

Online Appendix

Supplementary materials for the manuscript:

Ethnic Campaign Appeals: To Bond, Bridge, or Bypass?

Includes descriptive and summary statistics, alternative models, supplementary figures, and an overview of the election poster data and codebook.

CONTENTS

Tables

Table A1.	Summary statistics for dependent variables	3
Table A2.	Summary statistics for independent variables	3
Table A3.	Correlation matrix for independent variables	4
Table A4.	OLS model for Figure 3 of the manuscript	5
Table A5.	OLS model that excludes independent and control variables	6
Table A6.	OLS model that uses continuous variables for ethnic groups	7
Table A7.	OLS model with clustering on the constituency	8
Table A8.	OLS model with dummy variables for indigenous group identity	9
Table A9.	OLS model that includes variable for Islamic party support	10
Table A10.	Logit model 1: DV = 1 if ethnic appeal is 50% or more posters	11
Table A11.	Logit model 2: DV = 1 if ethnic appeal is present in any posters	12
Table A12.	Ordered logit model: DV = 1, 2, or 3	13
Table A13.	Tobit model with ll = 0 and ul = 100	14
Table A14.	Logit model: Election poster UOA (N = 1,501)	15
Table A15.	Multilevel mixed-effects model: Election poster UOA (N = 1,501)	16

Figures

Figure A1.	Predicted probabilities of appeals based on models in Table A6	17
Figure A2.	Fractional polynomial plots with the ethnic fractionalization index	18
Figure A3.	Fractional polynomial plots with the polarization index	19

Election poster data

Gathering	Notes on gathering election posters	20
Table A16.	Number of posters, candidates, and constituencies	21
Figure A4.	Map of Indonesia	22
Eligibility	Criteria for selection of posters to code	22
Codebook	Codebook overview and variable definitions	22
Figure A5.	Sample poster	25
Reliability	Intercoder reliability tests	26
Table A17.	Reliability test results	26
Analysis	Dictionary overview	26
Table A18.	Dictionary of words for religious and indigenous identities	27
References	List of references used in this appendix	28

Table A1. Summary statistics for dependent variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Indigenous bonding	246	25.034	39.144	0	100
Indigenous bridging	246	7.643	22.122	0	100
Indigenous bypassing	246	67.324	41.008	0	100
Religious bonding	246	23.446	38.459	0	100
Religious bridging	246	6.602	20.942	0	100
Religious bypassing	246	69.952	40.484	0	100

Table A2. Summary statistics for independent variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Viable indigenous group	246	0.553	0.498	0	1
Viable religious group	246	0.561	0.497	0	1
Indigenous law	246	0.433	0.259	0	0.991
Places of worship	246	1.901	1.592	0.158	11.911
Poverty	246	0.139	0.074	0.022	0.354
Fishing/farming GRDP	246	0.294	0.198	0.001	0.635
Number of candidates	246	6.638	2.302	2	10
Female candidate	246	0.065	0.247	0	1
Population (log)	246	12.874	0.930	11.617	15.394

Note: GRDP = gross regional domestic product.

Table A3. Correlation matrix for independent variables

	Viable indigenous group	Viable religious group	Indigenous law	Places of worship	Poverty	Fishing/farming GRDP	Number of candidates	Female candidate	Population (log)
Viable indigenous group	1.000								
Viable religious group	-0.038	1.000							
Indigenous law	0.123	-0.534	1.000						
Places of worship	0.109	-0.287	0.070	1.000					
Poverty	0.394	-0.252	0.145	0.067	1.000				
Fishing/farming GRDP	0.283	-0.269	0.280	0.274	0.472	1.000			
Number of candidates	-0.291	-0.232	0.114	-0.264	0.147	0.061	1.000		
Female candidate	-0.061	-0.066	-0.033	0.067	-0.053	-0.004	-0.016	1.000	
Population (log)	0.007	0.397	-0.241	-0.136	-0.200	-0.138	-0.142	0.063	1.000

Note: GRDP = gross regional domestic product.

Table A4. Impact of politically viable groups on ethnic bonding and bridging appeals

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	35.24** (4.75)	-12.56** (3.55)	-22.68** (5.67)	-5.33 (5.63)	-3.43 (2.56)	8.77 (6.07)
Viable religious group	-12.24* (5.15)	0.65 (4.04)	11.58^ (6.31)	38.50** (6.28)	-15.66** (4.26)	-22.83** (7.53)
Indigenous law	6.78 (10.78)	-2.49 (4.93)	-4.30 (11.73)	1.17 (12.09)	-3.34 (4.35)	2.18 (12.69)
Places of worship	2.04 (1.63)	-0.84 (1.13)	-1.20 (1.99)	0.03 (1.30)	0.42 (1.23)	-0.45 (1.78)
Poverty	-12.58 (46.53)	-33.41* (13.66)	46.00 (48.76)	38.72 (29.18)	7.03 (16.21)	-45.75 (33.41)
Fishing/farming GRDP	8.17 (13.63)	11.09 (8.60)	-19.26 (15.52)	-7.48 (12.13)	-2.81 (8.41)	10.28 (14.41)
Number of candidates	0.76 (0.99)	0.25 (0.84)	-1.01 (1.25)	0.00 (1.14)	0.15 (0.60)	-0.15 (1.27)
Female candidate	8.32 (8.35)	-6.92* (3.25)	-1.39 (9.73)	14.53 (9.39)	-2.01 (4.20)	-12.53 (9.65)
Population (log)	1.95 (2.26)	0.69 (1.58)	-2.64 (2.69)	-2.56 (2.94)	3.42* (1.55)	-0.85 (3.29)
Intercept	-25.80 (31.27)	8.17 (22.75)	117.63** (37.72)	33.15 (40.73)	-27.08^ (15.85)	93.93* (43.30)
N	246	246	246	246	246	246
R Squared	0.26	0.12	0.11	0.23	0.12	0.10

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the OLS regression model. Robust standard errors are in

Table A5. Impact of politically viable groups on ethnic campaign appeals
OLS Model. It excludes the independent and control variables.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	35.17** (4.08)	-13.77** (2.93)	-21.40** (4.89)	-4.41 (4.42)	-3.39 (2.64)	7.80 (5.04)
Viable religious group	-16.04** (4.42)	2.61 (2.62)	13.44** (5.04)	35.15** (4.00)	-12.64** (2.90)	-22.51** (4.81)
Intercept	14.59** (3.13)	13.79** (3.00)	71.61** (4.21)	6.16* (2.93)	15.57** (3.49)	78.27** (4.40)
N	246	246	246	246	246	246
R Squared	0.25	0.10	0.10	0.21	0.09	0.09

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the OLS regression model. Robust standard errors are in parentheses. $\hat{p} < 0.10$; * $p < 0.05$; ** $p < 0.01$.

