

LETTER

Election Ink and Turnout in a Partial Democracy

Karen E. Ferree¹, Danielle F. Jung^{2*}, Robert A Dowd³ and Clark C. Gibson⁴

¹Department of Political Science, University of California, San Diego, ²Department of Political Science, Emory University, ³Department of Political Science, University of Notre Dame and ⁴Department of Political Science, University of California, San Diego

*Corresponding author. E-mail: danielle.jung@emory.edu

(Received 31 October 2016; revised 31 October 2017; accepted 14 February 2018; First published online 13 July 2018)

Keywords get out the vote; turnout; election ink; turnout manipulation; Uganda

From Afghanistan to Zimbabwe, an inked finger symbolizes participation in the electoral process. Indelible election ink offers a low-cost, easy to implement solution to the problem of double voting in countries with unreliable voting records and weak administrative capacity. Its use has therefore become standard practice in many emerging democracy elections. However, while the putative goal of inking is to decrease electoral fraud, it may also enable politicians and others to manipulate turnout. In this study, we articulate a theory linking ink to turnout behavior and present supporting evidence from a field experiment conducted in Uganda during the 2011 election. Our experiment was exploratory in nature, with limited scope and size. Nonetheless, it demonstrates the plausibility of a relationship between election ink and turnout.

Inking renders the decision to vote visible. An inked finger identifies a voter not just when she emerges from the polling station, but until the ink on her finger wears off. During this time, which can last for days or even weeks, her decision to vote is public. Interested actors can condition rewards and punishments on an observable indicator of behavior: the inked (or uninked) finger. Ink thereby enables turnout manipulation, which can aim either to encourage or discourage participation.

Anecdotal evidence from elections in several contexts supports the intuition that election ink facilitates turnout manipulation. In Zimbabwe, militias supporting President Mugabe used ink to encourage turnout in the second round of Zimbabwe's 2008 presidential election. Going door-to-door in Harare townships, they promised 'the most ferocious retribution' for anyone lacking an inked finger (BBC News, 2008). In other places, ink enabled turnout discouragement. During the 2009 and 2010 Afghan elections, the Taliban threatened anyone with an inked finger with its amputation (or worse). In some instances, they carried out their grisly threat. Election observers noted these intimidation efforts kept many voters at home. They also observed voters begging polling station staff not to ink their fingers (Democracy International, 2010, 2011). Similar anecdotes surface about Indian elections. In Kashmir, one journalist reported during the 2002 elections that ink that is a 'nuisance' in most parts of India was 'virtually a passport to death in Kashmir' because militants threatened retribution to voters found with inked fingers (Jha, 2002). During the lead-up to the 2013 elections in Naxal-affected districts of Chhattisgarh, election officials requested exemptions from the use of ink from the State's Chief Electoral Officer, specifically citing depressed local turnout in the 2008 elections due to Naxalites threatening to cut off inked fingers ('Move', 2013).

Moving beyond anecdotes to evaluate more systematically the relationship between electoral ink and turnout presents challenges. Depending on the mixture of electoral strategies in a particular election, the effects of ink may vary, increasing turnout in some instances, depressing it in others; ignoring this heterogeneity may cause us to underestimate ink's full impact. Virtually

universal within-election adoption of ink further complicates evaluation. Not only is there little variation in observational data, but randomization of the inking practice itself seems unfeasible. Finally, few credible measures of turnout exist in emerging democracies. Standard practice involves asking people if they voted, an approach confounded by strategic misreporting and non-response.

To circumvent these challenges, we implemented a Get Out the Vote (GOTV) experiment to evaluate the relationship between ink and turnout. In the experiment, conducted in Uganda's capital city Kampala during the country's February 2011 national elections, we reminded people to vote and provided information to registered voters about the use of ink in the election. We also explained that ink would mark them for several days, revealing their decision to vote to other members of their community. This information was new to some, altering knowledge about electoral practices; for others, it may have primed the salience of an aspect of the election that they knew about but had not carefully considered. We find that the inking treatment reduced the probability of having an inked finger, especially for younger and less educated voters – precisely the set least likely to be familiar with inking practices and therefore most likely to respond to an informational treatment. As the scope of our study was modest, with a sample size of just over 1,100 individuals from one constituency in one country, we do not want to overstate the generalizability or conclusiveness of our findings. Nonetheless, our study provides preliminary evidence of a link between the largely unexamined practice of election inking and voting behavior.

Our study suggests that practices, like inking, which publicize turnout may not be benign in all settings. Experiments in the United States routinely find that increasing turnout's visibility raises participation (Gerber, Green, and Larimer, 2008; Davenport *et al.*, 2010; Mann, 2010; Sinclair, 2012), but these results may not generalize to settings with different norms about participation and dissimilar electoral pressures. Our results echo findings in studies by Daxecker (2014), Ichino and Schündeln (2012) and others suggesting that policies adopted to improve election quality in one domain can have unintended consequences in others.¹ Moreover, relatively innocuous interventions aimed at promoting electoral participation may backfire in some contexts (Driscoll and Hidalgo, 2014). Studies of turnout and other types of voting behavior in emerging democracies might benefit from these insights, which highlight the value of considering institutional features of elections in addition to individual-level factors like age, education and partisanship emphasized in most extant work (Bratton, 1999, 2008; Bratton, Mattes, and Gyimah-Boadi, 2005; Isaksson, 2014; Kuenzi and Lambright, 2011, 2007). Only by placing voters in a specific political context can we make sense of their behavior.

Inking as a Standard Electoral Practice

Use of election ink dates to the early 1980s, when election officials began marking voters with ink detectable only with ultraviolet light. Difficulties with administration (particularly, equipping polling stations with UV-lights) led to the adoption of visible, indelible ink as the standard by the mid-1980s (Cody, 1985; Meislin, 1982; Taubman, 1982; Wattenberg, 1986). Inking has since become an international norm, particularly in emerging democracies outside the OECD. Nearly 30 per cent of all countries have used it, and it is particularly common in South, Central, and Southeast Asia, the Middle East, and sub-Saharan Africa. It is less common in Latin America and rare or non-existent in long-term democracies. See Figure A1 for all countries where we have found evidence of election inking.

¹See Daxecker (2014) on temporal displacement of fraud; Ichino and Schündeln (2012) and Callen and Long (2015) on fraud detection methods and geographic spillover; Hyde and O'Mahony (2010) and Sjöberg (2014) on substitution effects; and Callen *et al.* (2016) on the use of ICT, citizen-based observation and cost-effectiveness.

The attractions of inking are straightforward. Establishing accurate voter registries is costly, difficult, and often controversial (Organization for Security and Cooperation in Europe (OSCE), 2010). Would-be voters in newer and poorer democracies frequently lack valid forms of identification to use for voter registration or voting. Given these limitations, multiple voting presents a serious threat to election quality. Ink offers a low-technology, inexpensive solution easily delivered with election materials and not requiring extensive training or electricity to implement.² Polling station staff need only mark a finger (or other part of the hand) with indelible ink after voting. Ink is typically bright purple and easily seen on all skin tones. As of this writing (late 2017), alternatives like biometric registration remain in the development stage in most countries.³

Controversies periodically surface regarding election ink. The Malaysian government responded to public concerns about multiple voting by purchasing nearly 50,000 bottles of indelible ink from India prior to the 2008 election. It then reversed this policy and abandoned inking, citing claims that the ink might be used to mark unsuspecting citizens prior to election day, preventing them from casting votes (Weiss, 2009). Malaysia's ink woes continued in its 2013 General Election, when 'indelible' ink proved removable with soap and water (Ostwald, 2013; Welsh, 2013). Political operatives in the Philippines reportedly gave rewards to potential opposition voters who allowed them to ink their fingers, disqualifying them from voting (Schedler, 2002). Voting station workers used non-permanent ink during Afghanistan's 2004 elections, leading to extensive allegations of ink removal and double-voting (Raman, 2004; Baldauf, 2004). Inking controversies continued in subsequent Afghan elections, with questions about ink quality and inconsistent application (Democracy International, 2010).

