriptive and substantive representation, I assume that the extensive literature on descriptive representation is correct that black legislators are at least as interested in advancing blacks' interests (for a sum of potentially extrinsic and intrinsic reasons) as are nonblack legislators, all else equal.

With it established that black legislators are not as motivated by the receipt of extrinsic rewards for responding to a black person as are their nonblack colleagues, yet also that black legislators are at least as motivated as their white colleagues to do so overall, it then must be that they do so because they have greater intrinsic motivation to do so. Formally, if $E_B + I_B \geq E_W + I_W$ (black legislators are at least as interested in advancing blacks' interests as are nonblack legislators) and $E_W > E_B$ (nonblack legislators are more animated by political incentives than black legislators when representing blacks, which the experiment can establish), it must be that $I_B > I_W$ (intrinsic motivation to represent blacks is greater among black legislators than nonblack legislators).

In sum, consistent with the intuition described by the black legislator quoted above, if black legislators engage in greater "surrogate representation" (Mansbridge 2003) by responding to letters from blacks that their nonblack counterparts would not have when their expected political rewards are reduced, this implies that black legislators' intrinsic motivation to advance blacks' interests is greater.

Ethical Considerations

Though the human subjects committee approved this experiment, several ethical concerns were still important to consider in its design that any future work employing this approach should carefully consider as well.

First, the experiment was designed so as to place as minimal a burden on legislators' time as possible: the request made was selected to be commonplace and hence easy for legislators to answer. From the replies, it appears that this was successful: the median reply was 298 characters, or about 50 words, less than a third of the length of

this article's abstract. As Hall (1996) notes, investigating how legislators choose to spend their time is an important way to learn about their priorities. However, researchers also have a clear obligation to minimize the burden they impose on others, and future work should continue to take this concern seriously.

Next, deception was largely unavoidable in this experiment in order to determine how legislators would respond differently to people they believed lived inside and outside of their districts.¹¹ However, the ethical status of deception in the many audit experiments academics have conducted is the subject of continuing debate (e.g., Riach and Rich 2004), and researchers should employ deception with great care and avoid its use when it is unnecessary.

In addition, to minimize any harm that might come to subjects, the replication data will not include information that could identify the legislators. Especially with politicians, it is important to keep in mind that others might use data on whether they responded to harm them. Even though as researchers we appreciate that we cannot make inferences about why any one particular legislator did or did not respond, others may not appreciate this limitation.

Last, as McClendon (2012) points out in a thoughtful discussion of the ethics of experimenting on public officials, such research also has a potential cost for other researchers because these officials control research budgets. Elected officials have so far not shown signs of reacting negatively to this work in debates over support for political science and themselves also regularly authorize and fund audit trials of their own agencies and the private market (see, e.g., Fix and Turner 1998, chap. 6; Yinger 1998). However, researchers should remain carefully attuned and sensitive to this concern.

Data on Legislators and Excluded Observations

To implement the experiment, I first gathered data on legislators' races and email addresses in mid-2010 from public state legislative websites for all 50 states. This yielded a sample of 6,928 legislators in total. The data also included covariates about the legislators' districts, including their total population, the percentage of the districts that were black, the rural and urban makeup of the districts, median household incomes for blacks and whites in the district, and the Squire (2007) index of state legislative professionalism.

¹¹ However, see recent attempts to reduce deception in audit studies by cooperating with real constituents (Butler, Karpowitz, and Pope 2012; Carnes and Holbein 2012).