Continuous Variables for Candidate Group Size

In the main regressions in Table A4, I used binary variables for viable indigenous and religious groups. An indigenous group was viable (= 1) if the candidate's indigenous group was greater than 50% of the population and nonviable (= 0) if it was less than 50%. A religious group was viable (= 1) if the candidate's religious group was greater than 50% of the population *and the candidate's group was Muslim*. This is because the argument predicts constraints on non-Islamic appeals, so the size of a non-Muslim candidate's religious group should not affect their religious appeals. In alternative specifications in Table A6, I used continuous variables. For viable indigenous group percentage, I used the size of the candidate's indigenous group. For viable religious group percentage, I used the size of the candidate's religious group, *but I set the size for all non-Muslim candidates equal to 0%*, to remain consistent with the argument on the irrelevance of non-Muslim group sizes in relation to religious appeals. See Figure A1 below for the predicted probabilities.

Table A6. Impact of politically viable groups on ethnic bonding and bridging appeals OLS Model. It uses continuous (instead of binary) independent variables.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group %	0.48** (0.06)	-0.15** (0.05)	-0.33** (0.07)	-0.11 (0.08)	-0.03 (0.04)	0.14 [^] (0.08)
Viable religious group %	-0.20** (0.06)	0.01 (0.04)	0.19** (0.07)	0.42** (0.07)	-0.16** (0.05)	-0.26** (0.08)
Indigenous law	-0.13 (10.65)	-1.67 (5.45)	1.80 (11.60)	-0.75 (12.01)	-1.34 (4.19)	2.09 (12.50)
Places of worship	1.14 (1.68)	-0.73 (1.10)	-0.41 (2.04)	0.27 (1.33)	0.44 (1.22)	-0.71 (1.81)
Poverty	-22.83 (47.17)	-34.60* (14.18)	57.42 (49.19)	44.43 (28.45)	6.89 (16.78)	-51.32 (33.41)
Fishing/farming GRDP	13.27 (13.62)	9.50 (8.51)	-22.76 (15.29)	-9.75 (12.08)	-2.54 (8.47)	12.29 (14.14)
Number of candidates	0.39 (1.03)	0.35 (0.82)	-0.74 (1.25)	0.03 (1.15)	0.17 (0.62)	-0.19 (1.27)
Female candidate	8.25 (8.10)	-6.93* (3.14)	-1.31 (9.47)	13.57 (8.83)	-1.59 (4.04)	-11.97 (9.25)
Population (log)	3.52 (2.24)	0.35 (1.67)	-3.87 (2.65)	-2.68 (2.94)	3.23* (1.52)	-0.55 (3.25)
Intercept	-42.96 (31.15)	13.57 (23.96)	129.39** (37.35)	38.31 (40.93)	-26.37 [^] (15.66)	88.07* (43.20)
N	246	246	246	246	246	246
R Squared	0.27	0.11	0.13	0.22	0.11	0.10

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the OLS regression model. Robust standard errors are in

Clustering on District

One possible issue with the data concerns how the posters were gathered from electoral districts across Indonesia. If candidates in the same electoral district shared a predisposition to appeal to voters in particular ways, the standard errors might have a downward bias. In an alternative specification, I corrected the standard errors by clustering on the electoral district.

Table A7. Impact of politically viable groups on ethnic campaign appeals
OLS Model. It includes clustering on the constituency. There were 49 constituencies.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	35.24** (4.81)	-12.56** (3.47)	-22.68** (5.80)	-5.33 (7.01)	-3.43 (2.42)	8.77 (7.24)
Viable religious group	-12.24* (4.99)	0.65 (3.88)	11.58* (5.75)	38.50** (7.86)	-15.66** (4.67)	-22.83* (8.55)
Indigenous law	6.78 (10.36)	-2.49 (5.01)	-4.30 (11.74)	1.17 (14.12)	-3.34 (5.43)	2.18 (14.80)
Places of worship	2.04 (1.34)	-0.84 (0.72)	-1.20 (1.45)	0.03 (0.88)	0.42 (0.90)	-0.45 (1.28)
Poverty	-12.58 (39.64)	-33.41* (16.43)	46.00 (47.90)	38.72 (41.70)	7.03 (23.11)	-45.75 (52.04)
Fishing/farming GRDP	8.17 (13.69)	11.09 (8.83)	-19.26 (17.16)	-7.48 (15.72)	-2.81 (9.02)	10.28 (16.73)
Number of candidates	0.76 (1.00)	0.25 (0.71)	-1.01 (1.25)	0.00 (1.23)	0.15 (0.62)	-0.15 (1.39)
Female candidate	8.32 (7.34)	-6.92* (3.32)	-1.39 (8.89)	14.53 (8.90)	-2.01 (4.24)	-12.53 (8.79)
Population (log)	1.95 (2.55)	0.69 (1.70)	-2.64 (3.29)	-2.56 (2.69)	3.42** (1.17)	-0.85 (2.77)
Intercept	-25.80 (35.59)	8.17 (22.24)	117.63* (44.56)	33.15 (40.42)	-27.08^ (13.49)	93.93* (40.95)
N	246	246	246	246	246	246
R Squared	0.26	0.12	0.11	0.23	0.12	0.10

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the OLS regression model. Robust standard errors are in parentheses. ^ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$.

Dummy Variables for Indigenous Groups

A second possible issue was that candidates from particular indigenous or religious groups may have a greater predisposition to appeal to their group. Although I had already controlled for ethnic attachment in the district, as a further check I also controlled for indigenous groups by including dummy variables for each of the 34 different indigenous groups with which candidates were associated. I could not do the same for religious groups due to the high correlation between being a Muslim candidate and being from a viable religious group.

