Moderation from Bias: A Field Experiment on Partisan Media in a New Democracy

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Partisan media are often blamed for polarization in newly liberalized regimes. However, there is little empirical work on the subject, and information-processing theories suggest that extreme position taking is only one possible response to opinionated news. Rather, we theorize that partisan media may cause moderation in postliberalization settings, because low political sophistication and shifting political landscapes discourage partisan-motivated reasoning. We conducted a field experiment in Ghana in which tro-tros (commuter minibuses) were randomly assigned to one of four conditions. Passengers heard live talk-radio from a progovernment, pro-opposition, or neutral station, or were in a no-radio control. We find no effect of like-minded media on polarization, but significant evidence of moderation from cross-cutting broadcasts, indicating that rival arguments persuaded subjects. Partisan broadcasts also encouraged displays of national over partisan identity. Rather than fueling extremism, we argue that partisan media can moderate by exposing citizens to alternate perspectives.

How do partisan media affect polarization in newly liberalized regimes? Opinionated media, which often emerge after media liberalization, are frequently blamed for discord and instability. Observers worry that bias polarizes citizens and threatens democracy. However, many democratic theorists argue that exposure to diverse views fosters moderation, tolerance, and compromise (Barber 1984; Habermas 1989; Mill [1859] 1999), which are crucial for progress in politics with histories of authoritarianism. Since individuals are unlikely to encounter opposing attitudes within homogenous social networks, partisan media may be the most prevalent source of alternate perspectives (Gentzkow and Shapiro 2011; Mutz and Martin 2001). According to this reasoning, partisan media may help, rather than harm, democracy and stability.

We theorize that partisan media likely have salutary effects in postliberalization settings, even though observers fear such contexts are vulnerable to polarization. The dominant perspective predicts polarization because it assumes individuals engage in motivated reasoning, as they are more persuaded by their own side and/or counterargue with the other (Levendusky 2013; Pomerantz, Chaiken, and Tordesillas 1995; Taber and Lodge 2006). We argue, however, that extreme position taking is an unlikely response to partisan media in postliberalization settings, which are usually marked by shifting landscapes and populations with limited political sophistication. Individuals in such settings typically lack the inclination or tools to engage in counterargument, so they accept, rather than refute, discordant messages. Contrary to expectations in the literature, we posit that partisan media cause moderation, not polarization, in postliberalization environments.

This article examines the effects of partisan media on attitudes about candidates, as well as on behavioral displays of partisan over national affiliation, in a newly liberalized setting. We evaluate whether exposure to media favoring one's
own side (i.e., like-minded exposure) increases attitudinal and behavioral extremity. Importantly, we also test the effects of content challenging preferences (i.e., cross-cutting exposure), which has received far less attention.

To do so, we conducted a novel field experiment weeks prior to the 2012 elections in Ghana, an emerging democracy where many fear that partisan media contribute to polarization. We made use of captive audiences traveling in tro-tros, which are minibuses that serve as the most common form of public transport in Ghana. Typically, riders are exposed to radio of the driver’s choosing; under our design, drivers played randomly assigned programs. There were four conditions: pro-government, pro-opposition, or neutral political talk radio, or a no-radio control. Upon completing their commute, 1,200 subjects from 228 tro-tros were interviewed.

We find that partisan media moderate attitudes. There is no difference in attitudinal extremity between subjects exposed to like-minded media and those not exposed to radio. Instead, we find that exposure to cross-cutting broadcasts begets partisan ambivalence and encourages displays of national over partisan affinities. Rather than fueling extremism, our evidence suggests that partisan media provoked reconsideration of initial positions.

Our results have important theoretical and methodological implications. First, extant theories do not consider how the effects of partisan media on polarization vary contextually. While Levendusky (2013) empirically evaluated how individual-level factors affect response to partisan media, scholars have not considered responses in settings where system-level factors, such as institutional flux and weak educational infrastructures, might make motivated reasoning less likely than it seems to be in advanced democracies (specifically, the United States).

Our article also makes an important methodological contribution. Existing approaches might overestimate partisan media’s polarizing effects. Observational studies risk mistaking selective exposure for media effects, while laboratory experiments can increase counterarguing if subjects become especially attentive to partisan labels. We introduce an alternate approach. Subjects in our field experiment were exposed to live broadcasts in a natural setting, giving the design high external validity while maintaining the inferential benefits of random assignment.

THEORIZING THE EFFECTS OF PARTISAN MEDIA IN POSTLIBERALIZATION SETTINGS

Media liberalization yields pluralized environments in countries where state-run outlets once dominated. While necessary for competition and accountability, many believe these reforms have Janus-faced qualities, since newly established outlets are often owned by politicians or their allies (Lawson 2002; Nyamnjoh 2005, 56–59; Snyder and Ballentine 1996).

The predominant view is that biased media exacerbate partisan cleavages, which could foster antidemocratic elites (Linz 1978; Sartori 1976; Valenzuela 1978), weak economic performance (Frye 2002), and violence (Esteban and Ray 1999). Power wrote of killers in Rwanda who “carried a machete in one hand and a radio transistor in the other” (2001: 89), referencing the anti-Tutsi propaganda by Radio Télévision Libre des Milles Collines (RTLM), the first private radio station after media liberalization. Observers typically focus on extreme cases where violence coincided with indecent broadcasts (Abdi and Deane 2008; IRIN 2008; Palmer 2001; Sofos 1999, Thompson 1999) to surmise the dangers of biased media generally.