Despite its controversies and pervasive use, we have found no systematic study of inking in either the policy or academic literatures. This lack of attention is puzzling because, as we suggest in the next section, inking may have significant consequences for voting behavior. Specifically, we argue that inking can facilitate the manipulation of turnout.

Inking and Turnout

Ink helps polling station officials detect and deter double voting, but in the process makes the decision to vote visible beyond the polling station, typically for days or even weeks. During this time, a range of actors – spouses, bosses, neighbors, religious leaders, community activists, party leaders, politicians, soldiers, police – can observe whether an individual has a marked or unmarked finger and from this infer his or her decision to vote.⁴

Ink facilitates turnout manipulation by lowering the costs of turnout monitoring. External actors can now condition rewards or punishments on the presence or absence of ink. These rewards and punishments may assume many forms, from the subtle (a raised eyebrow, a verbal rebuke, shunning) to the direct (cash payments, physical injury, loss of employment) and may be legal⁵ or illegal in nature.⁶ They may or may not involve coercion and threats of violence.

²A report by the UNDP discussing its work in the Myanmar's 2015 polls reiterates the conventional wisdom and attraction to the use of ink to solve these problems, calling it 'a powerful integrity tool' and noting 'indelible ink has been widely seen as a very positive part of the process'. <http://www.mm.undp.org/content/myanmar/en/home/presscenter/pressreleases/2015/11/25/undp-provided-indelible-ink-in-myanmar-elections-a-powerful-integrity-tool-.html>

³See Barkan (2013) for a discussion of biometric registration in the 2013 Kenyan election. See also Gelb and Diofasi (2016) for a general overview.

⁴Keeping with prominent work on clientelism (Nichter, 2008; Stokes, 2005), our perspective assumes political strategies focus on rewarding and punishing *individuals* rather than collectives like villages or polling stations. This is a reasonable assumption in areas, like the one we study, where mixed political allegiances make group-targeting inefficient. In politically homogeneous places where targeting focuses on collectives, ink may play a less significant role, although even in these contexts, group conformity may require policing individual behavior.

⁵For example, providing "I voted" stickers.

⁶For example, illicit transfers of money or gifts.

External actors have a range of motivations when attempting to manipulate turnout. We highlight two: encouragement and discouragement. An *encouragement* strategy tries to increase turnout of a voter or group of voters. Parties frequently engage in encouragement strategies vis-à-vis their partisans, especially in close elections, to enhance their chances of winning. The Obama campaigns of 2008 and 2012, for example, made targeted attempts to raise turnout of African American voters, students and other groups strongly predisposed to vote Democrat. Nichter (2008) refers to such strategies as ‘turnout buying’ when they involve an exchange of benefits for voting. Turnout encouragement can also take on a coercive tone, as it did in the example from Zimbabwe discussed earlier, where pro-government police threatened retribution to citizens who could not show a marked finger.

The individuals encouraging turnout can be ordinary citizens rather than politicians. Citizens may encourage turnout in a bid to attract the attention and support of powerful patrons, or to enforce community norms about political participation. The encouragement mechanism involved in Gerber, Green, and Larimer (2008) is likely normative and community based – the desire to be seen as a good citizen by friends and neighbors – rather than explicitly electoral in nature.⁷

Parties and other actors may also engage in *discouragement* strategies. In addition to the Afghan and Indian examples discussed earlier, Cox and Kousser (1981) document cases of parties paying opposition partisans to stay home in late nineteenth-century New York state. The Democratic Party used a variety of coercive methods to discourage African American voting in the pre-Voting Rights South (Kousser, 1974). Collier and Vicente (2014) and Bratton (2008) discuss efforts by Nigerian parties in the 2007 election to discourage opposition turnout via intimidation. A similar dynamic may have transpired in Colombia in the 1990s, where Steele (2011) documents a long-term strategy by counter-insurgents to displace voters in areas likely to vote for the insurgent-backed political party, and in Pakistan’s 2013 election, when the Pakistani Taliban targeted leaders and candidates from three secular parties and warned people to stay away from their rallies.⁸ Parties in the Panchthar region of Nepal threatened and intimidated voters to keep them home. Affected villages recorded turnout levels under 2 per cent. Observers noted that even weeks after the elections ‘citizens of one of the communities were still fearful of reprisals against those who had managed to vote’.⁹ Normative turnout discouragement strategies are less commonly discussed in the literature, but community-based election boycotts likely employ these (see Beaulieu, 2014).

Regardless of whether an actor’s goal is encouragement or discouragement, to further electoral goals or enforce community norms, election ink makes the task of monitoring – and therefore manipulating – turnout easier. It reveals turnout decisions just as surely as Gerber, Green, and Larimer’s experimental letter treatment, but in a far broader and more public fashion. It therefore seems plausible that ink might also influence turnout decisions. Moreover, the effects of information revelation may not always be turnout encouragement. Publicizing past turnout decisions through letters, public voting records, or ink is likely to *depress* rather than increase turnout where turnout discouragement prevails.

⁷Gerber, Green, and Larimer (2008) find letters publicizing neighbors’ past turnout decisions, and promising to reveal future ones, increased the probability of voting in a Michigan primary election by 8 per cent. Additional GOTV experiments generally reinforce these findings (Davenport et al., 2010; Mann, 2010; Sinclair, 2012) and complement research across social science disciplines demonstrating that making behavior public can alter it (e.g. Ariely and Meier, 2009; Becker, 1968; Becker and Stigler, 1974; Cialdini and Goldstein, 2004; Cialdini and Trost, 1998; Habyarimana et al., 2007, 2009; Posner and Rasmusen, 1999; Rind and Benjamin, 1994; Schultz, 1999; Schultz et al., 2007; Whatley et al., 1999). See Jung and Long (2018) for an application in a comparative context.

⁸See https://www.theguardian.com/world/2013/apr/14/pakistani_taliban_target_anp_leaders. We thank Matanock and Staniland (n.d.) for highlighting this example.

⁹See <https://www.cartercenter.org/resources/pdfs/news/peacepublications/electionreports/Nepal—2013—final.pdf>, p. 53.

In sum, the use of ink in elections may lead to changes in voter turnout by facilitating turnout manipulation, which can attempt to raise *or* lower turnout. Inking lowers the cost of all such strategies by rendering the voting decision public, making it easier for outside actors to incentivize desired voting behaviors. Anecdotal evidence, as well as results from American GOTV experiments, support these claims.

Evaluating Inking

Rigorous empirical evaluation of the practice of inking presents challenges. Inking likely has context-specific effects that depend on the turnout manipulation strategies present in a particular place. Ignoring this heterogeneity may wash out treatment effects, but accounting for it directly can be difficult if turnout manipulation is subtle or hidden. Furthermore, the practice of inking voters has been adopted so universally that variation in treatment is rare. Election officials periodically fail to ink some voters because of political controversy or insufficient ink, but these instances are almost certainly not random, leading to standard problems with identifying treatment effects. Nearly universal adoption of inking and the importance placed on the practice by election officials would also seem to rule out direct randomization of inking itself.

Measuring turnout brings its own difficulties. Official voting records detailing individual turnout (as in the US) rarely exist in developing countries. Moreover, social norms in many places strongly favor voting, leading to potential social desirability bias in self-reports of voting. Bratton, Mattes, and Gyimah-Boadi (2005, 145–6) show self-reported turnout for Afrobarometer respondents is, on average, 13 per cent higher than official turnout.