Table A8. Impact of politically viable groups on ethnic campaign appeals
OLS Model. It includes dummy variables for indigenous groups. The coefficients and standard errors for indigenous groups are not shown.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	31.71** (6.90)	-15.63* (6.82)	-16.08^ (9.32)	4.12 (9.53)	-5.93 (3.64)	1.81 (10.03)
Viable religious group	-4.77 (9.16)	0.35 (13.07)	4.42 (14.42)	63.86** (13.38)	-31.29** (9.41)	-32.57^ (17.11)
Indigenous law	-16.15 (21.56)	17.10 (13.99)	-0.95 (24.16)	-14.31 (20.37)	-7.92 (9.11)	22.22 (20.97)
Places of worship	0.13 (1.76)	-1.70 (1.25)	1.57 (2.08)	-0.15 (2.39)	-0.76 (0.78)	0.91 (2.43)
Poverty	-27.71 (106.37)	-74.60 (56.46)	102.31 (115.34)	75.80 (91.11)	44.06 (35.28)	-119.86 (94.08)
Fishing/farming GRDP	21.97 (21.85)	7.79 (14.55)	-29.76 (25.49)	3.66 (18.66)	0.70 (13.39)	-4.36 (22.68)
Number of candidates	1.13 (1.39)	-0.34 (1.26)	-0.79 (1.77)	0.67 (1.73)	0.64 (0.52)	-1.31 (1.79)
Female candidate	3.59 (10.30)	-2.95 (3.43)	-0.64 (11.49)	13.23 (8.84)	-1.58 (3.57)	-11.65 (8.48)
Population (log)	1.63 (2.93)	2.46 (1.66)	-4.09 (3.31)	-7.02^ (3.91)	1.61 (1.17)	5.41 (3.99)
Intercept	-31.11 (41.98)	-22.50 (29.26)	153.61** (50.33)	104.15^ (54.72)	3.25 (16.95)	-7.41 (56.11)
N	246	246	246	246	246	246
R Squared	0.34	0.39	0.26	0.40	0.38	0.34

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the OLS regression model. Robust standard errors are in parentheses. ^ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$.

Influence of Supporting Political Party

These models include the variable of Islamic party support, which is equal to 1 if a candidate is supported by at least one Islamic party. Most regional head candidates were supported by more than one political party. These models test an alternative argument that political party support is associated with a candidate's religious appeals.

Table A9. Impact of politically viable groups on ethnic campaign appeals
OLS Model. It includes a binary variable "Islamic party support," which is equal to 1 if a candidate is supported by at least one Islamic party.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	33.97** (5.01)	-12.62** (3.75)	-21.35** (5.84)	-6.86 (6.09)	-3.26 (2.73)	10.13 (6.50)
Viable religious group	-15.29** (5.77)	-1.20 (3.94)	16.48* (6.63)	39.74** (6.97)	-15.76** (4.50)	-23.99** (8.20)
Islamic party support	-4.71 (4.91)	-0.46 (3.47)	5.16 (5.88)	3.03 (6.34)	1.52 (3.05)	-4.55 (6.68)
Indigenous law	0.95 (11.15)	-6.53 (4.60)	5.58 (11.91)	3.30 (13.11)	-2.45 (4.82)	-0.85 (13.76)
Places of worship	1.49 (1.68)	-0.69 (1.16)	-0.81 (2.08)	-0.25 (1.31)	0.43 (1.25)	-0.18 (1.80)
Poverty	-53.18 (59.12)	-41.14* (16.23)	94.32 (61.98)	76.16* (38.41)	19.30 (24.47)	-95.46* (47.30)
Fishing/farming GRDP	19.03 (14.76)	13.81 (8.73)	-32.84* (16.40)	-11.47 (13.21)	-3.96 (9.50)	15.43 (16.04)
Number of candidates	0.59 (1.05)	0.01 (0.86)	-0.60 (1.30)	-0.42 (1.23)	0.16 (0.61)	0.26 (1.34)
Female candidate	5.42 (9.07)	-6.52^ (3.58)	1.10 (10.20)	19.33^ (10.97)	0.80 (4.66)	-20.13^ (10.48)
Population (log)	0.14 (2.21)	1.52 (1.67)	-1.66 (2.67)	-2.94 (3.24)	2.29^ (1.36)	0.65 (3.47)
Intercept	8.86 (30.60)	1.27 (24.28)	89.87* (37.80)	36.86 (44.69)	-14.51 (14.71)	77.65^ (46.40)
N	213	213	213	213	213	213
R Squared	0.28	0.12	0.15	0.25	0.12	0.12

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the OLS regression model. Robust standard errors are in

Logit and Tobit Models

A fourth potential issue was that many candidates had values of 0 or 100 for the different types of ethnic appeals, resulting in a non-normal distribution of the dependent variables. To address these concerns, I first ran logit and ordered models using different approaches to dichotomize the dependent variables. Second, I used a tobit model to take into account the limited nature of the dependent variable, with a floor of 0 and a ceiling of 100.

Table A10. Impact of politically viable groups on ethnic campaign appeals
Logit Model 1. The DV equals 1 if there are ethnic appeals in 50% or more of a candidate's posters, otherwise the DV equals 0.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	2.87** (0.58)	-2.24** (0.81)	-1.29** (0.39)	-0.47 (0.44)	-1.81 [^] (0.96)	0.76* (0.37)
Viable religious group	-0.66 (0.56)	0.17 (0.66)	0.60 (0.41)	3.74** (0.83)	-3.24** (0.94)	-1.16* (0.46)
Indigenous law	0.27 (0.75)	-1.59 (1.30)	-0.11 (0.67)	0.30 (0.80)	-0.28 (1.96)	-0.18 (0.73)
Places of worship	0.11 (0.13)	-0.28 (0.26)	-0.10 (0.10)	0.04 (0.15)	0.08 (0.24)	0.01 (0.12)
Poverty	-1.31 (2.38)	-26.40** (9.59)	1.66 (2.37)	4.54 (4.10)	8.34* (3.44)	-3.14 (2.21)
Fishing/farming GRDP	1.03 (1.21)	5.76** (2.03)	-0.48 (0.97)	-0.63 (1.29)	0.97 (1.61)	1.28 (0.93)
Number of candidates	0.01 (0.10)	0.18 (0.14)	-0.06 (0.08)	-0.04 (0.09)	0.08 (0.17)	0.03 (0.08)
Female candidate	0.59 (0.66)	-	-0.24 (0.56)	1.41 [^] (0.82)	-0.29 (1.05)	-0.72 (0.54)
Population (log)	0.03 (0.20)	0.07 (0.34)	-0.05 (0.18)	-0.24 (0.18)	0.88** (0.30)	-0.05 (0.18)
Intercept	-3.69 (2.80)	-1.61 (4.57)	2.71 (2.62)	-1.10 (2.42)	-14.04** (4.62)	2.04 (2.32)
N	246	230	246	246	246	246
Pseudo R ²	0.25	0.23	0.08	0.25	0.23	0.08
Log Likelihood	-108.00	-50.81	-132.96	-103.06	-51.83	-130.80

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the logit regression model. Robust standard errors are in parentheses. [^] $p < 0.10$; * $p < 0.05$; ** $p < 0.01$.