The widespread expectation of polarization from partisan media in postliberalization settings is echoed by most scholars of the United States (Allen and Moehler 2013; Baum 2012; Della Vigna and Kaplan 2007; Dilliplane 2014; Jacobson 2010; Jamieson and Cappella 2008; Prior 2007; Stroud 2011; Sunstein 2009; Williams and Delli Carpini 2011). Like-minded media might foster extreme views by augmenting argument repertoires, boosting confidence in one’s beliefs, intensifying feelings, and exacerbating ingroup sentiments (Arceneaux, Martin, and Cryderman 2013; Levendusky 2013). Cross-cutting messages have received less attention, but the common expectation is that individuals dismiss or argue against perspectives that challenge their pre-existing beliefs, thus strengthening initial attitudes (Kunda 1990; Lodge and Taber 2000; Redlawsk 2002).

According to this perspective, partisan media polarize because the reinforcing effects of like-minded exposure are larger than any persuading powers of cross-cutting exposure, and/or cross-cutting exposure provokes counterargument and intensifies biases. Importantly, this reaction requires partisan-motivated reasoning, such that individuals find their party’s arguments compelling, ignore discordant views, or argue against the other side (Levendusky 2013). However, this expectation of polarization might not hold universally. We theorize that partisan media are more likely to moderate in postliberalization settings. We establish this expectation by drawing on studies of cross-cutting discussions and theories of biased information processing.

First, scholarship on interpersonal discussion and social networks highlights how cross-cutting interactions can foster mutual understanding, reevaluation of positions, and moderation (Huckfeldt, Mendez, and Osborn 2004; Kloster, Sokhey, and McClurg 2013; Mutz 2006; Nir 2011). The empirical findings of this literature, in turn, support a venerable tradition within democratic theory that exposure to
myriad views is good for democracy (Barber 1984; Habermas 1989; Mill [1859] 1999).

Although these arguments about interpersonal contact are rarely applied to partisan media, it is important to recognize that mass media are important sources of exposure to opposing political views (Gentzkow and Shapiro 2011; Mutz and Martin 2001). This is especially true when personal networks are segregated, as they often are in the post-liberalization settings of the developing world. In such environments, cross-cutting media might be especially influential because they provide novel perspectives, whereas like-minded media duplicate arguments heard elsewhere (Morley and Walker 1987). Furthermore, partisan media might be more effective in delivering alternate perspectives than nonpartisan outlets because partisan media present arguments in capturing, unidirectional, and straightforward ways (Druckman et al. 2010; Feldman 2011; Jamieson and Cappella 2008; Zaller 1992). Strident partisan programming can help citizens pay attention to and understand arguments from the other side.

Cross-cutting media facilitate exposure to alternate views, but moderation will not result if individuals reject or argue against them, as literature on biased information processing expects. Individuals reject discordant views when they are motivated by strong attitudes and attachments and equipped with arguments to defend their positions (Arceneaux, Johnson, and Cryderman 2013; Levendusky 2013; Pomerantz, Chaiken, and Tordesillas 1995; Taber and Lodge 2006; Zaller 1992). Absent these conditions, individuals will be more willing to accept, and less able to reject, discordant messages.

The polarizing effect of like-minded media is also likely contingent on motivated reasoning. When motivated reasoning is high, bias evokes emotions and amplifies group attachments. Affective responses, in turn, reinforce attitudes (Taber and Lodge 2006). Partisans are also attentive to and trusting of congenial media. Their confidence is bolstered when trusted sources repeat their views on air. When motivated reasoning is low, like-minded media do not grab attention, excite, heighten identification, and lend additional credence to views by virtue of the messenger. Discussions on like-minded media duplicate those in homogeneous social networks and are uninformative and uninformative when accuracy goals surpass partisan ones.

We contribute to the information-processing literature by arguing that motivated reasoning varies by political development. Partisan attachments and political sophistication are low in postliberalization settings where political actors and parties are new, voters’ experience with competitive politics is limited, and education rates are lower. Individuals lack the inclination and tools to resist messages from opponents. Therefore, we expect individuals are open to persuasion by cross-cutting media in such settings, while redundant arguments in like-minded media are not as potent. Paradoxically, observers are most worried about partisan media in postliberalization societies, but media in these settings may be least likely to polarize.

This possibility of moderation has been overlooked by extant research on media effects, which has not incorporated how broader contexts might affect responses to biased messages. And to our knowledge, there have been no studies of how privately owned partisan media affect attitude extremity in postliberalization settings using survey or experimental evidence.3

CASE BACKGROUND: PARTISAN MEDIA AND POLARIZATION IN GHANA

Ghana is a useful case for studying partisan media in postliberalization settings. Most of the country’s postindependence history was marked by single-party or military rule under which media were significantly restricted (Asante 1996; Hachten 1971, 167–70; Hasty 2005, 33–34). Multi-partyism’s return in 1992 was accompanied by the end of the state-run Ghana Broadcasting Corporation’s de jure radio monopoly. By October 2012, 225 FM stations were operating, 70% of which were commercially owned.6 These outlets operate in an environment of fierce political competition between two evenly matched parties: the National Democratic Congress (NDC) and the New Patriotic Party (NPP). Partisan control of the presidency and Parliament each changed hands twice (2000, 2008). In 2008 and 2012, the presidential winner enjoyed margins of only 0.5% and 3.0%, respectively.