We circumvent these challenges through an experiment conducted during the February 2011 Ugandan election in a central Kampala constituency. We randomly exposed participants to reminders to vote and information about the use of ink in the election via a face-to-face intervention just before the election. We then evaluated the effect of this intervention on turnout by returning a few days after the election to check individuals' fingers for ink.¹⁰ The goal of the experiment was twofold: first, to evaluate whether face-to-face reminders to vote would raise participation; and second, to evaluate the effects of inking on turnout. As our study was exploratory and small in scale, we chose a constituency that was accessible with middling levels of turnout in prior elections, to avoid ceiling or floor effects that would make changes in turnout difficult to detect.

Our design had several advantages and a few limitations. We reduced the problem of strategy heterogeneity by restricting the experiment to a single constituency. We avoided the problem of response bias by measuring turnout through observation of inked fingers. And we mitigated standard problems with observational data by pursuing an experimental design. One limitation, however, is that our focus on a single constituency reduces external validity. Our findings apply to a particular setting, discussed below. Were we to run the experiment in alternative contexts, we would expect different outcomes.¹¹ A second limitation of our approach is that the informational ink treatment is necessarily weaker than a treatment directly manipulating the application of ink. It may only affect respondents who previously lacked information or awareness about the practice. Our results thus likely *understate* the true effects of inking. Nonetheless, given the challenges of non-experimental approaches and the difficulty of manipulating the use of ink itself, the informational treatment offers a valuable if indirect window on an otherwise impossible to study practice. In the next sections we discuss the experimental setting, treatments and design.

¹⁰See Giné and Mansuri (2011) and Aker, Collier, and Vicente (2011) for similar measurement strategies.

¹¹While an experiment that spanned multiple contexts would have provided a better evaluation of the effects of inking, financial and practical limitations precluded this fuller design.

Setting

We conducted the experiment in Kawempe South constituency in the heart of Kampala, Uganda's capital city. Kawempe is a large, socially, economically and ethnically diverse area. Built over a flood plain and settled by waves of migrants, it contains dense neighborhoods of closely spaced small one or two room structures, many informal, with some larger homes interspersed. Markets, schools, churches, mosques, clinics, farms and small businesses coexist with residences. Small streets and paths meander and branch off roads clogged with buses, motorcycles, pedestrians, cars and animals. Kawempe is also home to Makerere University, Uganda's premiere post-secondary institution. It is neither particularly poor nor rich relative to other urban areas of Uganda.

Kawempe's history of oppositional politics differentiates it from much of Uganda. The National Resistance Movement (NRM) has dominated Ugandan politics since the mid-1980s when its leader, Yoweri Museveni, seized power during a civil war. After resisting pressures to democratize, Museveni removed a ban on multiparty politics in 2005. He won the presidency in the country's first multiparty election in many decades in 2006, defeating perennial rival, Kizza Besigye of the Forum for Democratic Change (FDC) 59.3 per cent to 37.4 per cent. Ironically, political repression and consolidation of power around Museveni appear to have increased in the period after the introduction of multiparty competition (Barkan, 2011; Makara, Rakner, and Svåsand, 2009; Mwenda, 2007; Tripp, 2010). Museveni bolsters his dominance through a 'carrot and stick' mixture (Conroy-Krutz and Logan, 2012) of good economic performance, control over state resources and service delivery, constitutional manipulation, lavish campaign spending, election fraud, and intimidation of the opposition, all in the context of a highly militarized state (Juma, 2011; Barkan, 2011; Tripp, 2010; Mwenda, 2007).

Fractured, weak and underfunded, the Ugandan opposition has had few means to challenge the NRM in most of Uganda (Tangri and Mwenda, 2010). Rural areas in particular remain firmly tied to Museveni (Barkan, 2011). In Kawempe, however, the opposition won a majority in 2006, supporting Besigye with 55.5 per cent of the vote to Museveni's 41.4 per cent (Electoral Commission, 2006). In 2011, Museveni once again faced an opposition that was weak and divided throughout most of the country, but was relatively strong in the capital city (Conroy-Krutz and Logan, 2012). Kawempe thus represents an opposition-leaning area in a single party dominant, semi-authoritarian state with a long history of political repression. As Barkan (2011, 7) writes: 'Kampala serves as something of a "Potemkin Village of Democracy" – impressive at first encounter, but not representative of the country or the regime'.

Our results may therefore be particular to Kawempe and likely do not generalize to Uganda as a whole. Kawempe is urban and politically diverse. Rural, politically homogeneous areas might exhibit different dynamics. In places firmly dominated by the ruling party, we would expect turnout encouragement to prevail and ink to have turnout enhancing effects. In opposition strongholds we would expect turnout discouragement by the ruling party. Kawempe is somewhere between these extremes. It leans opposition, but the NRM also has a strong and visible presence, typically winning at least 40 per cent of the vote. It is politically vibrant, and we are aware of no tradition of election boycotts or norms disfavoring political participation. We therefore anticipate that the effects of ink are weaker in Kawempe than in many other contexts, and our choice of case makes null results more likely, if anything.

Treatments

The experiment had three treatments: a non-political 'control' treatment, a 'reminder to vote' treatment, and an 'ink prime' treatment. Table 1 summarizes treatment groups. All were delivered face-to-face via household survey. We trained interviewers to deliver treatments in a neutral, informative fashion, and to emphasize that they represented an American research organization.

Table 1. Treatments and control

Control	Treatment 1 (Reminder)	Treatment 2 (Ink Prime)
Short, non-political survey on mobile phone use	Short, non-political survey on mobile phone use Message reminding voters of election date and asking them to vote	Short, non-political survey on mobile phone use Message reminding voters of election date and asking them to vote Message reminding voters that ink would be used in election and that ink would make their decision to vote visible
N = 384	N = 376	N = 377

The control consisted of a short, benign set of questions on demographic factors (age, education) and mobile phone usage. The ‘reminder to vote’ treatment included the mobile phone survey, plus a generic message reminding the recipient that there would be presidential and legislative elections on 18 February. It also stated ‘all registered voters will have the opportunity to vote in this election and voting is very important’. The purpose of the reminder to vote treatment was to evaluate the generalizability of American GOTV experiments, which have typically found personal delivery of a pro-turnout message raises turnout (Adams and Smith, 1980; Eldersveld, 1956; Gerber and Green, 2000, 2001; Green, Gerber, and Nickerson, 2003; Michelson, 2003; Miller, Bositis, and Baer, 1981; Ramirez, 2005). As several studies have demonstrated similar effects in a variety of different countries and settings (Giné and Mansuri, 2011; Aker, Collier, and Vicente, 2011; Bochel and Denver, 1972; Fieldhouse et al., 2013; John and Brannan, 2008; Guan and Green, 2006), we hypothesized that the reminder treatment would increase turnout.

In the ‘ink prime’ treatment, interviewers delivered the mobile phone survey and then the following script:

I would like to speak with you briefly about the upcoming election. Are you aware that there will be a presidential and legislative election on February 18? Are you aware that visible ink will be used to mark the fingers of those who have voted in this election? [Response noted.] Are you aware that this ink will be easy to see and will last for several days? [Response noted.] Ink is not just about preventing fraud. It will also allow everyone to know if you’ve voted or not. It is important to show your neighbors that you are responsible and that you are involved in influencing what happens in your community. All registered voters will have the opportunity to vote in this election and voting is very important. Since you are a registered voter, please remember to turn out and vote.