Table A11. Impact of politically viable groups on ethnic campaign appeals
 Logit Model 2. The dependent variable equals 1 if one or more ethnic appeals are present in any of a candidate's posters; otherwise the DV equals 0.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	2.50** (0.46)	-2.54** (0.66)	-1.39** (0.47)	-0.19 (0.36)	0.31 (0.55)	0.51 (0.43)
Viable religious group	-1.00* (0.45)	0.21 (0.48)	0.48 (0.48)	2.48** (0.49)	-2.17** (0.68)	-1.92** (0.56)
Indigenous law	-0.02 (0.67)	-0.84 (0.93)	-1.34^ (0.79)	0.29 (0.67)	-1.06 (1.11)	-0.36 (0.79)
Places of worship	0.01 (0.11)	-0.28^ (0.16)	-0.16 (0.13)	-0.04 (0.11)	0.08 (0.13)	-0.07 (0.15)
Poverty	-3.78 (2.32)	-14.05* (5.86)	-0.51 (2.53)	1.49 (2.67)	-2.45 (3.13)	-6.45* (2.53)
Fishing/farming GRDP	0.47 (1.07)	2.94^ (1.53)	-0.71 (1.05)	-0.48 (0.97)	0.07 (1.31)	1.30 (0.97)
Number of candidates	0.02 (0.09)	0.18^ (0.10)	-0.09 (0.10)	0.00 (0.08)	0.27* (0.11)	0.01 (0.09)
Female candidate	0.33 (0.64)	-0.49 (1.04)	0.61 (0.75)	0.95 (0.65)	0.09 (0.59)	-0.63 (0.64)
Population (log)	0.27 (0.17)	0.48* (0.23)	-0.10 (0.20)	-0.05 (0.16)	0.69* (0.33)	-0.03 (0.19)
Intercept	-4.86* (2.47)	-6.70* (3.37)	5.19^ (2.98)	-1.63 (2.24)	-11.10* (4.83)	3.70 (2.45)
N	246	246	246	246	246	246
Pseudo R ²	0.20	0.28	0.14	0.18	0.16	0.10
Log Likelihood	-128.24	-80.16	-105.23	-129.25	-87.92	-107.94

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the Logit regression model. Robust standard errors are in parentheses. ^ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$.

Table A12. Impact of politically viable groups on ethnic campaign appeals
 Ordered Logit Model. The dependent variable equals 1 if there is no poster with the ethnic appeal; 2 if some posters have the ethnic appeal; and 3 if all posters have the ethnic appeal.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	2.46** (0.44)	-2.46** (0.63)	-1.05** (0.30)	-0.25 (0.36)	0.25 (0.53)	0.09 (0.30)
Viable religious group	-1.03* (0.44)	0.25 (0.45)	0.58^ (0.32)	2.51** (0.49)	-2.13** (0.65)	-1.03** (0.38)
Indigenous law	0.53 (0.61)	-0.90 (0.99)	-0.61 (0.59)	0.07 (0.70)	-0.86 (1.09)	0.56 (0.66)
Places of worship	0.05 (0.13)	-0.29 (0.18)	-0.05 (0.11)	-0.06 (0.12)	0.09 (0.14)	0.00 (0.10)
Poverty	-1.51 (2.52)	-15.78* (6.26)	2.44 (2.68)	2.32 (2.75)	-1.79 (2.93)	0.27 (2.01)
Fishing/farming GRDP	0.21 (1.06)	3.07* (1.44)	-0.52 (0.79)	-0.39 (0.86)	-0.12 (1.24)	-0.01 (0.73)
Number of candidates	0.01 (0.08)	0.16^ (0.09)	-0.09 (0.07)	0.00 (0.07)	0.24* (0.10)	-0.08 (0.06)
Female candidate	0.20 (0.54)	-0.53 (1.01)	0.27 (0.49)	0.94 (0.60)	-0.02 (0.52)	-0.76^ (0.43)
Population (log)	0.27^ (0.14)	0.34 (0.21)	-0.29* (0.13)	-0.09 (0.15)	0.67* (0.32)	-0.09 (0.15)
Constant cut 1	5.30* (2.06)	4.56 (3.05)	-6.24** (1.82)	1.23 (2.01)	10.79* (4.61)	-3.58^ (1.91)
Constant cut 2	6.64** (2.07)	6.63* (3.21)	-4.74** (1.80)	2.47 (2.01)	12.92** (4.63)	-2.16 (1.91)
N	246	246	246	246	246	246
Pseudo R ²	0.17	0.23	0.05	0.14	0.13	0.05
Log Likelihood	-184.38	-101.09	-239.48	-185.78	-104.95	-234.93

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the Ordered Logit regression model. Robust standard errors are in parentheses. ^ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$.

Table A13. Impact of politically viable groups on ethnic campaign appeals
Tobit Model. The lower limit (i.e., left-censoring) is set at 0 and the upper limit (i.e.,
right-censoring) at 100 for each DV.

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	172.71** (32.09)	-98.06** (25.84)	-70.69** (20.17)	-14.90 (25.81)	6.73 (22.06)	14.17 (20.22)
Viable religious group	-67.11* (32.00)	11.27 (22.22)	37.56^ (22.56)	192.58** (37.55)	-103.29** (28.16)	-75.05** (24.22)
Indigenous law	37.05 (47.64)	-61.37 (52.23)	-32.02 (38.37)	-2.15 (49.24)	-31.06 (46.78)	28.62 (40.56)
Places of worship	3.76 (8.20)	-12.36 (8.24)	-3.07 (6.16)	-4.31 (9.42)	3.86 (6.19)	-1.14 (6.71)
Poverty	-101.71 (161.67)	-814.33* (324.37)	159.31 (137.64)	138.17 (212.79)	-54.15 (142.93)	-42.75 (153.52)
Fishing/farming GRDP	41.51 (65.03)	147.62* (63.70)	-46.63 (48.96)	-17.61 (70.55)	-19.29 (51.17)	11.35 (52.90)
Number of candidates	0.94 (5.72)	7.33 (4.48)	-4.79 (4.19)	0.32 (5.58)	7.77^ (4.55)	-3.72 (4.34)
Female candidate	20.74 (42.40)	-19.11 (35.45)	10.92 (33.64)	73.36^ (43.36)	-11.82 (35.37)	-49.15 (33.99)
Population (log)	18.78 (12.59)	8.97 (10.44)	-15.93^ (9.56)	-8.81 (11.95)	27.21* (11.58)	-5.82 (9.83)
Intercept	-386.77* (181.11)	-118.03 (146.41)	366.45** (134.86)	-65.17 (163.35)	-430.05* (171.14)	241.11^ (137.55)
N	246	246	246	246	246	246

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the Tobit regression model. ^ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$.

Using the Poster as the Unit of Analysis

As a further robustness check, I reran the regressions using each individual poster, rather than the candidate's poster campaign, as the unit of analysis. As a result, the dependent variables were binary instead of continuous. Logit models were used in Table A14 and mixed-effects logistic models were used in Table A15.

