Web Appendix for

The Evolution of Culture and Institutions: Evidence from the Kuba Kingdom

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A1. Sampling procedure

The data were collected over the summers of 2013 and 2014 in Kananga, the capital of Kasai Occidental province (what is now Kasai Central province). We used Google satellite imagery from 2012 to develop a sampling frame. We overlaid nine grid cells on Google satellite imagery of Kananga. (See figure A1 for an example of a grid cell.) Each grid cell was subsequently divided into polygons whose shape was determined by natural physical boundaries, such as rivers, forests, roads, etc. We counted the number of houses within each polygon to estimate the population size. See Figures A2, A3, and A4 for maps showing the polygons for each grid cell, as well as the geo-referenced location of households that participated in the screening survey indicated by red dots.

Random sample

The individuals in the sampling frame were selected in two ways: a random sampling strategy and a targeted sampling strategy. For the random sample, we used a two-stage cluster sampling method. In general, six polygons from each grid cell were randomly selected to be visited by survey enumerators. The one exception is that we selected three polygons rather than six from grid cells 8 and 9 because these grid cells were only partially populated (approximately half of the cell). We estimated the number of households within each polygon using the satellite data. The probability of a polygon being chosen was determined by the number of households within the polygon. That is, we used a probability-proportional-to-size (PPS) sampling method. Under this method, sampling occurs in two stages. In the first stage, polygons are selected, with the probability of their selection proportional to the number of households within the polygon. In the second stage, a fixed number of households are selected to be visited from each polygon.

The target number of observations from each grid cell was determined by its relative size (measured by number of houses) and the fact that the target size for the full sample was 1,000 (in 2013 and 2014). The number of target households for each grid cell is shown in column 5 of table A1. Columns 1–4 report the grid cell identification numbers and information about its estimated size based on the number of houses.

The (constant) number of households visited within each polygon is reported in column 6. Due to differences in the size of polygons, this generated a different skip pattern for each polygon,

with one out of every x houses being surveyed. The value of x for each polygon is reported in columns 9 and 12 (for 2013 and 2014, respectively). Enumerators chose a starting point and path within their polygon and applied the appropriate skip pattern, generating a random sample of houses from the polygon. Using the PPS method, we visited 1,079 households within 48 randomly selected polygons in 2013 and 1,065 households within another 48 randomly selected polygons in 2014.

Targeted sample

The goal of the random sampling was to ensure a representative sample of the population of Kananga. However, a shortcoming of the random-sampling strategy was that a very small proportion was Kuba (or nearby ethnic groups). For example, in the sample of 1,079 households from 2013 there were only 10 Kuba and 3 Lele households. Therefore, in order to increase the number of households from the ethnic groups of interest, we undertook a second round of sampling. Neighborhoods that were likely to have Kuba or Lele were identified in consultation with local Kuba and Lele leaders. In the targeted sampling round, polygons with neighborhoods that were known to have larger populations of Kuba or Lele households were purposefully selected. However, the sampling procedure within the polygon remained random: enumerators skipped a given number of houses before selecting the next household, as in the polygons in the fully random sample. The targeted sample includes 813 individuals from 33 targeted polygons in 2013. In 2014, the targeted sample includes 2,277 individuals from 77 targeted polygons.

Therefore, the full sampling frame from 2013 includes 1,892 individuals and from 2014 includes 3,342 individuals. An overview of the targeted sampling is provided in table A2.

A2. Visits: initial survey, in-depth survey, and behavioral games

For each household visited, survey team members asked to speak to the head of the household. When the head of the household was not available, the enumerator interviewed an adult member of the household that was available. The initial survey consisted of questions intended to identify the respondent's ethnic group as well as villages and territories of origin and birth. In the cases where the household head was unavailable, we also asked the respondent about the household head's ethnic group and villages of origin and birth.

Table A1: Overview of random sampling frame.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
						2013			2014		
Grid cell id number	**Number of polygons in grid cell**	**Number of houses in grid cell**	**Proportion of houses in grid cell**	**Number of houses to visit in grid cell**	**Number of houses to visit per polygon**	**Id of selected polygons**	**Number of houses in polygon**	**Visit every *X* house**	**Id of selected polygons**	**Number of houses in polygon**	**Visit every *X* house**
1	23	5497	10.24%	102	17	111	321	18	103	438	26
						113	255	15	104	454	27
						116	259	15	112	291	17
						119	651	38	115	310	18
						121	220	13	117	88	5
						128	418	25	120	246	14
2	38	11584	21.58%	216	36	202	482	13	201	332	9
						214	509	14	204	412	11
						218	422	12	206	218	6
						219	302	8	211	938	26
						221	229	6	215	422	12
						236	176	10	222	166	5
3	51	6528	12.16%	122	20	301	242	12	302	333	17
						306	284	14	321	133	7
						307	240	12	324	59	3
						309	167	8	330	103	5
						310	68	3	337	68	3
						336	134	7	339	50	3
4	40	6985	13.01%	130	22	405	366	17	404	87	4
						411	352	16	406	264	12
						416	177	8	408	190	9
						417	436	20	412	315	14
						419	112	5	413	546	25
						434	123	6	427	270	12
5	74	7395	13.78%	138	23	509	239	10	504	121	5
						521	149	6	511	136	6
						535	122	5	532	214	9
						546	179	8	556	84	4
						565	88	4	558	337	15
						572	378	16	573	162	7
6	65	7660	14.27%	143	24	607	114	5	631	230	10
						631	230	10	633	54	2
						639	91	4	644	259	11
						658	152	6	654	160	7
						663	164	7	655	201	8
						665	94	4	656	73	3
7	25	2555	4.76%	48	8	704	73	9	702	149	19
						705	121	15	708	39	5
						709	143	18	713	195	24
						718	109	14	716	60	8
						719	141	18	717	101	13
						720	69	9	721	124	16
8	13	1979	3.69%	37	13	803	304	23	802	165	13
						806	206	16	809	252	19
						807	342	26	810	186	14
9	36	3495	6.51%	65	22	924	105	5	914	130	6
						934	243	11	917	126	6
						936	110	5	926	166	8

Table A2: Overview of the targeted sampling frame.

2013			2014					
Id of selected polygons	**Number of houses in polygon**	**Visit every *X* house**	**Id of selected polygons**	**Number of houses in polygon**	**Visit every *X* house**	**Id of selected polygons**	**Number of houses in polygon**	**Visit every *X* house**
317	135	5	209	458	5	426	89	5
318	237	5	210	720	5	431	82	5
319	183	10	213	203	5	436	247	10
325	159	10	217	209	5	437	231	10
327	243	10	223	487	5	438	132	5
328	50	5	224	162	5	508	29	5
332	116	10	225	201	5	523	11	5
333	83	3	226	278	5	524	82	5
334	46	3	239	15	5	525	187	5
335	106	5	304	229	5	538	43	5
344	59	1	305	309	5	545	55	5
346	9	10	308	281	5	601	141	5
349	260	10	311	98	5	603	147	10
353	164	2	312	16	5	605	24	5
354	28	2	313	101	5	606	168	10
418	39	10	315	205	5	608	171	5
423	88	10	316	149	5	609	260	10
424	51	10	317	135	10	611	199	10
430	83	10	318	237	10	612	28	5
432	99	10	322	39	5	613	168	5
433	190	10	323	51	5	614	167	10
436	247	10	326	56	5	615	223	5
437	231	10	331	239	5	617	13	5
439	151	5	340	36	5	618	141	10
440	164	10	341	13	5	619	102	5
601	141	5	342	9	5	622	181	5
602	53	10	343	4	5	623	19	5
603	147	5	345	45	5	624	127	5
606	168	10	347	193	5	625	224	5
609	260	5	348	73	5	626	146	5
610	72	2	349	60	5	629	176	5
611	199	5	350	41	5	630	175	5
614	167	5	351	207	5	632	227	5
618	141	10	414	20	5	634	34	5
620	119	10	415	137	5	637	8	5
621	165	10	420	190	5	710	183	5
627	242	10	421	299	5	711	195	5
628	116	5	423	88	10	712	172	5
			425	119	5	727	168	5

From the sampling frame, we selected a subset of individuals to be in the study's sample if individuals (1) were from Mweka territory, the modern territory that has boundaries very similar to that of the historical Kuba Kingdom; (2) were from any territory that is adjacent to Mweka;[1] (3) were not from Mweka or an adjacent territory, but belonged to an ethnic group that was present within Mweka in our sample.[2] Given the large numbers of Luntu and Luluwa in the screening sample that met these criteria, a random subsample of these individuals, 10 and 15% respectively, was selected to be in the study sample. The final sample consists of 499, which includes 201 individuals from 2013 and 298 from 2014.