This treatment represented a milder version of the pro-turnout letter in Gerber, Green, and Larimer (2008), which threatened to publicize non-voters’ behavior to neighbors. Several studies have implemented treatments similar to Gerber, Green, and Larimer’s in a variety of American settings (Davenport et al., 2010; Gerber, Green, and Larimer, 2008; Mann, 2010; Nickerson, 2008; Panagopolous, 2010), but, to our knowledge, none have done so in an emerging or partial democracy.

The ink treatment manipulates knowledge or awareness about the link between ink and the visibility of turnout rather than the practice of inking itself. Informational treatments like the ink prime work one of two ways: they change the factual knowledge base of subjects (a learning effect) or alter the salience of particular considerations (a priming effect) (Conroy-Krutz, Moehler, and Aguilar, 2016). In focus groups prior to the experiment, we found many knew ink would be used in the upcoming election, but not all understood it would make turnout decisions

visible for an extended period of time and many had not thought through the political implications of this revelation of information.¹² We therefore had reason to believe the ink treatment would induce either learning or priming in a subset of respondents.¹³

Sampling and Randomization

We visited 1,137 households in the week prior to the election.¹⁴ We selected ten Kawempe South parishes and designated a supervisor and team of enumerators to each.¹⁵ Each enumerator received a packet of surveys, which came in three versions, corresponding to the treatment arms in Table 1. We randomized survey order for each enumerator. By working through the packets in order, enumerators achieved treatment randomization. Our procedure ensured randomization across treatment arms, but not a representative sample of Kawempe. Our sample is biased toward people at home during the period in which we delivered the survey and those willing to participate.¹⁶

During the three days following the election, enumerators recontacted treated individuals.¹⁷ They repeated demographic questions and asked a new set of political and social questions, including vote choice, political party identification, strength of ethnic attachment and political and social pressures to vote. Near the end of the survey, enumerators asked to check the respondent's finger for ink and recorded whether the respondent had a mark (indicating they voted) or lacked a mark (indicating they did not). We achieved a recontact rate of over 99 per cent; fewer than 2 per cent of successfully recontacted participants refused the follow-up survey, producing an overall attrition rate of 2.1 per cent.¹⁸

Results

We first examine whether the ink prime had the intended effect of increasing awareness about the public nature of voting. We asked: 'Regardless of whether you actually voted, do you think that your neighbors know whether you turned out or stayed home, or do they not know?' Overall, most respondents in our sample (63 per cent) believed that their neighbors could ascertain whether or not they voted, suggesting that voting in Kawempe is a relatively public act.¹⁹ If the visibility treatment had the intended effect, respondents exposed to it should have been more likely to believe their neighbors knew their turnout choice. Indeed, the ink prime increased the probability of believing neighbors knew turnout decision by about 7 per cent.²⁰ The simple reminder treatment served as a placebo for this outcome and, as expected, had no effect.

¹²We conducted a thorough review of available local press from the 2011 election period and the 2006 election, looking for articles about election ink. We find no evidence that inking was politicized in either 2006 or 2011. Uganda again used ink in the 2016 election, suggesting little controversy around the practice.

¹³Responses to the questions nested in the ink prime confirm these expectations: 95 per cent of the ink treatment group knew ink would be used and 81 per cent knew it would be visible and easy to see.

¹⁴Respondents could take the survey in Luganda (one of Uganda's many languages, common in Kampala) or English (the national *lingua franca*).

¹⁵Kawempe has thirteen parishes, but three (related to Makerere University) had few residential holdings so we excluded them. One parish, Bwaise II, was very large and three enumerator teams were assigned to it.

¹⁶For more detail on sampling, randomization, the balance table, and discussion of balance please see the Appendix.

¹⁷We note that neither enumerators nor respondents knew they would be recontacting these individuals, thereby ensuring that neither group strategically altered their behavior.

¹⁸We attribute high recontact rates to the short period between first and second measurement and the high priority our field team placed on recontact. Examining patterns in attrition, we found treatment status was unrelated to the likelihood of attrition. We also found a nearly perfect correlation between demographic questions asked in both rounds, suggesting we successfully recontacted the correct individuals. For more discussion and analysis see the Appendix.

¹⁹Also of some note, 32 per cent of our sample reported going to the polls with others rather than going alone.

²⁰Significant at the 0.05 level. See Table A4 for complete results. Note, the informational pathway is not the only one through which the treatment could have exerted an effect. Even for those already aware of the use of ink and its consequences, the treatment could have acted as a prime, increasing the salience of prior knowledge.

Table 2. Finger status

Finger Status	Count (%)	Control	Turnout Reminder	Ink Prime
Marked (Voted)	738 (65%)	248	255	235
Not Marked (Did Not Vote)	124 (11%)	36	40	48
Unclear	233 (20%)	88	66	79
Refused	42 (4%)	12	15	15
Total	1,137	384	376	377

Next we present a basic breakdown of the outcome variable: finger marking status (Table 2). A last-minute decision by election administrators in Uganda to use permanent markers instead of indelible ink complicated our measurement strategy. The permanent marker made a more subtle mark on the skin, which meant reading fingers required cooperation on the part of participants. A small number (4 per cent) of respondents refused to allow their fingers to be examined. More respondents (20 per cent) made it difficult for enumerators to get a clear reading. Rather than treating these unclear or refused fingers as a nuisance category, we view them as a strategic choice that reveals important information about the mindset of Kawempe citizens. In the following analysis, we group unclear fingers and refusals together as ‘concealers’.²¹ We then use multinomial logit to examine concealers, marked and unmarked fingers as an unordered three-level categorical variable.²²

The large ‘unclear’ category means we cannot map our marked finger variable directly to turnout because the true turnout level depends on the fraction of unclear fingers/refusals that actually voted. We can, however, put bounds on the turnout level: 65 per cent of our sample had a clearly marked finger and only 11 per cent had a finger that was clearly not marked. This gives us a turnout range of 65–89 per cent in our sample.²³

Table 3 shows average treatment effects on finger status for the two treatment variables (and 95 per cent confidence intervals).²⁴ Treatment effects represent the changes in probability for each category of the finger status variable given a particular treatment. Changes across a row must sum to 0. The simple reminder treatment produced no discernible shifts between categories of the dependent variable. The ink prime treatment, on the other hand, increased the probability of not having an inked finger by around four percentage points. This effect falls just shy of the 95 per cent confidence level, with a magnitude similar to those in American GOTV experiments,

²¹In Figure A3 we look at correlates of concealers. We note that the only statistically significant correlates are that apartment dwellers who live in high density settings and those who are relatively new to Kawempe (having lived there five years or less) are more likely to conceal, whereas self-identified NRM partisans are much less likely to conceal their fingers.

²²We have also estimated models with the original four levels of the dependent variable. Collapsing ‘finger unclear’ and ‘finger check refused’ has no effect on estimates for finger marked and finger unmarked. Estimates for ‘finger unclear’ are very similar to estimates for the combined ‘concealer’ group, while ‘finger check refused’ estimates indicate no substantive effects of interest.

²³Our sample was not representative, so this range is not indicative of official turnout in Kawempe South, which was 43 per cent. Many residents of Kawempe appeared to leave the city prior to the election and our baseline survey, and this may be one reason why our lowest estimate was higher than official levels. Figure A2 reports the distribution of turnout levels in this election. Median official turnout by district in the election was 61 per cent.

²⁴Table 3 estimates a multinomial logit on finger status, controlling for the reminder and ink prime treatments (control is reference category) as well as parish fixed effects to account for blocking design, and then generating first differences for each treatment. Raw output of the model is presented in Table A5 of the Appendix, ‘baseline model’.