Some of these observations were excluded from the dataset before the analysis. First, 297 observations were dropped as the emails immediately bounced as undeliverable because the addresses were reported incorrectly on the legislative websites or were entered with typographical errors. Second, when the experiment ran, a very small number of legislators carbon copied their replies to the legislators who actually represented the cities with names I used to construct the out-of-district city treatment. For example, as a courtesy, a legislator who represented Fort Worth, Texas, replied to an email that claimed to come from "Tyrone in Houston" with a carbon copy to a legislator who represents Houston. However, the Houston legislators' office was also part of the experiment and thus had received their own copy of the letter. I therefore excluded all 713 legislators like this Houston legislator who might have *received* letters via their colleagues by virtue of representing one of the 100 places with names I used to construct the treatments. Finally, all remaining 334 legislators in Georgia and Indiana were excluded because legislators in these states share staff, rendering it unclear to which legislator the replies should be credited. These criteria removed 19.3% of the sample, resulting in 5,593 usable observations. However, all of the experiment's results remain the same when the excluded observations remain, and the supporting information shows that these criteria were uncorrelated with treatment assignment. There were 4,965 white legislators, 364 black legislators, and 264 legislators from other racial groups in the final dataset.

Experimental Results

I received 2,365 replies to these 5,593 emails in total, an overall response rate of 42.3%. Following Butler and Broockman (2011), the analysis employs this objective dependent variable of whether I received a reply from the legislator at all. However, I also collected data on whether or not the replies were helpful (which 87.6% were) and found that all the results held when using this alternative dependent variable. These results and the criteria used for coding "helpful" responses are available in the supporting information.

Legislators Less Likely to Respond to Out-of-District Emails

The experiment relies on the assumption that legislators found less political reason to respond to requests ostensibly from a person living hundreds of miles away from their district than requests which purport to be from a constituent living in their district (i.e., that $\beta_C > \beta_T$).

TABLE 2 Experimental Treatment Effects

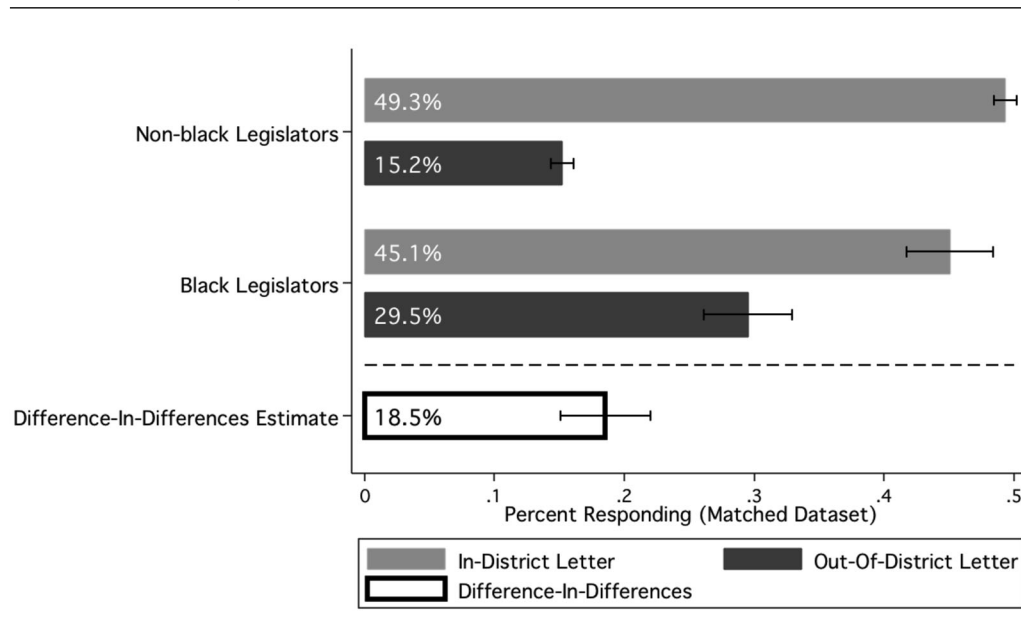
Specification	(1, OLS)	(2, OLS)	(3, OLS)	(4, Logistic Regression)	(5, OLS, CEM Matched/Weighted)
<i>Experimental Treatment Effects</i>					
Out-of-District Email	−0.266** (0.013)	−0.275** (0.013)	−0.276** (0.013)	−1.185** (0.059)	−0.311** (0.012)
Out-of-District Email x Black Legislator	-	0.128* (0.052)	0.128* (0.051)	0.552* (0.227)	0.161** (0.046)
<i>Covariates</i>					
Black Legislator	-	−0.097** (0.036)	−0.112* (0.045)	−0.462* (0.197)	−0.085** (0.033)
Other Nonblack Minority Legislator	-	-	−0.035 (0.031)	−0.162 (0.140)	0.018 (0.041)
Democratic Legislator	-	-	−0.051** (0.014)	−0.232** (0.061)	0.088** (0.022)
State Senator	-	-	0.089** (0.016)	0.398** (0.072)	0.191** (0.016)
South	-	-	−0.004 (0.017)	−0.018 (0.076)	−0.041* (0.019)
Black Population Percent	-	-	0.084 (0.067)	0.377 (0.298)	−0.039** (0.036)
Black Median HH Income (\$10,000s)	-	-	−0.000 (0.007)	−0.001 (0.032)	0.069** (0.019)
White Median HH Income (\$10,000s)	-	-	0.021* (0.010)	0.093* (0.045)	−0.113** (0.015)
Squire Index	-	-	0.489** (0.071)	2.183** (0.322)	−0.036** (0.105)
District Total Population (10,000s)	-	-	−0.004** (0.001)	−0.016** (0.004)	0.006 (0.001)
Urban Percent	-	-	0.014 (0.023)	0.065 (0.106)	0.232** (0.023)
Constant	0.555** (0.009)	0.561** (0.009)	0.442** (0.025)	−0.281** (0.113)	0.584** (0.043)
R ²	.073	.074	.091	-	.240
N	5593	5593	5593	5593	5125