A. *Visits in 2013*

The individuals selected in 2013 to be in the study sample were visited three times after the initial sampling survey. In the first visit, the enumerators administered an in-depth survey with social and economic questions.

During the second visit, enumerators administered three variations of both the dictator game (DG) and the ultimatum game (UG). The order in which an individual played the DG or UG was randomized, as was the order of the variations. Prior to playing the DG and the UG, the subject was asked several test questions to ensure their understanding of the game instructions. The three variations of the DG were: (*i*) divide money between self and an individual from the same ethnicity, (*ii*) divide money between self and an individual from another ethnicity, and (*iii*) divide money between self and a randomly selected individual from Kananga. The subject also played the same variations of the UG. After the UG and DG, the participant answered exit questions about their understanding of the games and their reaction to the games.

During the third visit, individuals played the resource allocation game (RAG), described at length in the body of the paper. Individuals played the same three versions of the RAG as they did for the DG and UG. They also played an additional version where they had to allocate money between themselves and the provincial government. After the games had been played we distributed the money to the other party as specified in the instructions given to the participants. At the end of the third visit, enumerators administered a survey module on time and risk preferences. These questions included choices between various gambles. The subjects were told

[1] These territories are: Luebo, Demba, Ilebo, Dekese, Dimbelenge, Oshwe and Kole.

[2] These ethnic groups are: Kete, Kuba, and Lele.

that one of the questions would be randomly selected to be administered for real. Thus, after answering the questions, one question was indeed randomly selected with payoffs determined according to the choice made by the subject in the survey. The respondent then received the payout associated with their choice and the outcome of the gamble.

B. *Visits in 2014*

In 2014, 298 participants were incorporated into the sample. As in 2013, the first visit after the initial sampling survey was an in-depth survey. In the next visit, subjects participated in the same three variations of both the DG and UG. The order of the games and the order of the variations of each game were randomized. In addition, subjects took an Implicit Association Test (IAT) of snakes, spiders, and food (see section A3 for further details), which was randomly assigned to be administered before or after the DG and UG. Subjects completed the RAG and the time-risk preference module during the third visit. In a follow up visit, subjects completed the Mobutu IAT that we discuss in the main paper.

The individuals selected to be in the sample in 2013 were revisited in 2014 to administer the IAT. Of the 201 subjects interviewed in 2013, we were able to reach 167 again in 2014. Thus, any regressions that include the IAT measures have a total of 465 individuals rather than 499.

C. *Lab set up*

Throughout the study, we were concerned about the privacy of subjects. To maximize privacy given the constraints of working in a developing country, enumerators used pop-up tents during home visits with participants. Subjects were encouraged to make their decisions in the behavioral games from inside the tents so that no other family members or neighbors would be watching. Enumerators also brought a mat that provided a clean surface on which to conduct the survey and explain the games.

A photo showing the equipment and two members of the survey team during a training session is shown in figure A5. For privacy reasons, we did not take photos, videos, or recordings of any actual experiment.

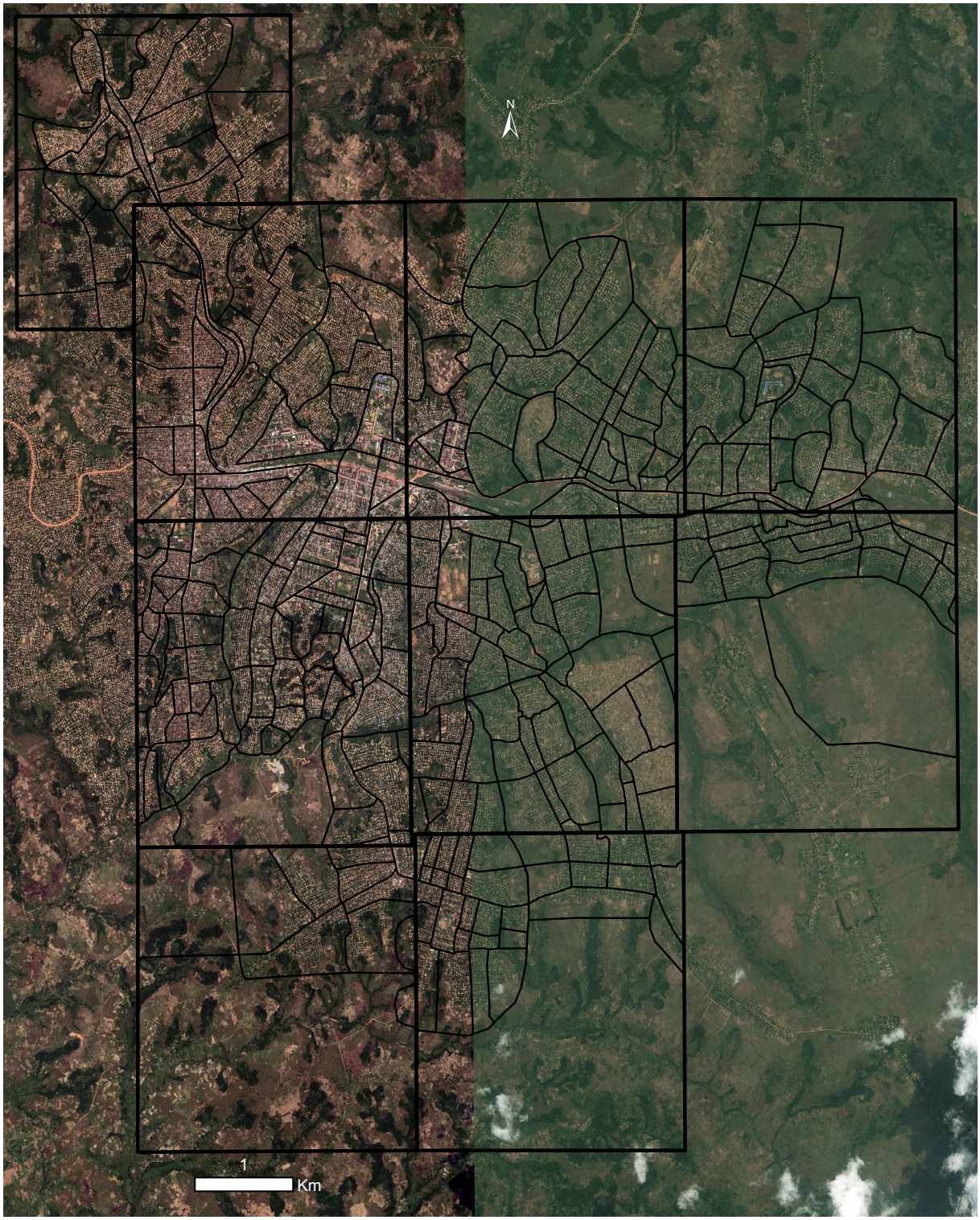
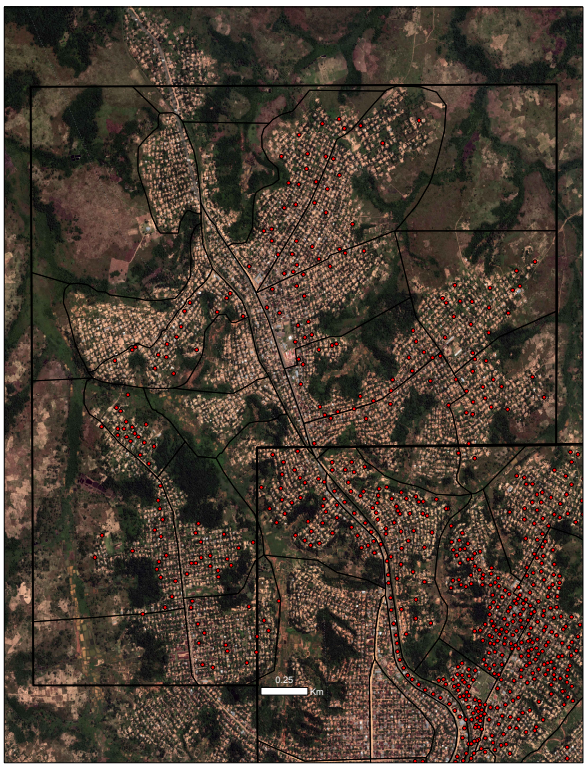
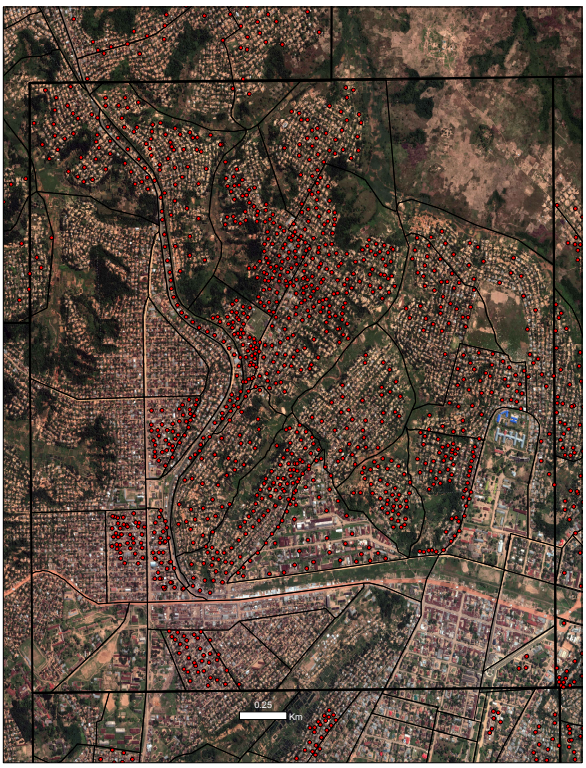