Table 3. Average treatment effects (95% confidence intervals)

	dP (Finger Inked)	dP (Concealed)	dP (Finger Not Inked)
*Reminder	0.029 (-0.043, 0.10)	-0.040 (-0.099, 0.016)	0.011 (-0.032, 0.060)
*Ink Prime	-0.025 (-0.097, 0.045)	-0.013 (-0.075, 0.049)	0.039 (-0.008, 0.085)

Notes: We estimate a multinomial logit on the three level finger status variable, controlling for the reminder and ink prime treatments (control is reference category) as well as parish fixed effects to account for the blocking design, generating first differences for each treatment. Raw output of the model is presented in Table A5 of the Appendix, 'baseline model'.

most of which fall in the 1–8 per cent range.²⁵ As our sample undoubtedly included many people who already knew about inking and had factored it into their decisions about whether to vote, our results likely understate the full impact of inking on behavior.

The ink prime treatment should have had its largest effects on respondents not already aware of the use and implications of ink in elections. We do not have direct pre-treatment measures of information about inking (asking these would have confounded the experiment). We can, however, examine differential treatment effects for respondents at varying levels of education and age. Less educated residents likely had limited access to information about the electoral process, including the use of ink. Younger voters, not having voted in previous elections, also likely had less knowledge about the use of ink and its implications.²⁶ We therefore expect the ink prime to have had stronger effects for these groups versus older, better educated participants.

Indeed, controlling for education, age and interaction terms for these variables and the ink prime substantially sharpens the effects of the ink treatment (now significant at the 0.01 level): both interactions are significant at the 95 per cent level.²⁷ Table 4 shows the effects of the ink prime treatment for respondents without a formal education versus those with a university degree or higher, and young (18–24) versus older respondents (60+).²⁸ The effects of the ink treatment on those with a university degree were indistinguishable from 0 while treatment effects for people without a formal education were substantial. Similarly, older people had no identifiable response to the inking treatment – if anything it may have increased their probability of having a marked finger (although this result is not statistically significant). Young respondents, in contrast, proved very sensitive to the inking treatment, displaying a significant increase in the probability of having an unmarked finger and a large drop in the probability of having a marked one. Given the almost symmetric and compensatory responses in the probability of being inked or not, and changes in the probability of being concealed centered around 0, we believe the treatment not only reduced the probability of being inked, but actually reduced turnout itself in young and less educated voters.

We might also expect effects to be strongest in more vulnerable groups, in particular, female voters. Work by Grossman, Humphreys, and Sacremone-Lutz (2014) suggests that female voters in Uganda are more marginalized and less engaged than male voters. They may therefore be especially vulnerable to turnout discouragement strategies. We find suggestive evidence of a gender effect: the ink treatment had a significant depressive effect on female voters but no effect

²⁵We do not know whether this effect occurred because people actually voted less or because they were more willing to show us they had not voted. We are fairly certain that the treatment moved people into 'not inked' but we are less certain whether it moved them out of 'inked', 'concealed' or both. In either case, the treatment either reduced turnout or reduced reluctance to be identified as a non-voter. Both outcomes are consistent with a turnout depression dynamic.

²⁶It is also possible that older, more experienced voters discounted the treatment because they knew from experience there would be no actual retribution for voting (or not voting), while younger, less experienced individuals were simply more manipulable.

²⁷The z-statistic for the interaction terms (on the inked outcome) are 2.21 for education and 2.03 for age. These remain significant at the 0.10 level when using the Bonferroni correction for multiple (3) tests.

²⁸These age categories were pre-set in the survey and are standard in many African surveys.

Table 4. Heterogeneous ink prime treatment effects for education, age and gender

		Finger Status:		
		Finger Inked	Concealed	Finger Not Inked
<i>Education Level</i>				
	No Formal Education	-0.17 (-0.44, 0.11)	-0.09 (-0.29, 0.17)	0.25 (0.02, 0.53)
	University Degree +	-0.03 (-0.17, 0.11)	0.03 (-0.08, 0.15)	0.001 (-0.09, 0.11)
<i>Age</i>				
	18–24	-0.20 (-0.49, 0.10)	-0.12 (-0.30, 0.10)	0.32 (0.02, 0.63)
	60+	.08 (-0.04, 0.22)	-0.08 (-0.21, 0.04)	-0.00 (-0.02, 0.01)
<i>Gender</i>				
	Male	-0.16 (-0.47, 0.15)	-0.10 (-0.33, 0.19)	0.27 (0.03, 0.55)
	Female	-0.38 (-0.63, -0.11)	0.00 (-0.14, 0.17)	0.38 (0.12, 0.66)

Note: Simulated from a multinomial logit model with parish fixed effects, N = 1,124. 95% confidence intervals in parentheses. See Table A5 for raw coefficients and full details.

on male voters. The z-statistic for the interaction term of female and the ink prime was not significant, however.

We also looked for evidence of turnout discouragement for the subset that, in this setting, we would expect to be most evident: opposition supporters. Partisan effects are challenging to detect in Kawempe. Given Uganda's single party dominant state and history of opposition oppression, there are compelling reasons for individuals to misrepresent or conceal partisanship. When we asked respondents in our post-treatment survey to report vote choice in the presidential election, 22 per cent refused to answer the question, a telling indication of their reluctance to reveal partisanship.²⁹ Most of those who did answer said they supported Museveni. We also asked them if they were close to any particular party: 9 per cent refused to even answer this question, and 40 per cent claimed not to be. Again, most of those who self-identified as partisans indicated that they supported the NRM. As the NRM won neither the presidential nor parliamentary election in Kawempe South, we conclude that many opposition supporters concealed their true preferences by refusing to answer or misrepresenting their choice. It is impossible to use such data as a true measure of electoral support.

Our clearest indication of partisan leanings is whether or not our enumerators noted pro-NRM displays on the living quarters of respondents. These displays could show electoral support for Museveni, but do not conclusively reveal partisanship since strategic incentives to misrepresent apply here as well. We find no detectable interaction between NRM displays and the ink prime.³⁰

We also considered whether visible demographic cues might provide information about partisanship that would help us identify opposition supporters in the data. Here again we ran into challenges. While ethnicity or race reveals information about partisanship in some contexts, it is not particularly informative in Kawempe. Visible cues do not provide clear information about individual ethnicity in Kawempe (Habyarimana et al., 2007), and ethnicity does not correlate strongly with stated partisanship in our sample (see Table A8). The only demographic indicator we identified that was both visible and correlated with partisanship was age. Age is

²⁹As a comparison point, in a 2013 exit poll in Kenya, 12 per cent of respondents refused to state their vote choice (Ferree, Gibson, and Long 2014).

³⁰See Table A8 for coefficients on visible NRM supporters. Turnout for this group was between 74 and 94 per cent in our sample, increasing the difficulty of detecting encouragement effects.

relatively easy to see and correlates with reported vote choice in Kawempe, with younger age groups less likely to say they voted for Museveni (see Tables A8 and A6). The salience of youth as an opposition marker might have been especially high in February 2011, as this coincided with youth-led upheavals in Egypt and elsewhere. As already discussed, the ink prime had a particularly strong effect on young voters. While we have interpreted this as a likely product of this group being less experienced and informed, it is also consistent with a partisan effect. Younger voters, fearing they would be associated with the opposition, may have been more sensitive to the ink prime.

Turnout Discouragement?

We have shown that an experimental ink prime treatment likely reduced turnout in Kawempe during the 2011 election, especially among younger and less educated potential voters. These results are consistent with the employment of turnout discouragement strategies in Kawempe, but obviously cannot tell us who might have been discouraging turnout, why they were doing it, or provide direct evidence of such efforts. Are there additional indications that strategies to reduce turnout may have in fact been in use? Here we consider two possibilities: community-based social sanctioning to enforce norms against participation and political efforts to suppress turnout by the Museveni regime.