Note: Dependent variable in all regressions is whether the legislator responded to the email. *p < .05, **p < .01 (two-tailed tests).

The data strongly validate this assumption: overall, legislators were 26.6 percentage points less likely to respond to emails in the out-of-district treatment ($p < .0001$; all p-values two-tailed). Legislators assigned to the in-district group responded to 55.5% of emails, whereas about half that number responded to the out-of-district emails, or only 28.9%. This number was surprisingly high and suggests that the baseline level of intrinsic motivation may not be trivial, yet it also shows that legislators are highly responsive to their electoral incentives, as expected. These results are reported in the first column of Table 2.

Black Legislators Are Less Sensitive Than Nonblacks to Their Political Incentives for Responding

Though all legislators were less responsive when their political incentives were decreased, how did the effect of decreasing legislators' political incentives vary between legislators? The data strongly reject the null hypothesis that black and nonblack legislators were equally concerned with the political rewards they might receive from responding to the letter: all else equal, nonblacks were much less likely to respond to the out-of-district

FIGURE 1 Rates of Reply by Treatment Group and Legislators' Race (Matched Dataset)

letters than were blacks. Column 2 shows that nonblack legislators responded to the out-of-district emails 27.5 percentage points less frequently ($p < .001$). However, black legislators responded to the out-of-district emails only 14.7 percentage points less frequently, a treatment effect 12.8 percentage points lower ($p < .01$) than that of their nonblack counterparts. The results thus imply that about *half* of the nonblack legislators who did not respond to the email because it came from outside their district would have responded if they were black (after accounting for selection bias).

This result remains robust to a variety of controls in column 3, which includes covariates for the legislators' race, party, whether the legislator is a state senator, whether the legislator is from the south, the black population of the district, the district black and white populations' median household incomes, the Squire (2007) index of state legislative professionalism, the district's total population, and the percent of the district which is urban. The fourth column of Table 2 also shows that the results hold just as strongly with logistic regression.

Matched Observations. A weakness with the above analysis is that many nonblack legislators represent districts where blacks would almost never be elected or are Republicans, though essentially no black legislators are. Likewise, though legislators' treatment condition is randomly assigned, their race is not.

These differences may be problematic because some legislators' circumstances may be so different that they

are simply "incomparable" to blacks (i.e., King and Zeng 2006), because legislators from districts with few blacks might have been suspicious of a letter from a putatively black individual or less knowledgeable about unemployment benefits, and because the most policy-relevant differences occur where black legislators could plausibly be elected.