Station owners are often participants in this competition (Gadzekpo 2008a; Hasty 2005; Owusu 2012; Temin and

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3. Several scholars mention that cross-cutting media can persuade, but they theorize that like-minded media have stronger effects or that partisan media persuade irrespective of partisanship (Dilliplane 2014; Druckman and Parkin 2005; Feldman 2011; Levendusky 2013). We theorize that, in postliberalization settings, cross-cutting media are more influential than like-minded media. Others expect polarization or parallel effects, while we expect moderation.

4. However, we lack empirical evidence on interindividual differences in responses to partisan media in the United States (for an exception, see Levendusky 2013).

5. Two studies on Rwanda come to differing conclusions about the role of the media in violence (Straus 2007; Yanagizawa-Drott 2014), but neither includes individual-level analysis of attitudes.

6. Data from National Communications Authority (NCA) at www.nca.org.gh.
Smith 2002). Programs attack opponents’ policies and character (Asah-Asante 2007; Carter Center 2012; Danso and Edu-Afful 2012; EU-EOM 2009; Gadzekpo 2008b; National Media Council 2012), which many say partisan animosities and widens cleavages to an extent that it threatens stability (Ghana News Agency 2008). Following the 2008 elections, a Ghanaian professor of communication studies, Dr. Audrey Gadzekpo, warned: “Some of the media houses, especially the FM stations such as Oman FM and Radio Gold . . . heightened tension and nearly plunged the country into chaos” (Daily Graphic 2009). Condemnations of media bias continued into the next election cycle, with former President Rawlings (1981–2001) warning:

[O]pen political bias and falsehood have eaten into our media practice . . . [T]alk radio has led to all sorts of characters with no capacity to discuss issues of national importance being given the opportunity to shout hoarse on our airwaves, throwing abuse and insults and feeding us with shallow arguments. (“JJ Blasts Media,” Daily Guide, 2012)

NGOs told us that curbs on free speech might be warranted. However, despite the widespread belief that biased media are polarizing Ghanaians, evidence of a causal relationship is lacking.

**EXPERIMENTAL DESIGN AND DATA COLLECTION**

To test the effects of media exposure on attitudes in Ghana, we conducted a field experiment in which subjects were randomly exposed to one of four treatments: two political-talk programs on partisan stations (one progovernment, one pro-opposition), one on a neutral station, and no radio (the control). Since our subjects included government and opposition supporters, this allows us to measure the effects of like-minded and cross-cutting messages.

We administered our treatments in tro-tros, which are small buses with capacities of 15–20 people. They form the backbone of Ghanaian transport (Abane 2011), and most of Accra’s four million residents regularly travel in them. Although privately owned, they operate more like public transportation in that passengers board whichever tro-tro happens to be available, drivers are typically unfamiliar to passengers, and passengers are generally anonymous to one another. During rush hour, the typical station will consist of hundreds—perhaps thousands—of commuters heading to myriad points. Furthermore, most origin stations in the experiment were major transfer hubs, so passengers and drivers would not be able to infer the partisanship, location of residence, or social identity of fellow travelers. Our subject population was morning riders in Accra. Discussions with Ghanaians, and our experience with transport in various African countries (including Ghana), indicated that commuters are captive to drivers’ musical or talk-radio preferences. Given that Ghanaians are frequently exposed to like-minded or cross-cutting messages in these settings, tro-tros seemed ideal for the administration of treatments.

In the study of media effects, experimental research has advantages because it avoids identification problems that occur with self-selection. Our field-based design also has significant advantages in terms of external validity as compared to previous experimental work, much of which was conducted in laboratories. We exposed subjects to treatments in a setting where they often hear both like-minded and cross-cutting messages, with content created by actual outlets, and in an unobtrusive manner (i.e., without subjects’ knowledge that they were being included in a study on media effects). This last feature is particularly important. Alternate designs, such as laboratory studies, might artificially raise subjects’ sensitivity to biased content and source cues (Jerit, Barabas, and Clifford 2013), thus increasing the probability of argument against cross-cutting messages and diminishing these messages’ persuasive potential. Our design also minimizes Hawthorne effects.

Each van was randomly assigned to one of the four conditions. Thus, all passengers in a given van were de facto assigned to that condition. We interviewed 1,200 respondents, who rode in 228 vans, plying 58 routes, during 15 days (October 16–November 7, 2012). The remainder of this section describes the selection of treatments, routes, vans, and respondents, as well as the procedures used to execute and verify random assignment of treatments.

**Selection of Radio Treatments: Live, Political, Popular, and Biased Broadcasts**

Our treatments included live broadcasts, rather than tailored or simulated stimuli. This strategy ensured that subjects would not be alerted to the experiment, while also accounting for real-world variation in programming. Bias can

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8. The subjects from nearly every origin point were significantly heterogeneous in partisanship.