Table A14. Impact of politically viable groups on ethnic campaign appeals
Logit Model. It uses an election poster as the unit of analysis (N = 1,501)

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	1.45** (0.16)	-2.03** (0.27)	-0.74** (0.15)	-0.48** (0.18)	-0.65 (0.45)	0.66** (0.15)
Viable religious group	-1.02** (0.21)	-1.11** (0.33)	1.02** (0.18)	3.38** (0.32)	-5.11** (0.53)	-0.48* (0.20)
Indigenous law	-0.61^ (0.32)	-5.40** (1.19)	1.25** (0.33)	0.18 (0.37)	-3.26* (1.34)	0.89* (0.39)
Places of worship	-0.09 (0.07)	-0.15 (0.15)	0.06 (0.07)	-0.01 (0.10)	-0.10 (0.17)	0.02 (0.07)
Poverty	-8.15** (1.83)	-10.81** (3.54)	8.91** (1.89)	5.53** (1.80)	8.46** (2.18)	-4.75** (1.38)
Fishing/farming GRDP	2.96** (0.47)	1.86** (0.71)	-2.29** (0.44)	0.06 (0.52)	-0.30 (0.90)	0.38 (0.38)
Number of candidates	-0.07* (0.03)	0.16** (0.06)	-0.03 (0.03)	0.09* (0.04)	0.02 (0.08)	-0.01 (0.03)
Female candidate	0.99** (0.22)	1.06** (0.33)	-1.20** (0.24)	1.33** (0.25)	-0.29 (0.50)	-0.85** (0.21)
Population (log)	-0.10 (0.07)	0.44** (0.13)	-0.12^ (0.06)	-0.15* (0.08)	1.11** (0.18)	-0.16* (0.07)
Intercept	1.05 (0.93)	-5.27** (1.65)	1.08 (0.82)	-2.88** (0.96)	-14.62** (3.13)	2.98** (0.86)
N	1,501	1,501	1,501	1,501	1,501	1,501
Pseudo R ²	0.18	0.17	0.09	0.18	0.36	0.05
Log Likelihood	-712.17	-415.67	-901.69	-732.66	-258.61	-926.63

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the logit regression model. Robust standard errors are in parentheses. ^ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$.

Table A15. Impact of politically viable groups on ethnic campaign appeals
Multilevel Mixed-Effects Logistic Models. Each model uses an election poster as the
unit of analysis (N=1,501) with random intercepts for candidates (candidate ID).

	Indigenous appeals			Religious appeals		
	Bond 1	Bridge 2	Bypass 3	Bond 4	Bridge 5	Bypass 6
Viable indigenous group	4.92** (0.84)	-3.33** (0.77)	-1.89** (0.51)	-0.80 (0.74)	-0.45 (0.73)	0.88 (0.55)
Viable religious group	-2.21* (0.89)	0.33 (0.69)	1.20* (0.57)	5.76** (1.07)	-4.21** (0.91)	-2.09** (0.67)
Indigenous law	0.71 (1.25)	-2.47 (1.79)	-0.37 (0.98)	0.42 (1.39)	-1.11 (1.69)	0.41 (1.11)
Places of worship	0.10 (0.24)	-0.28 (0.26)	-0.10 (0.17)	-0.07 (0.30)	0.06 (0.22)	-0.03 (0.19)
Poverty	-6.15 (4.47)	-23.17* (10.18)	6.98^ (3.63)	8.78 (6.37)	3.71 (4.69)	-5.42 (4.20)
Fishing/farming GRDP	2.31 (1.67)	4.77* (1.95)	-2.10^ (1.23)	-0.43 (2.02)	-0.48 (1.63)	0.39 (1.41)
Number of candidates	-0.01 (0.14)	0.22 (0.14)	-0.12 (0.10)	0.01 (0.16)	0.12 (0.14)	-0.06 (0.12)
Female candidate	1.14 (1.06)	-0.01 (1.05)	-0.34 (0.83)	2.10^ (1.15)	-0.37 (1.07)	-1.28 (0.93)
Population (log)	0.32 (0.31)	0.25 (0.32)	-0.34 (0.23)	-0.29 (0.31)	0.86* (0.37)	-0.18 (0.25)
Candidate ID	10.76** (3.11)	4.48** (1.57)	6.28** (1.48)	13.76** (4.35)	4.85** (1.81)	9.57** (2.34)
Intercept	-9.07* (4.42)	-5.08 (4.44)	6.92* (3.27)	-3.95 (4.16)	-14.25** (5.25)	5.91^ (3.52)
N	1,501	1,501	1,501	1,501	1,501	1,501
Number of groups	246	246	246	246	246	246
Log Likelihood	-480.41	-348.91	-684.54	-489.88	-221.27	-635.17

Note: Results of regression analyses for independent variables (rows) and dependent variables (columns). Entries are coefficients from the Logit regression model. Robust standard errors are in parentheses. ^ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$.

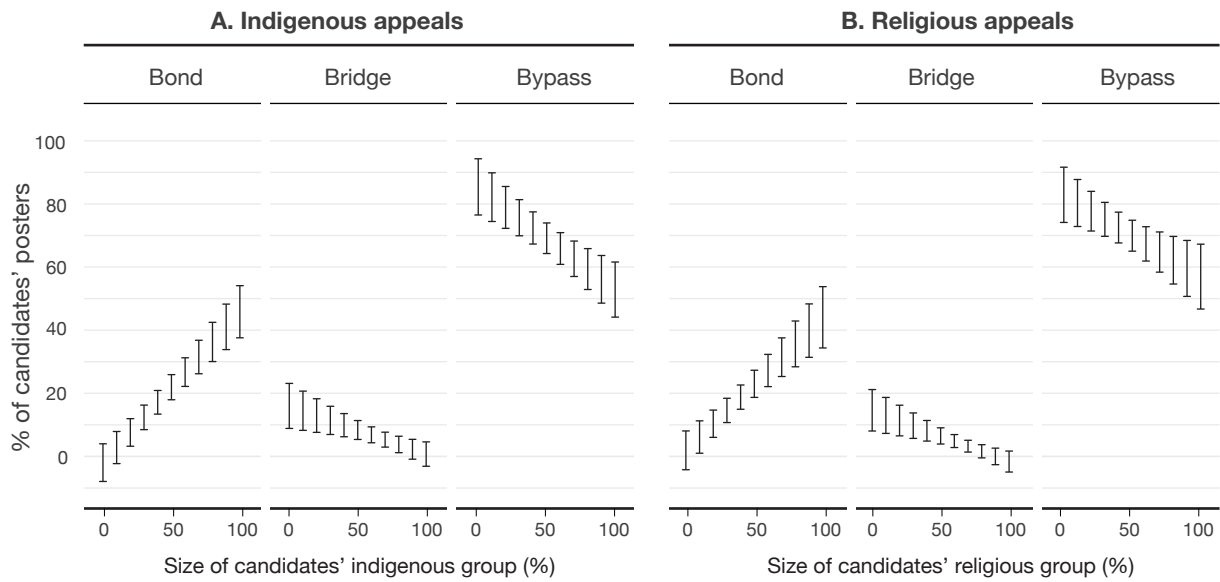


Figure A1. Predicted probabilities of appeals by candidates who were members of viable versus nonviable ethnic groups. This figure uses continuous variables for the size of candidate groups (based on the models in Table A6).