Therefore, I also present the results after using coarsened exact matching (Iacus, King, and Porro 2012) to improve balance between the districts with and without black legislators by matching on the districts' population percentage black, the median household income in the district, and the legislators' party. The procedure completely removed 467 observations from the dataset and greatly reduced the statistical weight placed on an additional 4,409 observations; 717 observations—378 describing nonblack legislators and 339 describing black legislators—were identified as good matches.

Despite this thorough narrowing of the dataset, the difference between black and nonblack legislators' behavior when their incentives were weakened remained large and significant; in fact, it was even larger among these observations. The top four bars in Figure 1 depict the rates of reply among black and nonblack legislators in each treatment group in the matched data; column 5 of Table 2 reports these results with controls. As Figure 1 makes clear, black and nonblack legislators responded similarly to the in-district letters, yet nonblack legislators were much less responsive once their political incentives are diminished. This difference-in-differences

of 18.5 percentage points between these groups' treatment effects is highly significant ($p < .001$); the treatment effect among nonblack legislators in the weighted sample is *more than double* the size of the effect among black legislators.

I also check the robustness of the results with a similar analysis based on linear regression in the supporting information by analyzing the main results in the presence of additional heterogeneous treatment effect estimates for the black population of the district, the median household incomes of blacks and whites, whether the state is in the American south, and the Squire (2007) index of state legislative professionalism. Consistent with the matching analysis, in all cases the original results remain the same, and these rival explanations are statistically insignificant (see Table SI3).

In sum, the results of the field experiment strongly support the view that extrinsic concerns constitute a greater share of the reasons why nonblack legislators advance blacks' interests when they do. By contrast, black legislators appear relatively insensitive to whether they will receive outside reward for promoting blacks' interests; that is, unlike nonblacks, most black legislators continued to advance the black individuals' interests even when their electoral incentives for doing so dramatically decreased. Moreover, a matching analysis showed that this pattern held especially strongly in the very districts where institutions to promote descriptive representation matter most.

In the next section, I evaluate a number of alternative explanations for these findings.

Evaluating Alternative Explanations

Potential Threats to Internal Validity

Possibility That Black Legislators Have Greater Incentives to Respond to Blacks Living Far Away Than Do Whites. The identification strategy assumes that blacks and whites perceive a similar decline in their relative extrinsic incentives for responding to the letter from the out-of-district writer instead of the in-district writer (that is, that $\beta_C - \beta_T$ is identical for whites and blacks). There may be two reasons, however, to doubt this assumption.

First, black legislators may expect black political networks spanning their states (e.g., Cho 2003) to monitor their interactions with black individuals across their state more closely. That is, black legislators might fear that not responding to the out-of-district letter would endanger their reputation in black political networks in ways that would have repercussions back in their districts. Unemployment benefits were used in the letter to help allay this

concern to some extent (see the third section), though two additional analyses can do so further. First, column 1 of Table 3 shows that blacks' responsiveness to the out-of-district letter was not negatively moderated by the distance between the black legislators' district and the city Tyrone claimed to be from. In fact, though statistically insignificant, this relationship is positive, inconsistent with this concern. Column 2 verifies this implication further by showing that the main result of the experiment continued to hold even when considering observations where the sender purported to live in a city more than 200 miles away from the legislators' districts.¹²

Second, it might be of concern that black legislators could perceive greater electoral incentives to respond to out-of-district letters than whites due to progressive ambition for statewide office; they may expect to need to win black votes across their state in the future. Three facts make it seem unlikely this was the case. First, as Johnson, Oppenheimer, and Selin (2012) recently document, black politicians have very rarely run for or met success in statewide elections in recent decades for a variety of contextual reasons, despite growing ranks of black officeholders showing ambition for higher offices like U.S. House seats. Further allaying this concern, the results also remain significant at the 0.05 level when limiting the scope of the analysis to states where Barack Obama received less than 45% of the vote in 2008 (and thus where black legislators, 98% of whom are Democrats, should be relatively unlikely to expect to win statewide office any time soon).¹³ This result is shown in column 3 of Table 3. One final placebo test adds further confidence to this assumption still. If the response rates were driven by legislators' perceived need to win black votes in future statewide elections, one would expect the experimental manipulation to affect nonblack Republicans more than nonblack Democrats (since Republicans almost never win black votes and Democrats, especially in states with numerous blacks, almost always rely on them). However, as column 4 of Table 3 shows, nonblack Democrats and Republicans did not differ in their treatment of the out-of-district letters. There seems to be little evidence that black legislators would have expected meaningfully greater extrinsic rewards from the out-of-district letter than would have whites.