9. We include only the 752 partisan subjects in our sample for analyses because only partisans can be coded for like-minded and cross-cutting exposure.
be subtle, and coverage includes discussions of apolitical topics, such as sports or celebrities. If our data do allow us to reject null hypotheses, we can be more confident that similar effects operate beyond our study.

To select the stations, we discussed options with Ghanaian academics, journalists, media-monitoring organizations, and radio directors. Three criteria, in addition to the partisan reputation, guided selection. First, we sought stations often played on tro-tros so that subjects would not recognize differences from their normal commutes. Second, we focused on stations with political-talk shows between 6 and 10 a.m. on weekdays, the most popular time for such programming. Third, we selected stations that mainly broadcast in Twi, Accra’s lingua franca.

We chose Radio Gold as the progovernment station and Oman FM as the pro-opposition station. We selected Peace FM as the neutral station because it also has a lively political-talk show, a large listenership, and a reputation for balance. The three programs (Gold Power Drive on Gold, National Agenda on Oman, and Kokrokoo on Peace) contain news, interviews, audience participation, and commentary. Hosts start by introducing a newspaper article or topic. In-studio guests discuss the issue before the conversation is opened to listener reactions via phone, SMS, and the Internet. The study was conducted weeks prior to elections, and topics included campaign activities, statements by politicians and supporters, candidate traits, policies, and current events. Guests included journalists, politicians, party agents, and issue experts.

Although the stations use similar programing formats, they express markedly different opinions. The quasi-governmental National Media Commission (NMC) monitored news stories over several months prior to the 2012 elections and ranked Gold and Oman as the most biased. The top panel of Table 1 presents the approximate amount of time devoted to coverage of the two main parties in news bulletins, though not in talk shows. The stations are also widely perceived as biased. As reported in the bottom panel of Table 1, the majority of subjects in our experiment identified the bias of the stations, while few reported the opposite bias for our partisan stations.

We focus on partisan bias, not inflammatory language, which constituted a small proportion of total political speech (content analysis by Media Foundation for West Africa 2012).

### Table 1. Partisan Bias by Station

| Panel One: Percentage of News Stories about Main Parties (National Media Commission 2013) |
|---------------------------------|---------------------------------|---------------------------------|
| Radio Gold (progovernment) | Oman FM (pro-opposition) | Peace FM (neutral) |
| NDC (government)       | 80.1                         | 6.3                           | 39.2                          |
| NPP (opposition)       | 8.1                          | 88.4                          | 32.5                          |

| Panel Two: Subjects’ Perceptions of Station Bias (authors’ survey) |
|---------------------------------|---------------------------------|---------------------------------|
| Radio Gold (progovernment) | Oman FM (pro-opposition) | Peace FM (neutral) |
| Progovernment                  | 53.9                          | 4.2                           | 5.4                           |
| Pro-Opposition                  | 2.4                           | 58.6                          | 25.3                          |
| Neutral                        | 19.3                          | 15.0                          | 53.2                          |
| Don’t know                      | 24.3                          | 22.3                          | 16.1                          |

Note—Coverage of minor parties not reported in Panel One.

10. The NMC tracked only news bulletins, and we use these data to indicate station, not program, bias. Professionalism dictates neutral news presentation, and bias results mainly from greater coverage of a favored party. In contrast, talk shows use tone to express editorial positions.

11. Appendix B reports the wordings for all the survey questions in this article.

12. We focus on partisan bias, not inflammatory language, which constituted a small proportion of total political speech (content analysis by Media Foundation for West Africa 2012).
to ensure subjects had significant exposure to the treatment and (2) a sufficient number of tro-tros plying the route during our study hours to facilitate efficient distribution of our staff—some were stationed at departures, while others worked at the destinations. We conducted an enumeration of routes in Accra, with assistants visiting the city’s nine main terminuses and interviewing Ghana Private Road Transport Union staff to identify all points that dispatched tro-tros to that station on a normal weekday morning. Assistants then visited these points and interviewed drivers about trip duration and ridership. To minimize the probability of individuals being included in our sample twice, or of subjects being in contact with others from earlier days, we never worked on the same route over multiple days.

**Recruiting tro-tro drivers, random assignment, and treatment administration.** Next, we recruited drivers as our confederates \((N = 228)\). We used simple random assignment to determine the treatment for each tro-tro before passengers boarded. In return for 10 cedis \((\sim US$5.26)\), drivers played their assigned station (or if in the control, no station), without interruption, at a volume that would make the broadcast as clear as possible,\(^{13}\) and without mentioning that they had received such instructions. To ensure these protocols, a staff member (the “recruiter”) traveled in the tro-tro. Finally, drivers did not turn on the radio until after departure, to minimize the possibility that individuals would hear a certain station and thus self-select into or out of certain treatments. Forty-nine vans were assigned to the progovernment station, 65 to the pro-opposition station, 55 to the neutral station, and 59 to the no-radio control.

**Recruitment of subjects.** As tro-tros neared destinations, recruiters announced that Ghanaian adults \((\geq 18)\) who had been in the van for at least 40 minutes could complete a survey “about your experience with riding tro-tros in Accra, conditions faced by commuters in Accra, and what can be done to improve conditions for Ghanaians more generally.”\(^{14}\) Subjects were promised two cedis \((\sim US$1.05)\), and interviewers met them where they disembarked. Contacted vans yielded 1–14 interviews, with a mean of 5.3 (3.3 partisans; \(N = 1200)\).\(^{15}\) Yields do not differ by treatment, suggesting treatments did not affect willingness to participate (see online Appendix A).