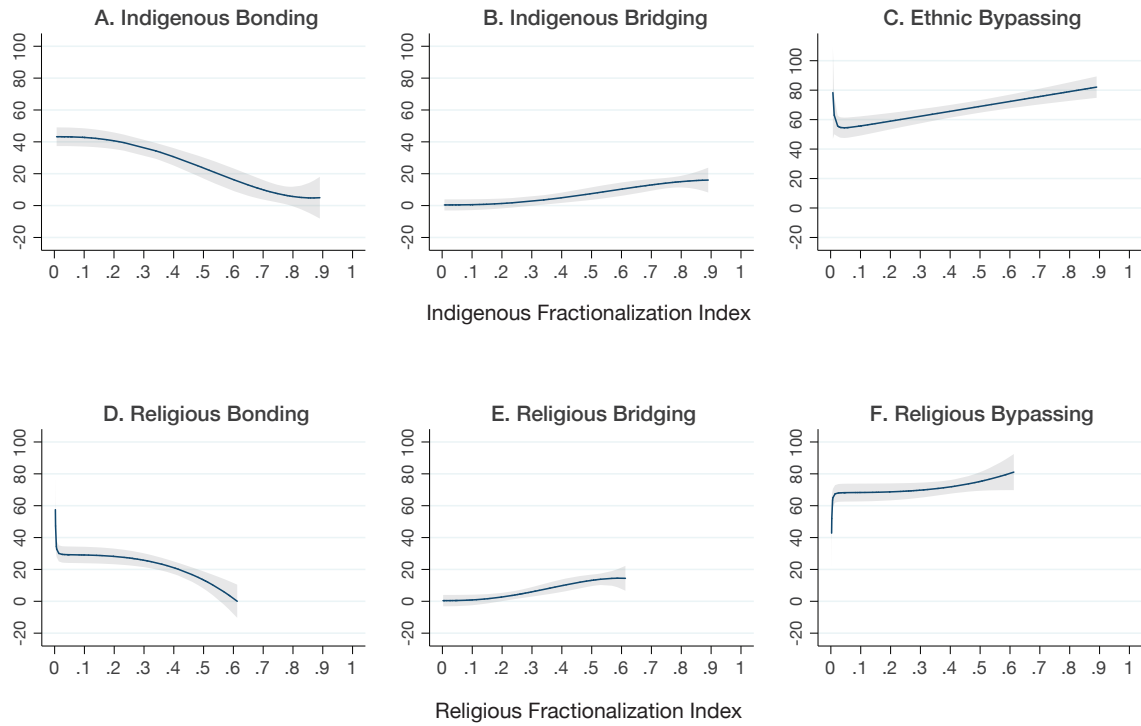


Figure A2. Fractional polynomial plots of ethnic bonding, bridging, and bypassing appeals based on the ethnic fractionalization index. The data were transformed into a fractional polynomial plot using Stata 14. The light gray shading around the lines represents 90% confidence intervals. The patterns are consistent with the variation in appeals across the size of ethnic groups in Figure 6 of the manuscript.

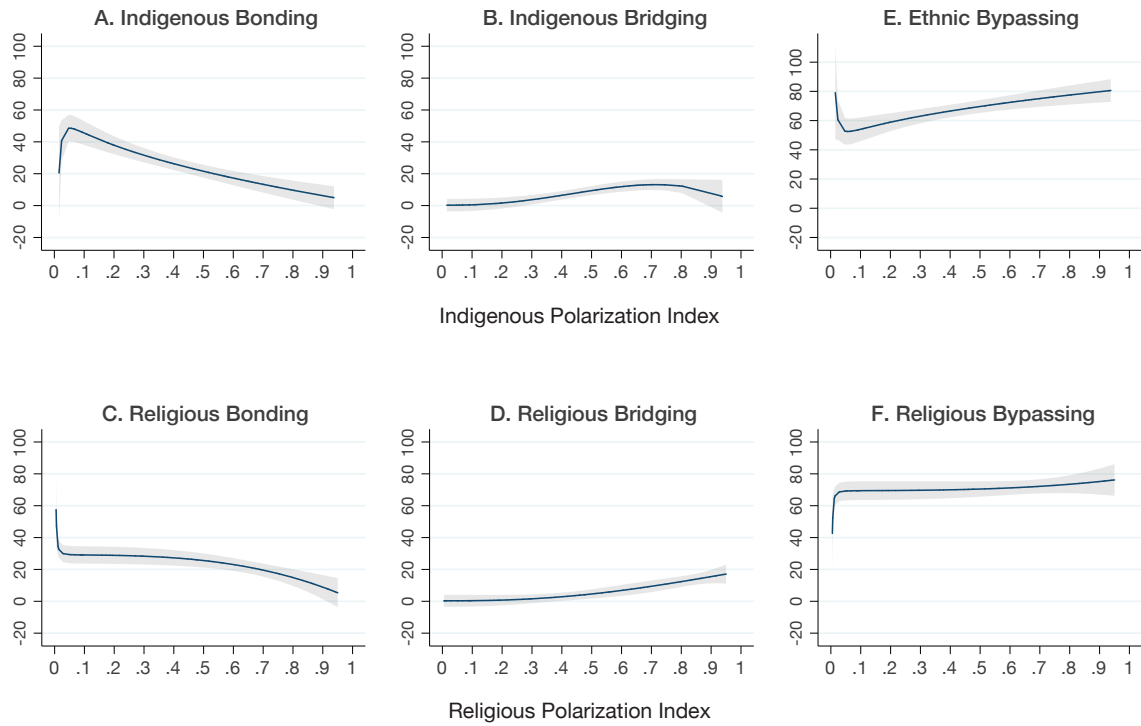


Figure A3. Fractional polynomial plots of ethnic bonding, bridging, and bypassing appeals based on the ethnic polarization index (Reynal-Querol, 2002). The data were transformed into a fractional polynomial plot using Stata 14. The light gray shading around the lines represents 90% confidence intervals.

Election poster data

In the following discussion, I present methodological notes on gathering of election posters, the criteria for poster eligibility, a list of the coded variables, and the classifications of posters. The complete codebook for the election poster data can be found at my website.