¹²This holds for other distances as well, including cases where the out-of-district cities are more than 50 miles away, 100 miles away, and 300 miles away. By 400 miles, the sample size grows too small ($N = 5$ black legislators). Distances were calculated between the geographic 'centroid' of each district and the official geographic coordinates of the out-of-district cities.

¹³The result also holds at the 0.05 level when excluding states from this group that have few black legislators (KS, KY, OK, WV).

TABLE 3 Robustness Checks and Placebo Tests for Alternative Explanations

Specification	(1, OLS)	(2, OLS)	(3, OLS)	(4, OLS)	(5, OLS)	(6, OLS)
	Black Legislators Only	Out-of- District City >200 Miles Away from District	States Where Obama Received <45% of 2008 Vote	Nonblack Legislators	Nonblack Legislators	All Legislators
<i>Experimental Treatment Effects</i>						
Out-of-District Email	-0.230 [^] (0.120)	- 0.291** (0.020)	- 0.268** (0.023)	-0.266** (0.019)	-0.269** (0.015)	-0.264** (0.017)
Out-of-District Email x Distance Between Legislator's District and Out-of-District City (in 100s of Miles)	0.045 (0.059)	- - -	- - -	- - -	- - -	- - -
Out-of-District Email x Black Legislator	-	0.180* (0.078)	0.174* (0.083)	-	-	0.217 [^] (0.119)
Out-of-District Email x Democratic Legislator	-	-	-	-0.018 (0.026)	-	-
Out-of-District Email x Female Legislator	-	-	-	-	-0.005 (0.031)	-
Out-of-District Email x Percent of Legislators Who Are Black	-	-	-	-	-	-0.002 (0.002)
Out-of-District Email x Black Legislator x Percent of Legislators Who Are Black	-	-	-	-	-	-0.005 (0.008)
<i>Covariates</i>						
Distance Between Legislator's District and Out-of-District City (in 100s of Miles)	-0.022 (0.041)	-	-	-	-	
Black Legislator	-	-0.119* (0.054)	- 0.211** (0.059)	-	-	0.091 (0.083)
Democratic Legislator	-	-	-	-0.032 [^] (0.019)	-	
Female Legislator	-	-	-	-	-0.002 (0.022)	
Percent of Legislators Who Are Black	-	-	-	-	-	0.003* (0.001)
Percent of Legislators Who Are Black x Black Legislator						-0.015** (0.005)
Constant	0.507** (0.084)	0.564** (0.014)	0.499** (0.016)	0.578** (0.013)	0.562*** (0.011)	0.545*** (0.012)
R ²	.024	.082	.078	.079	.077	.078
N	364	2322	1720	5229	5229	5593

Note: Dependent variable in all regressions is whether the legislator responded to the email. [^]p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001 (two-tailed tests).

Possibility That Black Legislators Respond Differently to the Treatment Due to Being of Higher Quality. One challenge in designing the experiment was that there were so few black legislators in the United States (as of November 2010) that a set of white letter placebo conditions could not be implemented due to a lack of adequate sample size. With fewer than 90 black legislators in each cell under such a design (and further exacerbated by the binary nature of the dependent variable), the experiment would have been significantly underpowered and only able to reliably detect implausibly large differences in response rates. However, this lack of parallel white letter conditions introduces several assumptions.