We find no evidence of community-based social sanctioning of turnout in Kawempe. If anything, Kawempe norms seem to favor participation. In our post-treatment survey, we asked several questions exploring social mechanisms to encourage or discourage turnout. The responses to these questions suggest that Kawempe residents believed their neighbors knew whether or not they voted but were relatively unconcerned about social sanctions for this behavior. To the extent that they feared negative reactions, it was for *not* voting. Thus, 63 per cent said their neighbors knew whether or not they voted but when asked whether their neighbors would treat them positively, negatively or no different if they learned the respondent did not vote, 65 per cent responded that it would not make a difference. For the subset that believed it would make a difference, most believed their neighbors would respond negatively to not voting. These pressures to vote seem particularly strong for older respondents and those who had lived in Kawempe for a long time.³¹

Kawempe residents also report pro-turnout messages from their religious leaders. Although Kawempe has many relatively new residents (more than half of our sample had lived in the community for five years or less), most residents, even newer ones, participate in community life through religious organizations. Over 80 per cent of our sample reported attending church or mosque at least once per week, and many attended multiple times per week. These religious organizations encourage political participation: 58 per cent of our sample reported that religious leaders at their service encouraged them to vote frequently or sometimes; only 16 per cent indicated never experiencing pro-turnout messages from religious leaders. In sum, we see little indication that social norms or community pressure dampened participation. If anything, social pressure operated in the opposite direction, particularly for older, well established Kawempe community members.

If social pressure does not explain our results, what does? We believe the answer lies in efforts by the ruling NRM to discourage turnout, either by actively threatening likely opposition supporters, or more likely through subtle attempts at intimidation that changed the voting calculus of some voters just enough to keep them at home. The ruling NRM and its leader Museveni

³¹It is interesting to note that a small subset, around 7 per cent of the sample, did anticipate negative responses for voting. We explored the correlates of these beliefs. The main predictor is short length of residence in Kawempe, suggesting that newer migrants to the city may feel social pressure to stay out of politics. But we emphasize that this is a small segment of the overall population.

certainly had incentives to discourage turnout in Kawempe. Given its historical support for the opposition, lower turnout there would bolster the NRM's electoral dominance and starve the opposition of one of its few reliable sources of votes.³²

We have no evidence of intentional, centrally directed, turnout punishment in Kampala. Intimidation can be difficult to detect, however. Intimidators have ways to signal their intent to their desired audience without revealing it to others. Moreover, it may only take a modest or even unintentional threat to affect turnout levels. Since voting confers low individual benefits, even small shifts in perceptions about the probability of sanctions may be enough to shift behavior (Driscoll and Hidalgo, 2014). Hence, the absence of overt acts of intimidation is not evidence that some voters did not feel intimidated, and that this intimidation kept them at home.

In fact, ample evidence suggests that many voters felt intimidated during the 2011 Ugandan election. In 2008, more than two years prior to the election, 45 per cent of Kampala's residents polled by the Afrobarometer answered that they personally feared becoming a victim of election related political intimidation or violence.³³ Numbers were similarly high in late 2010 and early 2011. Fears were especially prominent amongst opposition supporters (Conroy-Krutz and Logan, 2012).

Ugandans had good reason to be nervous about election-related violence. The previous election in 2006 saw several instances of such violence. Museveni suppressed demonstrations in Kampala in September 2009 by sending in the police, who shot and killed twenty protestors. Reports of human rights abuses by the army and police increased in the period between the elections (Barkan, 2011). The NRM primaries in summer 2010 featured violence (Conroy-Krutz and Logan, 2012). In interviews we conducted after the election, Kawempe residents complained of intimidation, bribery, rigging and vote stuffing by security forces and NRM representatives.

In this context, Museveni may have been able to discourage turnout in opposition areas *without engaging in overt and conspicuous efforts to do so*. Even if intimidation did not change hearts, minds and votes (Conroy-Krutz and Logan, 2012), it may have kept opposition voters at home.³⁴

If Museveni did attempt to discourage opposition voters from going to the polls, we would expect to see a negative correlation between opposition support and turnout in the 2011 election. We also would expect opposition support to correlate with use of violence and intimidation. Using data collected in a pre-election survey in January and February 2011, we find the level of opposition support positively correlated with expectations of violence, with borderline statistical significance. Moreover, areas with more opposition support had significantly lower turnout levels.³⁵ None of these pieces of evidence offers a 'smoking gun' for politically motivated turnout discouragement, but they paint a coherent picture of an electorate on edge, fearful of the consequences of voting. For anxious voters in Kawempe, any additional information that their turnout decision would be visible may have been enough to keep them at home.

³²The 2011 election involved both presidential and legislative races. We have simplified our discussion in this article by focusing only on the presidential race. It is worth noting that the legislative race in Kawempe was very competitive, featuring seven candidates (four from political parties and three independents). The NRM candidate narrowly lost the race to the Democratic Party (DP) candidate; both won about 33 per cent of the vote. These competitive pressures likely intensified NRM incentives to suppress turnout, conditional on being able to identify opposition supporters.

³³See Afrobarometer Round 4, Uganda.

³⁴We do not mean to imply that Museveni returned to power only or primarily through intimidation. As others have noted, the primary sources of his victory in 2011 probably include: general satisfaction with his provision of services (including new districts), good economic performance, improved security in the North, disorganization and weakness of the opposition, and a massive and expensive election campaign (Conroy-Krutz and Logan, 2012; Juma, 2011). However, intimidation likely played a role in some locales, especially opposition-leaning areas like Kampala.

³⁵The Appendix describes the data and shows full results.

Conclusion

During the 2011 Ugandan general election in an opposition-leaning neighborhood of a coercive single-party dominant state, raising awareness about the use of election ink reduced inked fingers, especially among young and less educated voters. This result is consistent with turnout suppression, supporting our intuition that electoral inking may have undesirable second-order behavioral consequences in some contexts. Kawempe is in many ways unusual in Uganda and our study was small-scale and exploratory. We make no claims these results generalize to all parts of the country. Indeed, our expectation is the effects of inking on turnout are highly context specific. In Museveni strongholds, we would expect inking to have the opposite effect, that is, encouraging turnout. However, we believe similar dynamics and locales such as Kawempe might be found within many other countries.

We hope our findings elicit greater consideration of the largely unquestioned practice of inking in emerging democracies. We do not advocate the whole-scale abandonment of inking in these elections. Ink is a low cost and easy to implement solution to important problems of electoral administration. In many elections, its behavioral effects are likely to be mild and benign. During elections featuring turnout manipulation strategies, however, electoral administrators should consider whether inking facilitates coercion and, if so, whether the risks of using ink outweigh the benefits.

Our results also suggest the outcomes reported in American GOTV studies should be reconsidered. The findings of these studies likely depend on a context in which community norms favor participation and electoral strategies promote turnout. In other contexts, like Kawempe, public revelation of turnout may have different, less benign results.

Finally, our results highlight the importance of broadening the study of political behavior in developing democracies to explicitly consider electoral context. Prior work on turnout in Africa has focused primarily on individual-level factors like education, income and partisanship, often borrowing independent variables from studies of US elections (Bratton, 1999, 2008; Bratton, Mattes, and Gyimah-Boadi, 2005; Isaksson, 2014; Kuenzi and Lambright, 2011, 2007). To truly understand voters in developing democracies, we must look beyond individuals to how electoral practices, institutions, community norms and political strategies interact with individual factors to shape behavior. Our study suggests it is especially important to understand practices and institutions that reveal information about otherwise private political action. We have focused on election ink, but a variety of practices and institutions can reveal such information, including voter files recording information about individual turnout, geographic segregation of politically similar individuals, and violations of ballot secrecy. When politicians can accurately deduce the partisan leanings of voters, they gain access to a range of powerful strategies to shape voter behavior: intimidation, vote buying and turnout manipulation (Kitschelt and Wilkinson, 2007; Shaffer, 2007; Stokes, 2005; Nichter, 2008; Ferree and Long, 2016). We hope our work inspires further theoretical and empirical analysis of the interaction between such practices and institutions and political behavior.