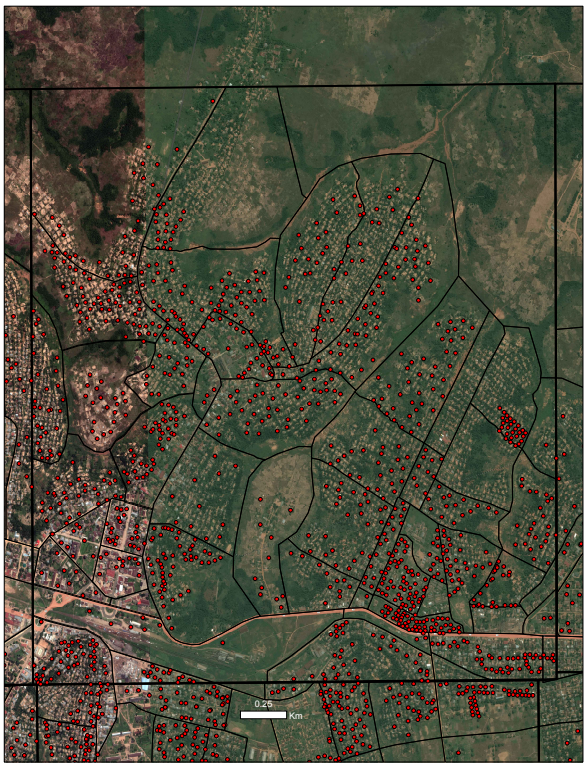
Figure A1: Satellite image of Kananga with the 9 grid cells and polygons.