**Verification of random assignment and manipulation check.** To examine whether randomization was successfully executed, we check for statistical balance across treatment groups for observables that we expected to be unaffected by treatments: demographics (sex, age, education, wealth); ethnicity; language ability; 2008 vote; radio-listening habits; and journey details (seat location, duration, start time, interviews per vehicle). Appendix A reports the balance tests, which indicate that the randomization procedure was well executed and treatments effects are unlikely to be associated with confounding variables. Differences in subject attitudes and behaviors between the treatment groups can therefore reliably be attributed to the assigned radio treatment.

As a manipulation check, subjects were asked (along with other transportation questions) whether the van’s radio was playing and, if so, what station. Of those assigned to the control, 75% reported the radio was not playing. Of those assigned to a radio condition, 79% reported a station was playing. Furthermore, 76% of subjects who named a station (and were assigned to a radio condition) were correct. The most common discrepancies were mislabeling partisan stations as neutral and naming stations other than our three. Only seven subjects assigned to the progovernment station said the pro-opposition station or vice versa. The high percentage who accurately reported the assigned treatment suggests correct application. Since subjects were not previously told of the experiment, we would expect some to have forgotten what was played.

Nonetheless, it is important to note that 21% of those assigned to a radio treatment said the radio was not playing, and another 31% did not name a station. Subjects who did not identify the treatment may still have been affected, or they may have ignored the treatment. The greatest strength of our design is that subjects were exposed to media in a real-world setting with everyday distractions; they had no contrived reasons to pay attention to the stimulus. If we find significant effects, we can be more confident that partisan media are consequential in reality.\(^{16}\)

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13. We required that all vehicles had working sound systems, even if assigned to the control.

14. Many questions concerned transport. The instrument was translated into English, Ga, and Twi.

15. Prestudy analyses calculated requisite sample sizes for detecting substantively meaningful effects with sufficient power. Because we could not collect lists of eligible riders in each vehicle, we cannot determine what proportion of eligible passengers completed an interview.

16. We evaluate effects for all subjects using an intention-to-treat analysis, rather than for only those who listened (i.e., treatment-on-the-treated \([\text{TOT}]\)). We designed the study to determine real-world impact, and we could not also measure listenership. We can identify active listeners who correctly identified stations, but we cannot distinguish passive listeners and those with poor recall from nonlisteners. A TOT analysis coding only active listeners as treated is problematic because active listeners are inclined to engage in counterargument and reject rival broadcasts.
Measurement. Our independent variables are the experimental treatments converted to indicate whether subjects were exposed to like-minded or cross-cutting radio, by virtue of their partisan preference. We also include the effects of neutral radio. Here, we measure subject partisan preference as reported vote in the 2008 election. (See online Appendix B for question wordings and online Appendix C for key variable descriptive statistics.) We chose to measure partisan preference in a posttreatment survey so as not to alert subjects to the study prior to the treatment.

Evidence suggests that our measure of partisan preference is valid. First, reported 2008 vote is balanced across conditions, indicating that it was not affected by the treatments (Appendix A). Responses about pretreatment behavior are less likely to be affected than other possible measures of partisan preferences, such as “closeness” to a party or planned vote in 2012. Second, vote choice tends to be stable over time, so behavior in 2008 is a good proxy for preferences at the time of our experiment. Our sample’s partisan proclivities did not change much between 2008 and 2012. Amongst those in the control who reported a preference for 2012, 88% of 2008 NDC voters said they would vote for NDC again; the figure was 92% for NPP. As we explain later, miscoded partisan preferences are unlikely to be responsible for our results.

The measure of partisan leaning was combined with the treatments to create indicators of exposure to media biased towards (like-minded) or against (cross-cutting) a subject’s 2008 vote.19 Like-minded treatments include: (1) subjects who voted for the government (NDC) and were exposed to progovernment radio (Gold) and (2) subjects who voted for the opposition (NPP) and were exposed to pro-opposition radio (Oman).19 Cross-cutting treatments include: (1) subjects who voted for the government (NDC) and were exposed to pro-opposition radio (Oman) and (2) subjects who voted for the opposition (NPP) and were exposed to progovernment radio (Gold). We also create an indicator of neutral exposure. Our analysis includes only those who reported voting for NDC or NPP in 2008 (N = 752).20 Partisan subjects in the treatment groups are always compared to partisan subjects in the no-radio control.

We have five outcomes: four based on attitudes about candidates and one on subject behavior. We chose to measure attitudes about candidates rather than ideological or policy positions because of scholarly consensus on the importance of the former for campaigning and voting in Africa. The first measures relative support for a subject’s own party as opposed to the other. Subjects were asked in three separate questions if they thought NDC candidates were (1) honest, (2) strong leaders, and (3) capable of developing Ghana; they were asked the same questions about NPP candidates. Responses are combined into a single measure by subtracting mean attitudes about the other party from mean attitudes about one’s own party. Higher values indicate polarization (i.e., strongly positive feelings about copartisans and strongly negative feelings about non-copartisans); lower values indicate moderation. Scores range from 3 to −3.