Supplementary Material. Replication data and instructions can be found in Harvard Dataverse at <https://dx.doi.org/10.7910/DVN/LZMEIV> and online appendices at <https://doi.org/10.1017/S0007123418000121>.

Acknowledgements. We gratefully acknowledge the help of Barak Hoffman and Craig McIntosh, who contributed in essential ways to design and/or implementation stages of this project. We also thank David Nickerson, James Fowler and the participants of seminars at University of Notre Dame and Stanford University for their comments. Doreen Lwanga provided expert advice in the field. Daniel Arnon, Inbok Rhee and Danielle Villa provided excellent research assistance. We greatly appreciate James Long, who generously contributed to the design and implementation of this project. This research was funded by the Kellogg Institute for International Studies at the University of Notre Dame.

References

- Adams WC and Smith DJ** (1980) Effects of telephone canvassing on turnout and preferences: a field experiment. *The Public Opinion Quarterly* **44**, 389–395.

- Aker JC, Collier P and Vicente PC (2011) Is information power? Using mobile phones and free newspapers during an election in Mozambique. Available from <http://www.iig.ox.ac.uk/output/presentations/pdfs/iig-E72-CellPhonesElection-Mozambique.pdf> (accessed May 2018).
- Arieli AB and Meier S (2009) Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *American Economic Review* **99**, 544–555.
- Barkan JD (2011) *Uganda: Assessing Risks to Stability*. Washington, DC: Center for Strategic and International Studies.
- Barkan JD (2013) Kenya's 2013 elections: technology is not democracy. *Journal of Democracy* **24**, 156–165.
- BBC News (2008) Tsvangirai rejects 'sham' ballot. <http://news.bbc.co.uk/2/hi/africa/7478399.stm> (accessed February 2013).
- Beaulieu E (2014) *Electoral Protest and Democracy in the Developing World*. New York: Cambridge University Press.
- Becker G and Stigler G (1974) Law enforcement, malfeasance, and the compensation of enforcers. *Journal of Legal Studies* **3**, 1–19.
- Becker GJ (1968) Crime and punishment: an economic approach. *Journal of Political Economy* **76**, 169–217.
- Bochel John M and Denver David T (1972) The impact of the campaign on the result of local government elections. *British Journal of Political Science* **2**, 239–244.
- Bratton M (1999) Political participation in a new democracy: institutional considerations from Zambia. *Comparative Political Studies* **32**, 549–588.
- Bratton M (2008) Poor people and democratic citizenship in Africa. In Krishna A, (ed.) *Poverty, Participation, and Democracy: A Global Perspective*. New York: Cambridge University Press, pp. 28–64.
- Bratton M, Mattes R and Gyimah-Boadi E (2005) *Public Opinion, Democracy, and Market Reform in Africa*. Cambridge: Cambridge University Press.
- Callen M and Long JD (2015) Institutional corruption and election fraud: evidence from a field experiment in Afghanistan. *American Economic Review* **105**, 354–81.
- Callen M, Gibson C, Jung DF and Long JD (2016) Improving electoral integrity with information and communications technology. *Journal of Experimental Political Science* **3**, 4–17.
- Cialdini Robert B. and Trost Melanie R. (1998) *Social influence: social norms, conformity, and compliance*, In Gilbert DT, Fiske ST and Lindzey G, (eds), *The Handbook of Social Psychology*. Boston, Mass: McGraw-Hill, pp. 151–192.
- Cialdini RB and Goldstein NJ (2004) Social influence: compliance and conformity. *Annual Review of Psychology* **55** (Feb.):591–621.
- Cody E (1985) Hondurans elect president today; dispute over election procedure not settled. *The Washington Post* (Nov.), A21.
- Collier P and Vicente PC (2014) Votes and violence: experimental evidence from a Nigerian election. *Economic Journal* **124**, F327–F355.
- Conroy-Krutz J and Logan C (2012) Museveni and the 2011 Ugandan election: did the money matter? *Journal of Modern African Studies* **50**, 625–655.
- Conroy-Krutz J, Moehler DC and Aguilar R (2016) Partisan cues and vote choice in new multiparty systems. *Comparative Political Studies* **49**, 3–35.
- Cox GW and Kousser JM (1981) Turnout and rural corruption: New York as a test case. *American Journal of Political Science* **25**, 646–663.
- Davenport TC, Gerber AS, Green DP, Larimer CW, Mann CB and Panagopoulos C (2010) The enduring effects of social pressure. *Political Behavior* **32**, 423–430.
- Daxecker U (2014) All quiet on election day? International election observation and incentives for pre-election violence in African elections. *Electoral Studies* **34**, 232–243.
- Democracy International (2010) *U.S. Election Observation Mission to the Afghanistan Presidential and Provincial Council Elections 2009*. Technical report. Bethesda, MD: Democracy International.
- Democracy International (2011) *Democracy International Election Observation Mission: Afghanistan Parliamentary Elections 2010*. Technical report. Bethesda, MD: Democracy International.
- Driscoll J and Hidalgo FD (2014) Intended and unintended consequences of democracy promotion assistance to Georgia after the Rose Revolution. *Research and Politics* **1** (Apr.):1–13.
- Electoral Commission of Uganda (2006) Election results. http://www.ec.or.ug/sites/Elec_results/2006_pres_polling.pdf (accessed October 2016).
- Eldersveld SJ (1956) Experimental propaganda techniques and voting behavior. *American Political Science Review* **50**, 154–165.
- Ferree Karen E, Dowd Robert A, Jung Danielle and Gibson Clark C (2018) Replication Data for: Electoral Ink and Turnout in a Partial Democracy, <https://doi.org/10.7910/DVN/LZMEIV>, Harvard Dataverse, V1, UNF:6:ZgvgI4va5tHRnCGpBPqBdA==.
- Ferree KE, Gibson C and Long JD (2014) Voting behavior and electoral irregularities in Kenya's 2013 election. *Journal of East African Studies* **8**, 153–172.
- Ferree KE and Long JD (2016) Gifts, threats, and perceptions of ballot secrecy in African elections. *African Affairs* **115**, 621–645.
- Fieldhouse E, Cutts D, Widdop P and John P (2013) Do impersonal mobilisation methods work? Evidence from a nationwide get-out-the-vote experiment in England. *Electoral Studies* **1**, 113–123.