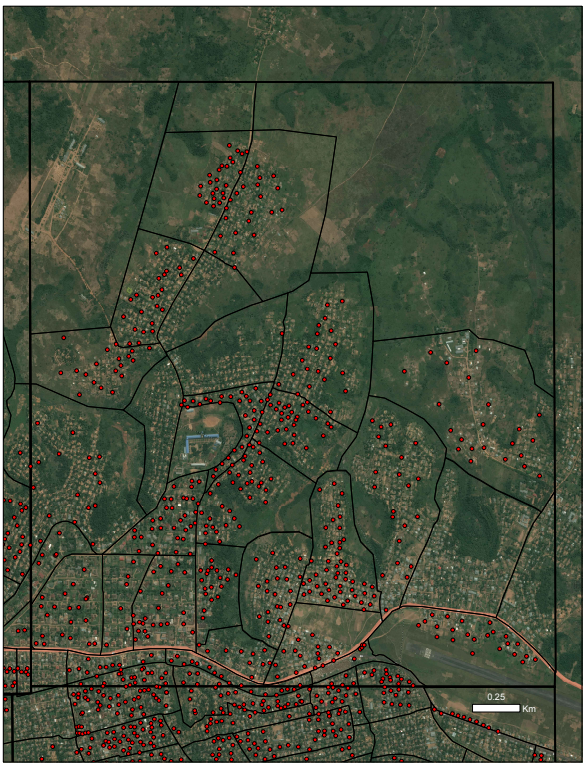
(a) Grid cell 1



(b) Grid cell 2



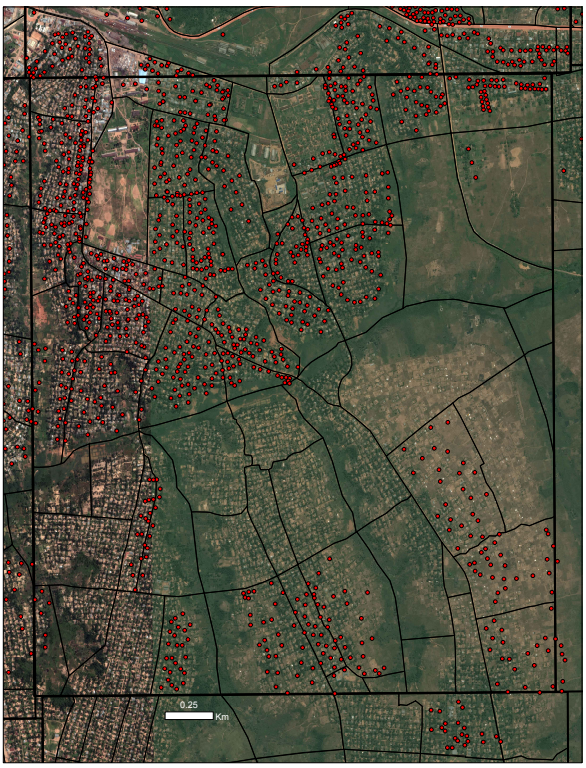
(c) Grid cell 3



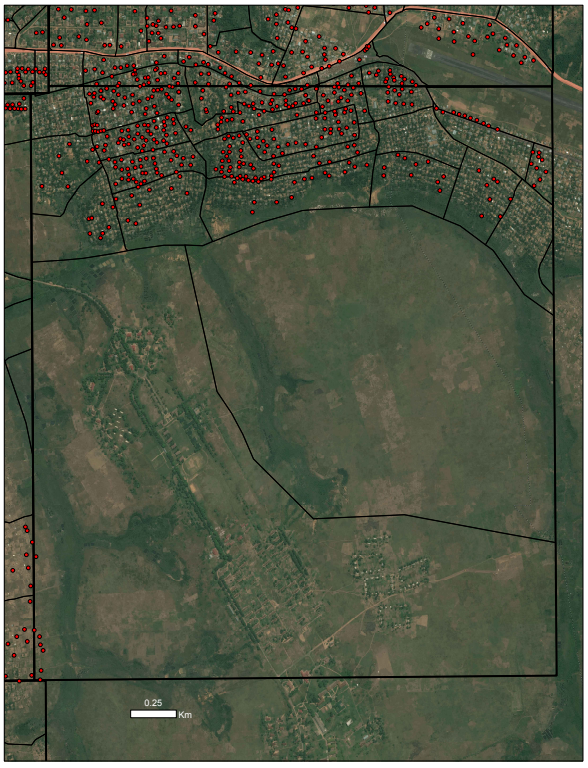
(d) Grid cell 4

Figure A2: Grid cells 1, 2, 3 and 4 (top row, left to right).

(a) Grid cell 5



(b) Grid cell 6



(c) Grid cell 7

Figure A3: Grid cells 5, 6 and 7 (middle row, left to right).

(a) Grid cell 8

(b) Grid cell 9

Figure A4: Grid cells 8 and 9 (bottom row, left to right).

Figure A5: Example of the equipment and approximate set up used during the RAG and UG with theft.

A3. The implicit association test

The implicit association test (IAT) was developed to measure an individual's automatic association between pairs of objects.[3] In the standard IAT, four different types of images appear on a computer screen. Participants are asked to sort these images into two groups, one group to the left side of the screen and one group to the right side. If there is an underlying association between certain types of images, then some groupings will be easier to sort than others.[4]

One shortcoming of the standard IAT is that it compares views of a target relative to the other target.[5] In addition, the standard IAT only lends itself to opposing pairs of targets e.g., black-white, male-female, etc. Many objects of interest, in our setting President Mobutu Sese Seko, are not naturally represented in pairs. Thus, our analysis uses a recent extension of the standard IAT, developed by Bluemke and Friese (2008), called the single-target IAT (ST-IAT).

The ST-IAT, which we administered on ten-inch Samsung Galaxy Tab III tablets, follows the same structure of the regular IAT but instead of using a pair of images, there is only one target image. Thus, in each block of the IAT, three types of images are sorted: happy images, sad images, and images associated with a target (e.g., Mobutu in this case). Following the same logic as the standard IAT, if the participant has a positive view of the target, then sorting will be faster when the participant has to sort the target and happy images to the same side of the screen than when the participant has to sort the target and sad images to the same side of the screen.

Respondents always begin with a practice round in which they sort only happy and sad images to get accustomed to the interface of the tablet-based IAT. To sort an image to the left (right), a participant presses the red button on the bottom left (right) side of the touch screen, as shown in figure A6. In this and every block of the ST-IAT, participants needed to obtain a 75% success rate (sorting images to the correct sides) in order to continue to the next block. If they did not meet this threshold, they repeated the block.[6]

[3]This section is drawn from Lowes, Nunn, Robinson and Weigel (2015).

[4]In the well known Black-White IAT, individuals observe: images of Caucasians, images of African Americans, images of good words (e.g., happy, wonderful), and images of bad words (e.g., terrible, horrible). If one has a negative implicit view of African Americans, then sorting the images of African Americans and the bad words to the same side of the screen will be easier and faster than sorting images of African Americans and of good words to the same side of the screen. If there is no underlying association, then sorting African-American and good images together should take the same amount of time as sorting African-American and bad images together.

[5]For example, in the race IAT, one is only able to observe whether the association of good words is stronger with African American images or Caucasian images (relative to the other). One is not able to make an absolute statement about how positively the participant views African Americans or Caucasians.

[6]For more details about the ST-IAT, including the scripts enumerators read to participants to explain the activity, see Lowes et al. (2015).

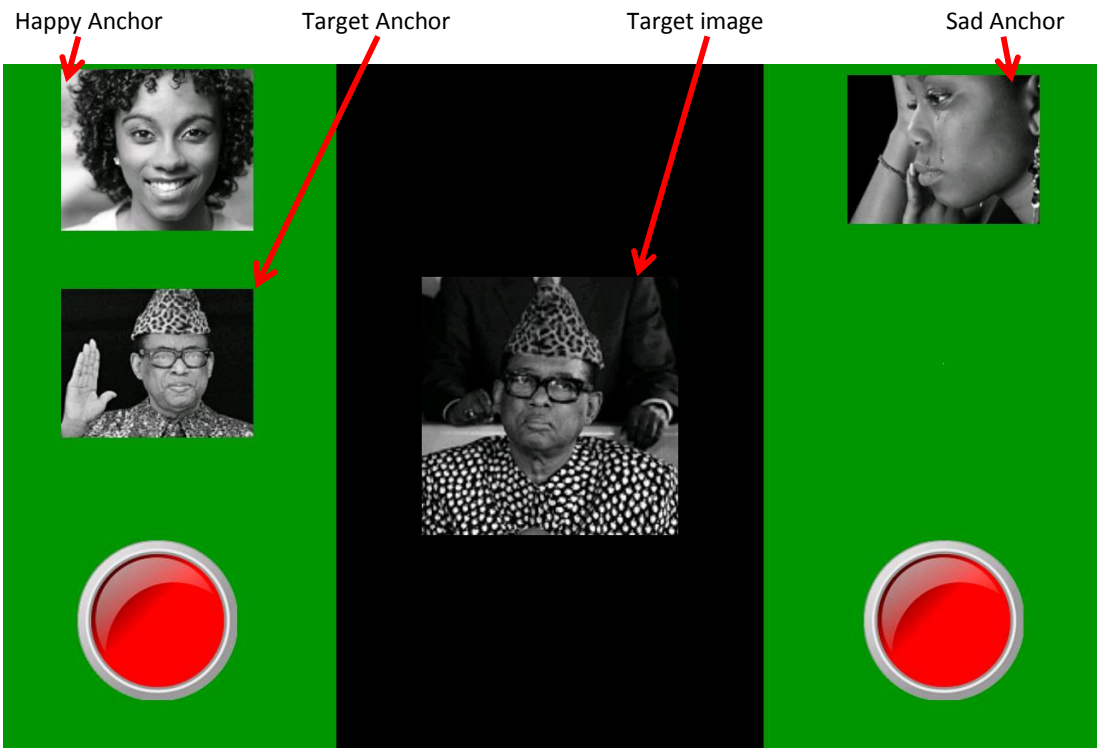


Figure A6: Screenshot from the Mobutu single-target IAT.

After a practice round, participants play the two blocks of the Mobutu ST-IAT. In one block, images of Mobutu are sorted left and in the other, they are sorted right. In all blocks, happy images are sorted left, and sad images are sorted right. Each opportunity to sort an image is called a trial. Each block comprises 24 trials: 8 trials with Mobutu images, 8 trials with happy images, and 8 trials with sad images. Figure A6 shows a screen shot of the ST-IAT when participants sorted images of Mobutu to the same sad as happy images (the left side).

The complete set of images used in the Mobutu IAT appears in figure A7. The order of the blocks was randomized across individuals. This means the order in which the targets appeared in the IAT was random and also that the side of the screen to which a target was sorted in the first block was random.