Gathering Posters

Posters from candidates competing in regional head elections were photographed between 2010 and 2012. During this time, regional head elections took place on a rolling basis across the country. Regional head elections are executive elections for governors, mayors, and regents for the second (provincial) and third (district) tiers of government. Regional head elections were introduced on a rolling basis across districts in 2005. By 2010, the first five-year term for many regional heads expired and new elections began in various provinces and districts.

During 2010, an email was sent to SurveyMETER researchers, inviting them to photograph election posters. SurveyMETER is an Indonesian nonprofit research institution that has provided data collection, analysis, and research services over the last 15 years. They have been responsible for gathering data for several iterations of the RAND Corporation's longitudinal household surveys, known as the Indonesian Family Life Survey (IFLS). SurveyMETER researchers are spread out across Indonesia, in both urban and rural areas, and gather data for nationally representative samples. The dataset of regional head posters needed to be supplemented, however, because SurveyMETER researchers were not available in all districts where elections were being held. I recruited from my personal network of researchers to photograph regional head election posters in regions where they were working between 2010 and 2012. I also photographed posters during numerous of regional head elections over the same time period in North Sumatra, Central Java, and Maluku. All these photographs were added to the dataset.

Figure A3 presents a map of the provinces where posters were photographed, while Table A16 lists the provinces. The table also includes the number and proportion of constituencies in each province where posters were photographed. Finally, it lists the number of posters and candidates by province. The total population of these 13 provinces (out of 33 in Indonesia) was 121.2 million, or more than half the national population. On average, election posters were photographed in 20% of constituencies in each province. In each constituency covered, posters from all the candidates were photographed. This round of regional head elections was held on a rolling basis across 503 constituencies over the course of several years, so not all constituencies had elections during the two years of fieldwork.

I cannot report a precise proportion of candidates from this round of regional head elections whose posters are contained in the dataset. However, all candidates competing in 49 constituencies are included, and there were 503 regional head constituencies in Indonesia at that time. Ethnically diverse districts tend to have more candidates competing, and the dataset has a larger proportion of ethnically diverse constituencies. Therefore, I can conservatively state that 10% of all Indonesian regional head candidates in this round of elections have posters in the dataset.

Although the number of posters gathered was sizable, the sampling approach was not designed to be representative of Indonesia as a whole. Rather, efforts were made to photograph posters across constituencies with varying degrees of indigenous and religious diversity. This allowed me to more effectively analyze how the ethnic identities of candidates and the constituencies' ethnic demographics affected campaign appeals. A representative sample would have had a much larger proportion of posters from constituencies with largely Muslim and Javanese populations.

Table A16. Numbers of posters, candidates, and constituencies

Provinces			Const. with posters		Posters	Candidates	
ID	Name	Pop.	Const.	(#)			(%)
1200	North Sumatra	13.0	33	15	45%	783	91
1300	West Sumatra	4.8	19	4	21%	112	19
1700	Bengkulu	1.7	10	1	10%	2	2
3300	Java Central	32.4	35	5	14%	231	17
3400	Yogyakarta	3.5	5	2	40%	51	9
3500	Java East	37.5	38	3	8%	51	16
5100	Bali	3.9	20	2	10%	8	4
5300	East Nusa Tenggara	4.7	21	5	24%	51	35
6100	West Kalimantan	4.4	14	1	7%	5	3
6400	East Kalimantan	3.6	14	2	14%	25	8
7100	North Sulawesi	2.3	15	3	20%	21	12
7300	South Sulawesi	8.0	24	5	21%	71	22
8100	Maluku	1.5	11	1	9%	90	8
		121.2	259	49		1501	246

Note: Posters were gathered from these 13 provinces. At the time of research, Indonesia had 33 provinces. Population (Pop.) is in millions. Const. = Constituency.



Figure A4. Map of Indonesia highlighting where regional head posters were gathered.

Poster Eligibility

After the posters were photographed, they were processed in professional photography archiving software (Adobe Lightroom). First, they were sorted by party and candidate. Each photograph was cropped to contain a single election poster, and the set of posters was digitally enhanced for readability. Next, irrelevant and duplicate posters were excluded before coding.

1. *Irrelevant posters:* Some photos were taken by mistake, either because they were left over from a previous election or advertised a product (such as a cell phone or noodles), not a candidate.
2. *Duplicate posters:* I considered posters with the same design, used by the same candidate in different geographic areas, to be duplicates. Some researchers included duplicate posters among their photographs, but others did not. To avoid possible bias, I retained just one unique design of each election poster in the dataset.

Codebook Overview

The development of the codebook and the interpretation of the election posters were undertaken during fieldwork in Indonesia. The coding protocol, interpretation issues, and some preliminary results were presented on two occasions in Jakarta—to a general audience at the Freedom Institute and to a panel of experts at the Center for Strategic and International Studies. The feedback received there contributed to revisions of the coding and interpretations.

The imagery in each poster was coded by hand in Extensis Portfolio, an archiving software, and Adobe Lightroom. Afterwards, text transcriptions from the posters were machine-coded for particular words related to religion and indigeneity, using Yoshi Coder and Stata software. Below is a list of variables coded for each election poster for this project.

I. Index information

1. *Poster image name*: The name of the poster image file in the software.
2. *Poster number*: Candidates had more than one poster design in the dataset. Each unique poster design for a candidate got a number beginning with 1, then 2 etc.
3. *Candidate number*: A unique number for each regional head candidate team in a constituency. It is the number on the ballot for the candidate team.
4. *Constituency number*: Specific constituency number for each election. These are the administrative codes for districts and provinces. They are assigned by the Central Bureau of Statistics (Badan Pusat Statistik, BPS).
5. *Province number*: Specific province number for where the election was held. This code is assigned by the BPS.
6. *Election*: The type of election in which the candidate shown in the poster was competing, either district or provincial.
7. *Number of candidates*: This is the number of candidates on the poster, either 1 (head candidate or deputy candidate) or 2 (head and deputy candidates).
8. *Candidate 1 name*: The name of the head or deputy candidate on the poster, if there is only one candidate on the poster. If both the head and deputy candidates are on the poster, candidate 1 is the head candidate.
9. *Candidate 2 name*: When the head candidate and deputy candidates are on the poster, candidate 2 is the deputy candidate.
10. *Gender 1*: This applies to the first candidate, and was coded as male or female.
11. *Gender 2*: This applies to the second candidate on the poster.