- Gelb A and Diofasi A** (2016) Biometric elections in poor countries: wasteful or a worthwhile investment. Center for Global Development Working Paper 435.
- Gerber AS and Green DP** (2000) The effects of canvassing, telephone calls, and direct mail on voter turnout. *American Political Science Review* **94**, 653–663.
- Gerber AS and Green DP** (2001) Do phone calls increase voter turnout? A field experiment. *Public Opinion Quarterly* **65**, 75–85.
- Gerber A, Green D and Larimer C** (2008) Social pressure and voter turnout. *American Political Science Review* **102**, 33–48.
- Giné X and Mansuri G** (2011) Together we will: experimental evidence on female voting behavior in Pakistan. World Bank Policy Research Working Paper 5692. <http://ssrn.com/abstract=1871588>.
- Green DP, Gerber AS and Nickerson DW** (2003) Getting out the vote in local elections. *Journal of Politics* **65** (Nov.):1083–1096.
- Grossman G, Humphreys M and Sacremone-Lutz G** (2014) I wld like u WMP to extend electricity 2 our village: on information technology and interest articulation. *American Political Science Review* **108**, 688–705.
- Guan M and Green DP** (2006) Noncoercive mobilization in state-controlled election: an experimental study in Beijing. *Comparative Political Studies* **39**, 1175–1193.
- Habyarimana J, Humphreys M, Posner DN and Weinstein JM** (2007) Why does ethnic diversity undermine public goods provision? *American Political Science Review* **101**, 709–725.
- Habyarimana J, Humphreys M, Posner DN and Weinstein JM** (2009) *Coethnicity: Diversity and the Dilemmas of Collective Action*. New York: Russell Sage Foundation.
- Hyde SD and O'Mahony A** (2010) International scrutiny and pre-electoral fiscal manipulation in developing countries. *Journal of Politics* **72**, 690–704.
- Ichino N and Schündeln M** (2012) Deterring or displacing electoral irregularities? Spillover effects of observers in a randomized field experiment in Ghana. *Journal of Politics* **74**, 292–307.
- Isaksson A-S** (2014) Political participation in Africa: the role of individual resources. *Electoral Studies* **34** (June):244–260.
- Jha PS** (2002) Kashmir: voting amid violence. *World Press Review* **49**, No. 12. www.worldpress.org/Asia/801.cfm (accessed May 2018).
- John P and Brannan T** (2008) How different are telephoning and canvassing? Results from a 'get out the vote' field experiment in the British 2005 General Election. *British Journal of Political Science* **48**, 565–574.
- Juma KS** (2011) Voting behaviour in Uganda since 1996: an investigation into the factors likely to determine voters' choices in the 2011 elections. *African Journal of Political Science and International Relations* **51**, 21–29.
- Jung DF and Long JD** (2018) Social sanctioning, trust, and voter turnout in emerging democracies: evidence from Afghanistan. <http://ssrn.com/abstract=3186835> (accessed May 2018).
- Kitschelt H and Wilkinson SI**, (eds). (2007) *Patrons, Clients, and Politics: Patterns of Democratic Accountability and Political Competition*. Cambridge: Cambridge University Press.
- Kousser MJ** (1974) *The Shaping of Southern Politics: Suffrage Restriction and the Establishment of the One-Party South, 1880–1910*. New Haven, CT: Yale University Press.
- Kuenzi M and Lambright G** (2007) Voter turnout in Africa's multiparty regimes. *Comparative Political Studies* **40**, 665–690.
- Kuenzi M and Lambright G** (2011) Who votes in Africa? An examination of electoral turnout in 10 African countries. *Party Politics* **17**, 767–799.
- Makara S, Rakner L and Svåsand L** (2009) Turnaround: the national resistance movement and the reintroduction of a multiparty system in Uganda. *International Political Science Review* **30**, 185–204.
- Mann Christopher B** (2010) Is there backlash to social pressure? *Political Behavior* **32**, 387–407.
- Matanock A and Staniland P** (Forthcoming) How and why armed groups participate in elections? Perspectives on Politics.
- Meislin RJ** (1982) Rural voters, despite fears, hike for miles. *New York Times* (March 29), A1.
- Michelson MR** (2003) Getting out the Latino vote: how door-to-door canvassing influences voter turnout in rural central California. *Political Behavior* **25**, 247–263.
- Miller RE, Bositis DA and Baer DL** (1981) Stimulating voter turnout in a primary: field experiment with a precinct committeeman. *International Political Science Review* **2**, 445–460.
- Mwenda AM** (2007) Personalizing power in Uganda. *Journal of Democracy* **18**, 23–37.
- 'Move'** (2013) Move to nix indelible ink in Naxal-hit Chhattisgarh villages. *New Indian Express* 6 Nov.
- Nichter S** (2008) Vote buying or turnout buying? Machine politics and the secret ballot. *American Political Science Review* **102**, 19–31.
- Nickerson DW** (2008) Is voting contagious? Evidence from two field experiments. *American Political Science Review* **102**, 49–57.
- Organization for Security and Cooperation in Europe (OSCE)** (2010) *Election Observation Handbook*, 6th edition, Warsaw: Office for Democratic Institutions/Human Rights.
- Ostwald K** (2013) How to win a lost election: malapportionment and Malaysia's 2013 General Election. *The Round Table: The Commonwealth Journal of International Affairs* **102**, 521–532.
- Panagopolous C** (2010) Affect, social pressure, and prosocial motivation: field experiment evidence of the mobilizing effects of pride, shame, and publicizing voting behavior. *Political Behavior* **32**, 369–386.

- Posner RA and Rasmusen EB** (1999) Creating and enforcing norms, with special reference to sanctions. *International Review of Law and Economics* **19**, 369–382.
- Raman S** (2004) India link to Afghan ink stain. BBC News. http://news.bbc.co.uk/2/hi/south_asia/3736590.stm (accessed May 2018).
- Ramirez R** (2005) Giving voice to Latino voters: a field experiment on the effectiveness of a national nonpartisan mobilization effort. *Annals of the American Academy of Political and Social Science* **601**, 66–84.
- Rind B and Benjamin D** (1994) Effects of public image concerns and self-image on compliance. *Journal of Social Psychology* **134**, 19–25.
- Schedler A** (2002) Might cleaning up elections keep people away from the polls? Historical and comparative perspectives. *International Political Science Review* **23**, 69–84.
- Schultz PW** (1999) Changing behavior with normative feedback interventions: a field experiment on curbside recycling. *Basic and Applied Social Psychology* **21**, 25–36.
- Schultz PW, Nolan J, Cialdini R, Goldstein N and Griskevicius V** (2007) The constructive, destructive, and reconstructive power of social norms. *Psychological Science* **18**, 429–434.
- Shaffer FC**, (ed.). (2007) *Elections for Sale: The Causes and Consequences of Vote Buying*. Boulder, Colo: Lynne Rienner Publishers.
- Sinclair B** (2012) *The Social Citizen: Peer Networks and Political Behavior*. Chicago: University of Chicago Press.
- Sjoberg FM** (2014) Autocratic adaptation: the strategic use of transparency and the persistence of election fraud. *Electoral Studies* **33** (Mar.), 233–245.
- Steele A** (2011) Electing displacement: political cleansing in Apartadó, Colombia. *Journal of Conflict Resolution* **55**, 423–445.
- Stokes S** (2005) Perverse accountability: a formal model of machine politics with evidence from Argentina. *American Political Science Review* **99**, 215–326.
- Tangri R and Mwenda AM** (2010) President Museveni and the politics of presidential tenure in Uganda. *Journal of Contemporary African Studies* **28**, 31–49.
- Taubman P** (1982) C.I.A. chief tells of attempt to aid Salvador vote. *New York Times* (July 30), A6.
- Tripp AM** (2010) *Museveni's Uganda: Paradoxes of Power in a Hybrid Regime*. Boulder, Colo: Lynne Rienner Publishers.
- Wattenberg BJ** (1986) The whole world is watching. *Newsweek* (Feb.), 25.
- Weiss M** (2009) Edging toward a new politics in Malaysia: civil society at the gate? *Asian Survey* **19**, 741–758.
- Welsh B** (2013) Malaysia's elections: a step backward. *Journal of Democracy* **24**, 136–150.
- Whatley MA, Webster JM, Smith RH and Rhodes A** (1999) The effect of a favor on public and private compliance: how internalized is the norm of reciprocity? *Basic and Applied Social Psychology* **21**, 251–259.