The standard measure of interest for IATs is the D-score, which we construct as follows.[7] We ignore data from practice blocks and from any blocks that were repeated because the participant did not have an accuracy rate above 75%. We winsorize (i.e., truncate) the recorded latency (i.e., response time) to 3,000 milliseconds and account for incorrect responses by replacing their latency

[7]Calculation of D-scores was done in accordance with the estimator's description in Greenwald, Nosek and Banaji (2003).

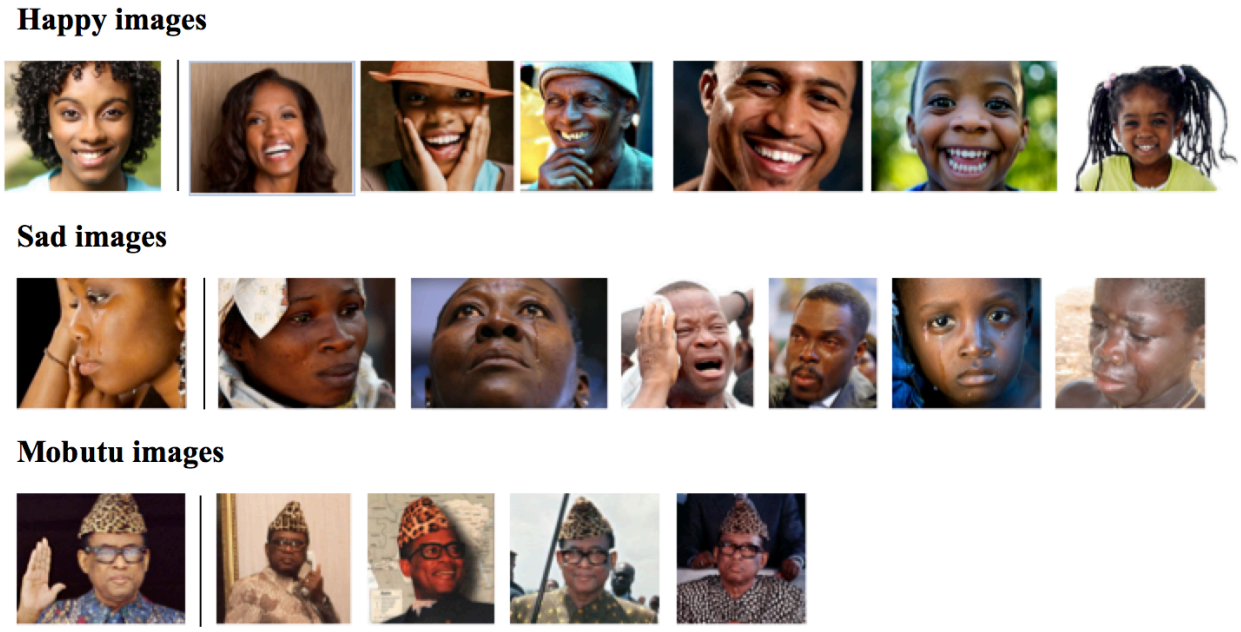


Figure A7: Images used in the Mobutu single-target IAT. Left-most image was used as the anchor and the others were used as the targets.

with the block mean latency plus the block standard deviation latency. The D-score measuring the positivity of the implicit association of the target is calculated by taking the difference between the average response time when the target is sorted to the same side as sad images and the average response time when the target is sorted to the same side as happy images, and dividing this quantity by the standard deviation of the response time during both blocks. Note that if the participant is able to sort the various objects more rapidly when the target (e.g. Mobutu) is matched with good words, then the D-score is positive. Thus, the D-score is increasing in the participant's implicit bias in favor of the target image.

To test the validity of the ST-IAT in Kananga, we developed a separate ST-IAT for which we had strong priors about what associations we should observe. Our chosen targets of interest were food, spiders, and snakes. From initial focus groups, we confirmed that individuals generally like food (not surprising) and that they dislike spiders and snakes. We also learned that they tend to dislike snakes much more than spiders since many snakes in the area are poisonous while the spiders are not. As with the Mobutu IAT, there are three types of images: images of happy people, images of sad people, and images of the target of interest (food, spiders, or snakes). Participants are instructed to sort pictures of happy people to the left, pictures of sad people to the right, and the target to either the left or right depending on the IAT block. Participants completed two

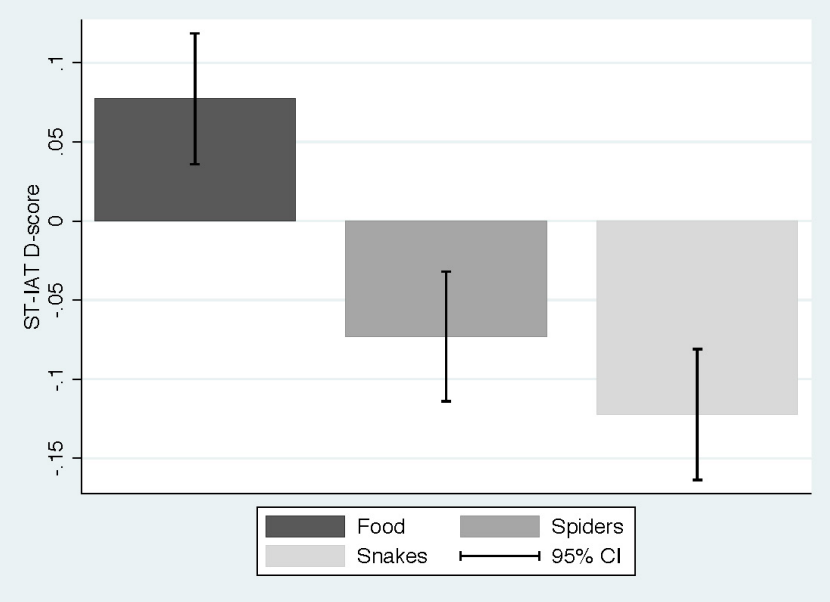


Figure A8: Results from the single-target food-spiders-snakes IAT.

blocks for each target of interest. During one block of the two, target images were sorted to the same side as happy images (to the left) and in the other block of the two, target images were sorted to the same side as sad images (to the right).

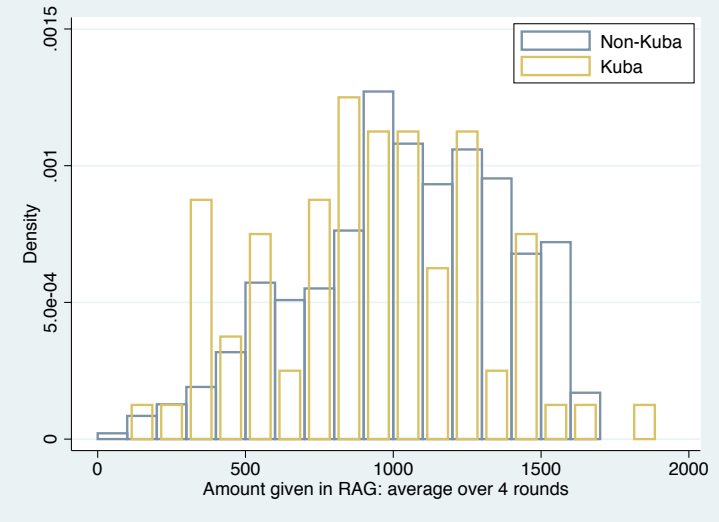
Results from the food-spiders-snakes ST-IAT are summarized in figure A8. Our findings confirm that within our sample, the average implicit association of food is positive (and statistically different from zero), and of spiders and snakes is negative, with the association with snakes being more strongly negative than for spiders. These findings confirm that the single-target IAT appears to succeed in capturing participants' implicit attitudes in our setting.