One such assumption is that black legislators themselves do not tend to respond more to out-of-district emails because they are of generally higher quality. As Anzia and Berry (1990) have shown, because the barriers to office are higher for women, women who are elected tend to be more talented in a variety of ways. Might a similar legislator quality effect explain black legislators' decreased sensitivity to their electoral incentives to respond? A placebo test based on Anzia and Berry's (2011) own theory can help address this concern: women are also underrepresented at the state house level just as they are at the federal level (in fact, even more so than blacks). Column 5 of Table 3 thus evaluates whether female legislators were more likely than men to respond to the letter overall or the out-of-district letter in particular and finds no support for either hypothesis. It consequently appears that discrepancies in legislative quality (in the Anzia and Berry sense) across races would not lead legislators to respond to this experiment differently.¹⁴

Black Legislators May Be More Motivated or Able to Provide Assistance to All Unemployed. An additional concern with my interpretation of the results is that, despite the advantages to using a request for unemployment benefits, the responses to such a request might actually reflect black legislators being more intrinsically motivated than nonblack legislators to represent the unemployed in general, regardless of race.

Two responses can help address this concern about how to interpret the results. First, while data on U.S. state legislators' personal views on unemployment benefits are prohibitively difficult to gather, one variable does correlate extremely well with such views: party. If concern for

¹⁴Another alternative account may be that black legislators are simply less likely to differentiate between emails based on their content in general (e.g., they simply read correspondence from constituents less attentively). However, Butler and Broockman (2011) find that blacks were actually far more likely than nonblacks to react to the partisanship and race signals in their experiment (see Butler and Broockman 2011, Table SI2, Parts C and D).

the unemployed largely explained the results, one would expect Democrats, who are significantly more supportive of unemployment insurance nationwide, to be more likely to respond to the letter. However, as shown in column 4 of Table 3, Democrats were no more responsive than Republicans to the out-of-district letter.

In addition, as Dawson's theory of linked fate argues, the "economic component of group interests" (1994, 85) is at the heart of black group consciousness in the United States. Even if some of black legislators' intrinsic motivation to respond was driven by the economic differences underlying the racial divide in America, this would still have largely similar and important substantive consequences for how black and nonblack legislators differ in their treatment of blacks in the United States. However, future work should attempt to further distinguish the effects of race and class, an important topic many scholars have long and no doubt will continue to pursue.

Legislators Expect Tyrone's Black Legislator Will Respond. Finally, what of the possibility that black legislators do or do not respond to the out-of-district emails because they expect another black state legislator already represents the sender? Column 6 of Table 3 examines the three-way interaction between the legislator's race, the out-of-district email treatment, and the percentage of legislators in the state who are black. The results show that legislators in general (the treatment x percentage of legislators who are black coefficient) and black legislators in particular (the three-way interaction) do not appear significantly less responsive to the out-of-district emails in states where many other black legislators serve.¹⁵

In summary, while there are many tempting alternative explanations for the experiment's findings, a number of robustness checks and placebo tests suggest they are unlikely to account for the results observed.

Possibility That Staff Results Limit Generalizability

In thinking about the experiment's broader generalizability, one final concern is that I treat state legislators' email addresses, not the legislators themselves. In highly professionalized legislatures where staff answers email, the treatment effect thus sometimes captures the effect of treating a legislative office instead of the legislator per se. To evaluate the possibility that the effects might largely reflect staff behavior only, Table SI3 in the online

¹⁵The interaction between the treatment and the percentage of a legislature that is black is also insignificant when examining black legislators only.

supporting information shows that the results remain robust to the inclusion of a heterogeneous treatment effect for state legislative professionalism (as measured by the Squire index). The results also hold even when only considering states where legislators have no staff who help to answer email, and the legislators themselves answered all the emails. Legislative staff were unlikely to be responsible for the patterns observed.

Discussion

An enduring and significant question about democratic representation is to what extent politicians act on intrinsic motivation to advance the interests of their group. Such intrinsic motivation matters because politicians often have a great deal of leeway in their behavior (Bianco 1994): they make many decisions concerning groups that pay little attention to their actions (Delli Carpini and Keeter 1996), in contexts that are difficult to observe (Arnold 2009; Hall 1996), and regarding the interests of those beyond the boundary of their formal constituencies (Mansbridge 2003). Nevertheless, though many scholars argue that politicians place great personal value on achieving certain outcomes for their group (e.g., Burden 2007; Mansbridge 1999; Whitby 1997), the role of such intrinsic motivation is challenging to empirically explore because politicians may have incentives to appear intrinsically motivated even if they are not. Politicians' intrinsic motivation thus plays a potentially large role in political representation even as detecting it in action has remained a considerable challenge for the very same reasons.