II. Candidate clothing

1. *Clothing 1*: The style or type of clothing for the first candidate on the poster (e.g., Islamic, suit and tie, indigenous Javanese).
2. *Clothing 2*: The style or type of clothing for the second candidate on the poster.
3. *Political Party clothing 1*: Whether the first candidate wore official party clothing, used the party logo on their clothing, and/or used the party color prominently in their clothing (e.g. a red suit when the party color is red).
4. *Political Party clothing 2*: Whether the second candidate wore party colors or party logos.
5. *Headdress 1*: The style of headdress for the first candidate (e.g., jilbab, turban, ethnic Acehnese headdress).
6. *Headdress 2*: The style of headdress for the second candidate.
7. *Cloth accessory 1*: Any cloth accessory held by the first candidate (e.g., *sorban* a turban cloth).

8. Cloth accessory 2: Any cloth accessory held by the second candidate.

III. Imagery

1. *Supporting institution*: Name of the institution supporting or endorsing the candidate on the poster. Candidates often got endorsements (often using logos) from a range of groups and actors, including local businesses and associations representing indigenous, religious, occupational, and youth groups, appeared on posters.
2. *Supporter identity*: Identity category of the institution supporting or endorsing the candidate (e.g., Islamic, Javanese).
3. *Political Party support*: Presence and prominence of support for regional heads from political parties. Small party logo(s) are coded as “discrete”, large logos and presence of party leaders is coded as “prominent”. Discrete means you could easily miss the party support if you looked at the poster for a few seconds. Prominent means that it is hard to miss the fact that a particular party or parties are supporting the candidate.
4. *Political Party logo or flag*: Presence of the party logo or a party flag in the background of the poster.
5. *Elite image*: Presence and type of any elite image in the poster (e.g., Islamic leader, indigenous leader).
6. *Other imagery*: Any other images, signs, or symbols on the poster (e.g., Islamic images such as a mosque, or indigenous images such as a traditional Minangkabau house).

IV. Textual content

1. *Non-Indonesian language*: Any languages, other than Indonesian, used on the poster (e.g. Arabic, Javanese).
2. *Non-Indonesian transcription*: All the non-Indonesian language text on the poster.
3. *Non-Indonesian translation*: Translation into English of the non-Indonesian text.
4. *Indonesian transcription*: All the Indonesian-language text on the poster.



Figure A5. Sample poster with some elements highlighted.

Intercoder Reliability Tests

I used the codebook to code all posters. Indigenous elements were challenging to code as there are so many indigenous groups in Indonesia, each with their own distinct indigenous clothing, patterns, symbols, and language. During fieldwork, I consulted with Indonesians across the country to identify elements in the posters and make the coding as accurate as possible. Coding the religious elements was more straightforward as religious clothing and imagery does not vary much across the country. I hired a second coder to code the religious elements for the entire dataset. This assistant coded the six visual elements in the posters: the clothing, headdress, and cloth accessories of the head and deputy candidate, as well as supporters, elites, and other imagery. Each was coded as 0 if they invoked no religious identity; 1 if they invoked Islam; 2 if they invoked Christianity, and 3 if they invoked Islam and Christianity. Islam was overwhelmingly the most common religious element in the posters, but on rare occasions Christianity was invoked. After the coding was complete, intercoder reliability tests were conducted, finding high levels of reliability. All codes on which the coders disagreed were identified and a correct code was decided upon for the final analysis. Intercoder reliability results appear in the following table.

Table A17. Inter-coder reliability tests for religious poster elements

		Percent Agreement	Scott's Pi	Cohen's Kappa	Krippendorff's Alpha	N Cases
Clothing	Clothing	96.28	0.90	0.90	0.90	1507
	Headdress	98.54	0.94	0.94	0.94	1507
	Cloth accessory	99.87	0.90	0.90	0.90	1507
Imagery	Suporter identity	99.80	0.89	0.89	0.89	1507
	Elite image	99.93	0.91	0.91	0.91	1507
	Imagery	98.81	0.85	0.85	0.85	1507
Average		98.87	0.90	0.90	0.90	1507

Dictionaries

Dictionaries were used to machine-code text transcriptions from the posters. Initially, all text from the posters was exported and every word was listed by frequency. The list of words was reviewed, and words that invoked religious or indigenous identities were selected for inclusion in the dictionaries. Some words were general religious words, while others related specifically to Islam or Christianity. I drew on Howard Federspiel's (1995) *Dictionary of Indonesian Islam* to check these words. In relation to bonding and bridging strategies, general religious words signified what I termed a "broad religious bridging" strategy, provided that no other elements in the poster invoked a specific religion. Since Indonesia is a very religious society, the use of general religious words can be interpreted as an effort to appeal to the broader population. The use of words associated with the religion of the candidate who created the poster was interpreted as a "religious bonding strategy," as long as no other poster elements invoked other religious identities. This strategy indicated an effort to bond with the candidate's religious group.

In terms of references to indigeneity in the text, several words referring to indigeneity in general appeared. These were interpreted as signifying a “broad indigenous bridging” strategy. However, candidates rarely mentioned specific indigenous groups in the text. In cases when they did, they were referring the constituency, which happened to have the same name as an indigenous group. For example, Simalungun is the name of a constituency and the name of an indigenous group in the constituency. As a result, instead of coding indigenous group names in the text, I coded the use of indigenous languages (e.g., Acehnese, Javanese, and Malay) on the posters. This was a better indication of an indigenous bonding strategy, because an indigenous language literally speaks to specific indigenous groups. Additionally, the use of languages associated with a religion (Arabic, Hebrew, and Latin) were occasionally used. Likewise, I interpreted them as religious bonding strategies.

Table A18. Dictionary of words that invoked religious identities

General words (Bridging)		Group-specific words (Bonding)		
Religiosity	Indigeneity	Islamic		Christianity
religius	suku	islam	insyaallah	gbkp
religis	budaya	allah	insyalloh	gereja
tuhan	berbudaya	masjid	kyai	katolik
doa	ras	mesjid	muhammadiya	kristen
agama	adat	ahhal	muharam	kristus
ibadah	etnis	muslimah	muharram	mazmur
jiwa	beradat	muslimat	muslim	protestan
agamis	native	kabah	muslimin	paskah
amin	kain tradisional	kaba	persis	natal
beragama		shariah	qur'an	masehi
beriman		syaria	sholat	yesus
kepercayaan		syariat	shalat	
rohani		akbar	shaleh	
sakril		hadith	shariat	
suci		ustadz	shariah	
toleransi		assalamu	syekh	
tolerans		alhamdullilah	taqwa	
toleran		allahuakbar	ulama	
keragaman		alwasliyah	ustadz	
pluralisme		arabic	ramadhan	
berdoa		haji	idul fitri	
umat beragama		syawal	babi ilegal	
agama harmonis		imam		

References

Federspiel, H. M. (1995). *A dictionary of Indonesian Islam*. Ohio University, Center for International Studies.

Reynal-Querol, M. (2002). Ethnicity, political systems, and civil wars. *Journal of conflict resolution*, 46(1), 29-54.