A4. Appendix figures

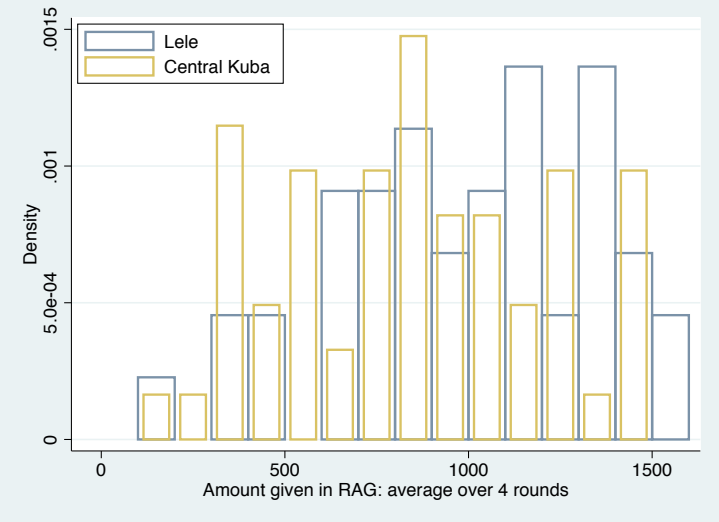
Figure A9a shows the distribution of average allocations to the other parties in the RAG for Kuba and non-Kuba descendants. Although the support of the distributions appears similar between the two groups, as does the variation, lower-than-average allocations are relatively more frequent among Kuba descendants while greater-than-average allocations are relatively less frequent among Kuba descendants.

Figures A9b and A9c report the same histograms for our two subsamples of interest: Central Kuba and Lele and the Bushong and Lele. As shown, a similar pattern emerges: Kuba descendants are more likely to allocate lower-than-average amounts to the other party.

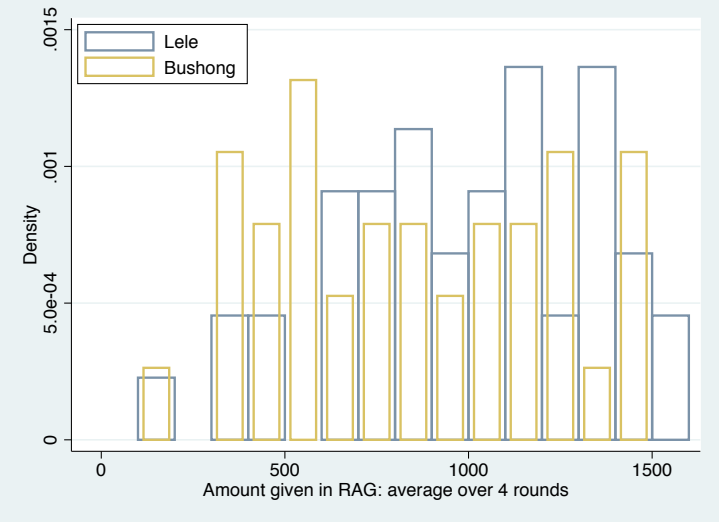
Figure A10 shows the fraction of individuals that stole in the UG for each of the six largest ethnic groups. The variation looks almost identical to the variation one observes when using the total amount stolen, which is the baseline measure used in the paper.



(a) Full sample



(b) Central Kuba and Lele



(c) Bushong and Lele

Figure A9: Distributions of the average allocation to the other parties in the RAG

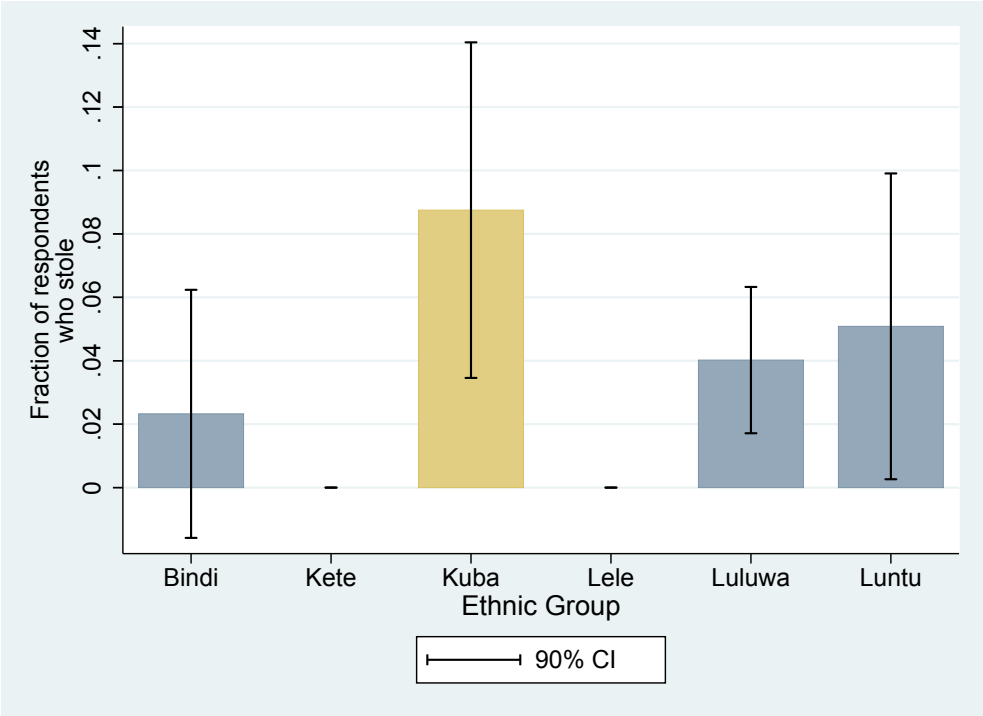


Figure A10: Fraction of respondents that stole (at least once) in the UG, by ethnicity.

A5. Appendix tables

Table A3 reports subjects' self-reported reasons for moving to Kananga among the 272 individuals in our sample who were born outside of Kananga.

Table A4 presents the results of our baseline estimates for allocation in the RAG, disaggregating the results by version of the RAG. Columns 1 through 4 show the results for each version of the RAG and column 5 shows the average allocation across the four versions. Across each version of the RAG, the Kuba consistently allocate less to the other party. Estimates of our baseline equation (1) when controlling for the two crop suitability measures are reported in table A5. The finding of less rule following and greater theft among the Kuba remains robust to the inclusion of controls for the suitability for cultivation of maize and cassava in a participant's ancestral village.

Table A6 reports estimates of equation (1), controlling for individuals' self-reported attitudes towards former President Mobutu, as well as for their implicit attitudes as measured by a single-target implicit association test (IAT). Details on the IAT are provided in section A3. Table A7 reports the estimates of equation (1) controlling for the respondent's self reported trust in foreigners, universities and international organizations. The respondents were asked to report how much they trust people from each group: completely, somewhat, not very much, or not at all. Table A8 presents estimates of equation (1) by version of the RAG controlling for the amount the respondent allocated in the DG to the relevant party. As shown, the results are robust to inclusion of the respondent's allocation in the DG.

A6. Testing for differences in religiosity

To test for religious differences between Kuba and non-Kuba descendants, we examine two forms of religiosity: strength of beliefs in Christianity and strength of beliefs in traditional spirits.

Beliefs in Christianity are measured using five survey questions: (*i*) How strongly do you believe in the Christian God? (*ii*) How strongly do you believe in heaven? (*iii*) How strongly do you believe in hell? (*iv*) How often do you pray to the Christian God or Jesus? and (*v*) How often do you go to church?