This variable allows us to measure how media affect disparities in relative attitudes,21 but it does not allow us to discern differential effects by party. It is possible that partisan media only change evaluations of incumbent performance or, instead, attitudes about lesser-known opposition candidates. Therefore, we create two additional variables: one measuring attitudes about government party (NDC) candidates and the other attitudes about opposition party (NPP) ones. Using evaluations of candidates’ honesty, leadership, and capability, we create folded scales in which higher values indicate attitudes consistent with the subject’s partisan leanings (i.e., positive attitudes if they voted for the party in 2008, negative attitudes if they did not), and lower values indicate attitudes out of line with them (i.e., negative atti-

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17. The correlations between 2008 vote and intended 2012 vote in the control group are high (r = .77, p = .00 for 2008 NDC voters, r = .74, p = .00 for NPP). The 2008 measure appears to be an equally reliable indicator of preferences for NDC and NPP partisans. The consistency in voting was expected given the commonalities between the races. One of the candidates—Nana Akufo-Addo—was the NPP’s candidate in both 2008 and 2012, while the NDC’s 2012 candidate—John Dramani Mahama—was on the party’s ticket as vice-presidential nominee in 2008. (He ascended to the presidency in July 2012, upon the death of the incumbent.) There were no major changes in the country’s macroeconomic situation or in ethnoregional politics that would make it likely that large numbers would shift their vote choices in regard to these men.

18. Use of variables coded as like-minded and cross-cutting is common (e.g., Arceneaux, Johnson, and Murphy 2012; Dilliplane 2014; Klofstad, Sokhey, and McClurg 2013; Levendusky 2013; Nir 2011).

19. In 2008, NPP was the government party and NDC the opposition. To ease the discussion, we refer to the parties in relation to their status at the time of the experiment in 2012.

20. Those who did not vote, did not report their choice, or voted for a minor party were thereby excluded from the analysis, even if they were assigned to the neutral or no-radio conditions.

21. Higher values indicate ratings of candidates from the party as extremely honest, strong, and capable; lower values indicate ratings of candidates as not at all honest, strong, or capable.

22. Negative values represent individuals who have favorable attitudes about the other party and negative attitudes about their own. Six percent of subjects in the control had negative values.

23. Measures of affective polarization are common in survey research and have also been used in experiments in polarization on the United States (for examples, see Levendusky 2013; Prior 2007).
tudes if they voted for the party in 2008, positive attitudes if they did not). Each scale ranges from 0 to 3.24

The fourth outcome is a folded dichotomous variable that measures whether respondents said they would never vote for the opposing party under any circumstances. NDC supporters were coded “1” if they mentioned NPP as a party for which they would never vote, and “0” if they did not mention NPP. NPP supporters were coded “1” if they mentioned NDC as a party for which they would never vote, and “0” if they did not mention NDC. In short, subjects were coded as more extreme if they said voting for the other party was unthinkable.

The final measure is a behavioral one indicating whether a subject was inclined to display a partisan preference. After the survey subjects were shown three keychains—one prominently displaying the NDC logo, one the NPP logo, and one the Ghanaian flag—and encouraged to select one as a gift. Twenty-three percent took the NDC keychain, 24% the NPP keychain, and 50% the keychain with the Ghanaian flag. Subjects received a “2” when they took a keychain with their own party logo, “1” for the flag, and “0” for the other party logo. In other words, strong partisan attitudes are revealed when subjects choose to display their own party preference over their national identity.

RESULTS
We compare partisans exposed to like-minded, cross-cutting, or neutral radio to partisans not exposed to radio for each outcome. Figure 1 presents the treatment effects. The dots mark the difference of means between the relevant type of radio exposure and the no-radio condition for each outcome. The y-axis records attitudinal and behavioral extremity. Positive dots indicate more extreme attitudes and selection of partisan keychain in the treatment conditions relative to the no-radio control. Negative dots indicate more moderate attitudes and selection of the flag keychain in the treatment conditions relative to the control. To facilitate comparisons across outcomes, the values for each outcome were first standardized so that each had a mean of zero and a standard deviation of one (z-scores). The error bars mark the 90% confidence intervals for these differences of means calculated from two-tailed t-tests.

25. T-tests are used for continuous outcomes, Chi-square tests for dichotomous, and Wilcoxon-Mann-Whitney tests for ordinal: support own vs. other (t = .99, p = .32), NDC (t = .22, p = .83), NPP (t = 1.30, p = .19), willingness to vote for out-party (χ² = .04, p = .85), keychain (z = .65, p = .52).

26. Support own party vs. other (t = .69, p = .49), NDC evaluations (t = .35, p = .73), NPP evaluations (t = .52, p = .60), willingness to vote for out-party (χ² = .02, p = .89), keychain choice (z = .49, p = .62).
Cross-cutting media significantly narrowed the gap in positive attitudes towards one’s own party vis-à-vis the other party ($t = 3.10, p = .00$). Furthermore, cross-cutting media led to more moderate attitudes about candidates from the governing party ($t = 2.04, p = .04$) and from the opposition party ($t = 2.35, p = .02$). This means that the narrowing of relative attitudes about party candidates was due to changes in both retrospective evaluations of government and to changes in assessments of the opposition and not limited to a single channel. Cross-cutting exposure also decreased aversion to voting for the other side ($\chi^2 = 3.89, p = .05$).