In this article, I attempted to shed light on these long-standing questions about politicians' intrinsic motivation with a field experiment that offered a rare look at how politicians behave when their political incentives are weakened. Specifically, I emailed state legislators from a putatively black alias asking for help signing up for state unemployment benefits and randomly varied whether the letters purported to come from a person living within or far from each legislator's district. The results showed that while most black legislators continued to respond to a putatively black person even when they expected little political reward for doing so, nonblacks were much less responsive once their political incentives were diminished. Intrinsic motivation to advance blacks' interests thus appears to be a substantial determinant of black legislators' behavior.

To the extent black Americans face structural barriers to exercising political accountability, mechanisms for encouraging the election of blacks to office thus appear especially crucial to ensuring that blacks receive equal sub-

stantive political representation. Underscoring this point, a matching analysis showed that the effects strongly persisted even in the very districts where institutions to promote descriptive representation would have the greatest effect.

Moreover, these results also strongly support the hypothesis articulated by Mansbridge (2003) that legislators engage in "surrogate" representation of group members outside their official constituencies (see also Pitkin's 1967 concept of "virtual" representation). Americans whose legal representatives are not of their group (a situation nearly all minority groups in the United States find themselves in) thus do have an interest in ensuring that group members do serve in the collective bodies that govern them. Such insights are especially important to note as debates over the future of the Voting Rights Act continue.

More broadly, the results also provide strong empirical evidence that intrinsic motivation can play an important role in shaping politicians' behavior. Though it is often viewed as analytically productive to think of politicians as motivated by reelection alone (e.g., Mayhew 1974), the experiment showed that politicians appear willing to pay costs to achieve goals they personally value: political incentives alone cannot easily explain the behavior observed in the experiment, either on the part of the many legislators of all races who responded to the out-of-district letter or the black legislators who were especially responsive to it. A focus on legislators' baseline and differing level of intrinsic motivation can thus yield crucial insights into their behavior (see Mansbridge 2009). Though future work can and should consider whether these findings generalize to other groups, they strongly demonstrate the potential importance of many politicians' personal preferences and desires.

The results also suggest several important avenues for future research. First, as Democrats and Republicans appear to differ little in their treatment of black interests in private settings, future research should further consider the trade-off between the relative lack of concern non-black Democrats appear to show for black interests in less public behavior and the relatively robust substantive representation they generally provide blacks on many salient policy issues (Lublin 1997).

From an institutional point of view, the findings also grant further urgency to efforts to devise institutions that can better monitor elected officials' behavior toward groups they are not a part of. Given how differently politicians appear to behave when their incentives diminish, the results also underscore the clear importance of electoral accountability to minorities' equal representation, especially when they are not represented by a member of their group.

Finally, the results underscore that Canon's (1999) and Dovi's (2002) points about the "supply side" of candidates—which candidates run for office—should not be neglected. A rich literature explores variation in group identification and policy preferences in the mass public (e.g., Gay 2004; Hochschild and Weaver 2007), though much less has done so among elites. Future research should do so—*who* governs does have consequences.

Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's website:

- Randomization Check
- **Table SI1:** Randomization Check. DV = Assignment to Out-of-District Treatment Group
- Results with "Helpful Reply" as the Dependent Variable
- **Table SI2:** Results With "Helpful Reply" as the Dependent Variable
- **Table SI3:** Heterogeneous Treatment Effects
- In- and Out-of-District City-Selection Method
- **Figure SI1:** Example In- and Out-of-District City Selection Results
- **Figure SI2:** Out-of-District Assignment Areas
- **Figure SI3:** Guide to Reproducing the City Name Assignment Process (5 Panels)

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