For the first three questions, individuals chose between: not at all, a little, strongly, and very strongly. For the question about prayer, individuals chose between: never, less than once a month, 1-4 times per month, 1-7 times per week, and multiple times per day. For the question about

church attendance, individuals chose between: never, rarely, several times per year, 1-3 times per month, once per week, and more than once per week. We assigned values to responses, with the least religious response receiving a value of 0, the second least a value of 1, the third least a value of 2, etc. We then created a measure of religiosity equal to the sum of the responses to the five questions. For ease of interpretation, we normalize the measure to lie between zero and one by dividing by the maximum possible sum across the five questions.

Beliefs in traditional spirits and other religions are measured with the following five questions: (*i*) Do any other gods or spirits punish people? (*ii*) How often do these ancestral spirits punish people? (*iii*) Can these other gods or spirits see into people's minds? (*iv*) How important are ancestral spirits in your life? (*v*) Have you ever consulted a diviner or fetisher to find out who was bewitching you?

For the first and third questions, respondents choose between: no, don't know, and yes. We construct a variable that equals 0 if an individual answered 'no', 1 if he or she answered 'do not know', and 2 if he or she answered 'yes'. For the second question, respondents choose between (with the numeric values assigned to the answers shown in brackets): (0) never, (1) rarely, (2) sometimes, and (3) often. For question 4, the responses are: (0) not important, (1) somewhat important, (2) important, and (3) very important. For question 5, respondents answered: (0) no or (1) yes. We create a measure of beliefs in traditional spirits and other religions based on the sum of the responses to the five questions. We again normalize the measure to lie between zero and one by dividing by the maximum possible sum across the five questions.

Estimates of equation (1) from the paper with these measures of religiosity as dependent variables are reported in table A9. There is some evidence that Kuba descendants have weaker Christian beliefs and stronger traditional beliefs. In each of the three samples, the coefficient on the Christianity index is negative and the coefficient on the traditional beliefs index is positive. However, the coefficients are only significant in one of the three samples.

Again, we check whether the reduced-form Kuba effect is partially explained by observed differences in religiosity. Estimates of equation (1), while controlling for the two religion indices, are reported in table A10. We find that the estimated difference between Kuba descendants and non-descendants is unaffected by the religiosity indices.[8]

[8]Interestingly, the Christian religion index is negatively associated with cheating in both games. Although the magnitude of the point estimate is sizeable and robust across the three samples, it is only statistically significant in the unrestricted sample.

A7. Testing for differences in trust of the Provincial Government

For the version of the RAG in which the other party is the provincial government, participants' confidence in the provincial government may be an important determinant of the amount allocated to the government. If a participant has little confidence in the government he or she may be less likely to allocate the 'correct' amount to the government. The estimates, which are reported in table A11, provide no compelling evidence that Kuba descendants have lower levels of confidence in the provincial government. In columns 1 and 2, the coefficient is negative, but small and statistically significant. In column 3, the coefficient is positive but very small in magnitude.

As a final robustness check, table A12 shows estimates of equation (1) with the amount allocated to the provincial government in the RAG as the dependent variable and with self-reported trust in the provincial government included as a control in the even columns. The estimates show that trust in the provincial government is positively correlated with more money being allocated to the government. However, the coefficient is never statistically significant. Importantly, the point estimates for the Kuba indicator variable remain robust when we include the trust control.

Table A3: Reasons for migrants moving to Kananga.

Reason for moving to Kananga	Number	Percent
Educational opportunities	87	35.66
Economic opportunities	57	23.36
Moved with parents (as child)	49	20.08
Marriage	23	9.43
Outcast from village	10	4.10
Disagreement with others	8	3.28
Health-related reasons	3	1.23
Other	7	2.87
Total	**244**	100.00

Notes : The table reports the reason for moving to Kananga among the individuals in our sample that were not born in Kananga.

Table A4: Baseline estimates, by game.

	Average amount allocated to other party (of 3000 CF) in the RAG:				
	Citizen of Kananga	Coethnic in Kananga	Non-coethnic in Kananga	Provincial Government	Average
	(1)	(2)	(3)	(4)	(5)
	Panel A. Full sample				
Kuba ethnicity indicator	-35.56	-110.77**	-101.95**	-105.59**	-88.47**
	(48.73)	(50.57)	(49.53)	(52.81)	(41.39)
Mean of dep var	1,003.21	1,028.06	988.18	987.58	1,001.75
Observations	499	499	499	499	499
R squared	0.07	0.02	0.06	0.09	0.08
	Panel B. Central Kuba & Lele				
Kuba ethnicity indicator	-151.20*	-158.32*	-113.11	-238.86***	-165.37**
	(80.23)	(92.01)	(80.56)	(85.54)	(70.92)
Mean of dep var	902.86	933.33	878.10	866.67	895.24
Observations	105	105	105	105	105
R squared	0.13	0.08	0.15	0.19	0.15
	Panel C. Bushong & Lele				
Kuba ethnicity indicator	-189.16**	-198.42*	-168.71*	-283.36***	-209.91**
	(90.06)	(102.89)	(91.35)	(97.60)	(81.33)
Mean of dep var	915.85	958.54	890.24	885.37	912.50
Observations	82	82	82	82	82
R -squared	0.14	0.10	0.18	0.19	0.17

Notes: The table reports OLS estimates of equation (1). Columns 1-4 report estimates where the dependent variable is the amount allocated to player two in a round of the RAG. The identity of player 2 in that round is reported in the column heading. Column 5 reports estimates with the average amount given in the four rounds as the dependent variable. "Kuba ethnicity indicator" is a variable that equals one if the individual's self reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect. *, **, and *** indicate significance at the 10, 5, and 1% levels.

Table A5: Accounting for crop suitability.

	Average amount allocated to other party (of 3000 CF) in the RAG:			Amount of money missing in UG		
	Kuba vs. all others	Central Kuba vs. Lele	Bushong vs. Lele	Kuba vs. all others	Central Kuba vs. Lele	Bushong vs. Lele
	(1)	(2)	(3)	(4)	(5)	(6)
Kuba ethnicity indicator	-88.86*	-159.75*	-211.85**	58.40*	140.57**	150.91
	(46.99)	(83.86)	(94.97)	(34.50)	(69.36)	(92.30)
Crop suitability index, 0-100:						
Maize suitability	-1.19	-14.03	7.98	0.58	-6.40	-5.56
	(5.81)	(56.17)	(56.74)	(4.44)	(27.28)	(30.04)
Cassava suitability	0.20	9.10	-2.62	-0.26	-0.97	-1.20
	(2.58)	(23.32)	(24.37)	(1.19)	(11.58)	(12.68)
Baseline covariates	Yes	Yes	Yes	Yes	Yes	Yes
Mean dep var	1,001.75	895.24	912.50	35.07	60.00	56.10
Observations	499	105	82	499	105	82
R-squared	0.08	0.16	0.17	0.02	0.09	0.09

Notes: The table reports OLS estimates of equation (1). "Kuba ethnicity indicator" is a variable that equals one if the individual's self reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect. *, **, and *** indicate significance at the 10, 5, and 1% levels.

Table A6: Accounting for attitudes towards former President Mobutu.