Finally, subjects in the cross-cutting treatment were more likely to select a keychain with a national symbol (i.e., the Ghanaian flag) than one indicating their partisan identity ($z = 1.64, p = .10$). In other words, cross-cutting radio induced respondents to prefer the symbol of national identity over partisan identity. On balance, exposure to cross-cutting radio reduced partisan cleavages by encouraging moderation.

Our conclusions are robust to the various estimation procedures, variable constructions, and model specifications reported in online Appendix D. Results hold when we conduct regression analyses that control for subject ethnicity, cluster standard errors by tro-tro, construct a global scale of the regression analyses that control for subject ethnicity, and model specifications re- 

Moreover, the null results for like-minded and neutral media are not likely due to ceiling effects, sample size, or duration outliers. First, most subjects scored below the maximum on all outcomes, indicating that they had space to become more extreme. Second, the differences of means between treatment and control groups are substantively close to zero. Even with a larger sample, and any associated reduction in standard errors, we expect null results. Third, the null results are not a product of particularly short dos- 

Next, it seems highly unlikely that the results are due to error with respect to our post-treatment measure of partisan preference. First, as mentioned earlier, reported vote choice in 2008 is balanced across the treatment groups, indicating that the treatment is unlikely to have affected our measure of partisan preference. Second, we can think of no reason why moderate listeners would report having voted against the party favored by their treatment station. Third, the main effects of the radio treatments are significant and in line with what we would expect based on the results of the like-minded and cross-cutting analysis. On average, progovernment radio increased support for government candidates while opposition radio increased support for opposition politicians. Each partisan station shifted attitudes in the direction of the media bias. Crucially, the main effects analyses do not depend on the measure of partisan preferences.

Finally, we also cannot think of a scenario whereby treatment-induced differences in who agreed to be inter- 

**DISCUSSION**

Why do our findings in Ghana differ from those predicted by extant scholarship on partisan media? The dominant view expects polarization because it assumes individuals are motivated reasoners who internalize points from their own side and argue against discordant views. However, partisan-motivated reasoning may be atypically common in the United States, the site of most research on partisan media. Strong psychological attachments to parties mean that Americans have strong inclinations to find validation in familiar arguments and dismiss those that threaten their social identity. This dissonance reduction strategy fosters perceptions that cross-cutting sources are untrustworthy, further increasing antipathy to the other side.

Such conditions do not hold in many postliberalization settings, including Ghana. The relative newness of the mul-
Finally, due to low school enrollment, many lack the political sophistication necessary to counterargue with cross-cutting sources. Only 27% of partisan subjects in the control said that they had no trust in the cross-cutting station during their morning commute. Finally, due to low school enrollment, many lack the political sophistication necessary to counterargue with cross-cutting messages, even if so inclined.32

The evidence is consistent with our theory that moderation occurs when motivated reasoning is low. Cross-cutting media moderate the attitudes of less politically knowledgeable subjects but not of those who are knowledgeable and thus better equipped to resist persuasion from un congenial sources (online Appendix E). We use a scale measuring knowledge about the number of MPs, the minister of finance, and ECOWAS. Nonsophisticates are those with below-average knowledge (n = 398), and sophisticates are those with above-average knowledge (n = 354).33 For nonsophisticates, cross-cutting media significantly decreased fondness for one’s own party vis-à-vis the other (p = .01), extremity of attitudes about the opposition (p = .03), aversion to voting for the other side (p = .03), party keychain selection (p = .03), and the global scale (p = .01). The estimated effect on attitudes about government candidates is also negative but not significant (p = .11). In contrast, cross-cutting media had no significant effect on sophisticates. Although the interaction terms between the treatments and knowledge are generally not significant, we note that our scale for knowledge proxies only part of what generates motivated reasoning. We cannot directly test our argument about low partisan identification because we lack a pretreatment measure of partisan strength. We also cannot evaluate whether experience with multiparty politics matters, since democracy is equally new for all subjects.

Next, we consider whether the findings are likely to be consequential in reality. Our research satisfies two conditions for real-world applicability: (1) the causal processes are at work beyond the experiment; and (2) the stimuli occur frequently in reality. First, our design replicates actual conditions by exposing subjects to live broadcasts in an unobtrusive way amongst everyday distractions. Other methods—surveys and laboratory experiments—are more likely to overestimate the polarizing effects of partisan media. Observational studies risk conflating selection with media effects, since extremists consume more partisan media (Yanovitzky and Cappella 2001). Laboratory experiments might overestimate polarization by inducing counterargument at higher-than typical levels. Subjects are more attentive to partisan cues and biases when they are insulated from distractions and when they know they are being observed. Attentive subjects are more likely to identify and react negatively to cross-cutting media than when passively consuming media on a day-to-day basis. Our subjects were unaware that they were exposed to, or questioned about, experimental treatments. We measured how individuals typically react to incidental exposure, while maintaining the benefits of experimental inference.

Second, the moderating effects of cross-cutting exposure are of real-world import, because it seems that individuals are exposed to media from the other side on a regular basis. We are not aware of representative surveys measuring cross-cutting media exposure in the developing world, but there are theoretical and empirical reasons to expect that it is common.

From a theoretical standpoint, selective exposure is one outcome of motivated reasoning (Iyengar and Hahn 2009; Lee and Cappella 2001; Stroud 2011). Given that we find little evidence of partisan-motivated information processing, we expect limited selective exposure; individuals lack the sophistication and motivation to select media based on partisan preferences. Second, we expect that conditions in the developing world beget incidental exposure. Individuals spend substantial time in public or semipublic settings where they are exposed to media not of their choosing (Nyamnjoh 2005, 16–17). For example, most individuals travel by tro-tros rather than by private vehicles (Abane 2011). Selective avoidance in such settings is difficult.

Empirically, our data suggest considerable exposure to cross-cutting media amongst our subjects. Of partisans in the control, 32% said they listened to the cross-cutting program at least a few times in the previous week. This figure likely underestimates how often subjects heard discordant messages, since it does not include less frequent exposure (once a week or less), nor does it account for exposure to the myriad partisan programs and stations beyond the two morning shows included in our survey.34 More research is needed, but what relevant evidence we have suggests that

31. For example, less than 1% of Ghanaians mentioned partisanship as their primary identity in the 2002–2003 Afrobarometer survey. Responses were similar in the pooled sample from 16 countries.

32. Only 46% of Ghanaians attended secondary school (World Development Indicators 2009).

33. The scale is balanced across treatments, which is expected given the questions we asked.

34. Some suggest that cross-cutting exposure is common even in the United States (Garrett, Carnahan, and Lynch 2013; LaCour and Vavreck 2014; Levendusky 2013), although its extent is a subject of debate.
cross-cutting exposure is common enough to be consequential.

How well might these conclusions from Ghana generalize to other contexts? While we cannot be certain about generalizability beyond our experimental setting without additional research, we can develop informed expectations. We anticipate that counterargument with cross-cutting messages would be lowest, and the persuasive effects of cross-cutting media would be greatest, where partisan identities are weak (Levendorsky 2013; Taber and Lodge 2006). Citizens should be especially susceptible to the moderating influence of cross-cutting media in settings with less institutionalized party systems, such as Benin, Bulgaria, Guatemala, Latvia, Madagascar, Malawi, Mali, Niger, Peru, and Senegal. Moderation might therefore be the most likely outcome of partisan media exposure in most postliberalization settings.

Importantly, we do not expect the Ghanaian results to generalize to all postliberalization settings. While partisan voting occurs in Ghana, it is far from absolute (Fridy 2007; Lindberg and Morrison 2005; Weghorst and Lindberg 2013). In contrast, violence has reified group differences in places like Kenya, Mozambique, and Zimbabwe (LeBas 2011; Levitsky and Way 2012). In these situations, exposure to cross-cutting media might be rare due to self-selection. And when cross-cutting exposure does occur, the many people with solidified identities might become more extreme. In sum, we expect that most citizens in postliberalization settings will be susceptible to the persuasion (and thus moderation) from cross-cutting media, but such salutatory effects are unlikely where conflict has already divided groups. Unfortunately, politics most in need of moderation might also be immune to the potential benefits of cross-cutting media.

CONCLUSION

Throughout much of Africa, Asia, Latin America, and Eastern Europe, liberalization ushered in media systems dominated by partisan outlets. Many worry that opinionated media polarize and threaten democracy. Extant scholarship, based primarily on the United States, similarly predicts that partisan media lead to more extreme views. Scholars assert that partisan media polarize because individuals readily accept their own side’s arguments, while dismissing or arguing against the other’s (Levendorsky 2013). We argue that an alternate theoretical framework is more useful where conditions are unfavorable to partisan-motivated reasoning. Partisan media can moderate attitudes when individuals are open to persuasion by arguments from the other side. While an established literature cites the democratic benefits of cross-cutting interpersonal communications, the same logic can be applied to the study of partisan media.

To evaluate the effect of partisan media in a newly liberalized polity, we conducted a novel field experiment in Ghana in which commuter minibuses were randomly assigned to one of four conditions involving live talk-radio. We find that partisan media moderated attitudes because exposure to like-minded and neutral media had no estimated effect on attitudes, while cross-cutting media decreased extreme positions. Cross-cutting broadcasts also encouraged displays of national over partisan affinities. Although other factors in Ghanaian society might polarize, our evidence suggests that partisan media are likely not among them.

The study has important methodological and theoretical implications. First, our design offers an innovation in its administration of live media treatments in a natural, unobtrusive manner, which decreases the likelihood of lab-induced hypersensitivity to bias and source cues. Researchers should reconsider how much motivated reasoning occurs in real-world settings.

Second, we argue that scholars should be attentive to contextual factors. Partisan media can have opposite effects depending on whether political and demographic environments favor motivated reasoning. While theory and evidence from the United States suggest polarization, we found the reverse in a newly liberalized polity. We theorize that moderating effects are likely in such settings, where low political sophistication, shifting alliances, and homogeneous networks mean that cross-cutting media may be especially persuasive. In many hybrid regimes and new democracies, partisan media may moderate attitudes, rather than fuel extremism.

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