	Average amount allocated to other party (of 3000 CF) in the RAG:			Amount of money missing in UG		
	Kuba vs. all others	Central Kuba vs. Lele	Bushong vs. Lele	Kuba vs. all others	Central Kuba vs. Lele	Bushong vs. Lele
	(1)	(2)	(3)	(4)	(5)	(6)
Kuba ethnicity indicator	-94.39**	-199.44**	-240.02**	61.63**	153.48**	182.08**
	(42.72)	(77.36)	(93.39)	(27.45)	(69.10)	(85.06)
Attitudes towards Mobutu:						
Impact of Mobutu, 1-5 scale	-27.44	-73.49*	-77.56	14.15	36.63	50.32
	(19.19)	(43.76)	(52.63)	(12.33)	(39.08)	(47.93)
Perception of Mobutu, 1-5 scale	41.70**	117.32***	82.35	-5.56	-15.57	-31.22
	(17.39)	(39.18)	(49.61)	(11.17)	(34.99)	(45.19)
Mobutu ST-IAT D-Score	-41.74	26.08	166.30	17.51	1.23	-57.56
	(32.75)	(83.73)	(100.37)	(21.04)	(74.79)	(91.41)
Baseline covariates	Yes	Yes	Yes	Yes	Yes	Yes
Mean dep var	1,011.96	905.91	927.46	37.07	67.74	64.79
Observations	464	93	71	464	93	71
R-squared	0.09	0.22	0.23	0.03	0.11	0.11

Notes: The table reports OLS estimates of equation (1). "Kuba ethnicity indicator" is a variable that equals one if the individual's self reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect. *, **, and *** indicate significance at the 10, 5, and 1% levels.

Table A7: Baseline estimates, controlling for trust in foreigners, universities, and international organizations.

	Average amount allocated to other party (of 3000 CF) in the RAG:			Amount of money missing in UG		
	Kuba vs. all others	Central Kuba vs. Lele	Bushong vs. Lele	Kuba vs. all others	Central Kuba vs. Lele	Bushong vs. Lele
	(1)	(2)	(3)	(4)	(5)	(6)
Kuba ethnicity indicator	-87.50**	-155.98**	-197.61**	55.50**	127.50**	128.91*
	(41.53)	(71.99)	(82.33)	(25.32)	(59.06)	(67.20)
Trust in (1-4):						
Int'l Organizations	9.27	42.76	34.79	-15.94	-40.45	-39.24
	(17.52)	(37.83)	(41.80)	(10.68)	(31.04)	(34.12)
Other Nationalities	3.18	33.86	53.78	-16.53	-69.26*	-112.28***
	(18.28)	(42.73)	(50.87)	(11.14)	(35.06)	(41.52)
Universities	10.29	2.88	3.62	15.29	36.62	56.72
	(18.94)	(49.09)	(60.43)	(11.55)	(40.27)	(49.32)
Baseline Covariates	Yes	Yes	Yes	Yes	Yes	Yes
Mean of dep var	1001.75	895.24	912.50	35.07	60.00	56.10
Observations	499	105	82	499	105	82
R-squared	0.08	0.17	0.20	0.03	0.14	0.19

Notes: The table reports OLS estimates of equation (1). The trust questions are measured on a 1, 2, 3, 4 scale that is increasing in trust. The responses are: (1) not at all, (2) not very much, (3) somewhat, (4) completely. "Kuba ethnicity indicator" is an indicator variable that equals one if the individual's self-reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect.

Table A8: Baseline estimates, controlling for offers in the dictator game.

	Average amount allocated to other party (of 3000 CF) in the RAG:				
	Citizen of Kananga	Coethnic citizen of Kananga	Non-coethnic citizen of Kananga	Provincial Government	Average
	(1)	(2)	(3)	(4)	(5)
	Panel A. Full sample				
Kuba ethnicity indicator	-33.75	-105.09**	-94.77**	-99.29*	-81.47**
	(47.30)	(49.63)	(48.10)	(53.89)	(40.57)
Offer in dictator game	0.48***	0.45***	0.51***	0.46***	0.64***
	(0.09)	(0.10)	(0.09)	(0.09)	(0.09)
Observations	499	499	499	465	465
R-squared	0.13	0.06	0.12	0.13	0.17
	Panel B. Central Kuba vs. Lele				
Kuba ethnicity indicator	-152.71*	-159.11*	-111.20	-226.80**	-150.80*
	(80.54)	(92.53)	(81.06)	(93.47)	(78.41)
Offer in dictator game	0.11	-0.05	0.07	0.55**	0.20
	(0.19)	(0.24)	(0.19)	(0.26)	(0.23)
Observations	105	105	105	93	93
R-squared	0.13	0.08	0.15	0.21	0.14
	Panel C. Bushong vs. Lele				
Kuba ethnicity indicator	-196.23**	-195.85*	-160.02*	-248.81**	-187.14**
	(88.90)	(103.83)	(92.02)	(107.90)	(90.01)
Offer in dictator game	0.40*	0.09	0.19	0.74**	0.44
	(0.23)	(0.28)	(0.22)	(0.32)	(0.28)
Observations	82	82	82	71	71
R-squared	0.17	0.10	0.19	0.23	0.18

Notes: The table reports OLS estimates of equation (1). "Kuba ethnicity indicator" is a variable that equals one if the individual's self reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect. *, **, and *** indicate significance at the 10, 5, and 1% levels.

Table A9: Differences in religious beliefs

	Full sample		Central Kuba vs. Lele		Bushong vs. Lele	
	Christianity index, 0-1	Traditional beliefs index, 0-1	Christianity index, 0-1	Traditional beliefs index, 0-1	Christianity index, 0-1	Traditional beliefs index, 0-1
	(1)	(2)	(3)	(4)	(5)	(6)
Kuba ethnicity indicator	-0.019	0.017	-0.044*	0.100*	-0.022	0.100
	(0.015)	(0.032)	(0.025)	(0.055)	(0.026)	(0.064)
Baseline Covariates	Yes	Yes	Yes	Yes	Yes	Yes
Mean of dep var	0.79	0.40	0.78	0.39	0.79	0.39
Observations	499	499	105	105	82	82
R-squared	0.03	0.01	0.09	0.07	0.06	0.04

Notes: The table reports OLS estimates of equation (1) with religion indices as as outcome variables. The dependent variables are 0-1 indices that measure the strength of beliefs in Christianity and traditional beliefs. "Kuba ethnicity indicator" is a variable that equals one if the individual's self reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect. *, **, and *** indicate significance at the 10, 5, and 1% levels.

Table A10: Controlling for differences in religious beliefs

	Average amount allocated to other party (of 3000 CF) in the RAG:			Amount of money missing in UG		
	Kuba vs. all others	Central Kuba vs. Lele	Bushong vs. Lele	Kuba vs. all others	Central Kuba vs. Lele	Bushong vs. Lele
	(1)	(2)	(3)	(4)	(5)	(6)
Kuba ethnicity indicator	-84.83**	-163.33**	-205.01**	53.50**	129.25**	153.10**
	(41.07)	(73.45)	(83.68)	(25.20)	(60.76)	(70.69)
Christianity index, 0-1	313.41**	175.24	242.36	-222.21***	-369.68	-391.24
	(124.00)	(286.01)	(361.59)	(76.07)	(236.58)	(305.45)
Traditional beliefs, 0-1	133.62**	56.99	4.54	28.51	-53.25	-110.83
	(56.88)	(131.22)	(148.69)	(34.90)	(108.54)	(125.60)
Baseline covariates	Yes	Yes	Yes	Yes	Yes	Yes
Mean of dep var	1001.75	895.24	912.50	35.07	60.00	56.10
Observations	499	105	82	499	105	82
R -squared	0.10	0.16	0.18	0.04	0.11	0.11

Notes : The table reports OLS estimates of equation (1). "Kuba ethnicity indicator" is a variable that equals one if the individual's self reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect. *, **, and *** indicate significance at the 10, 5, and 1% levels.

Table A11: Differences in trust of the provincial government

	Trust in the Provincial Government, 1-4 scale		
	Full sample	Central Kuba vs. Lele	Bushong vs. Lele
	(1)	(2)	(3)
Kuba ethnicity indicator	-0.048	-0.153	0.029
	(0.127)	(0.205)	(0.226)
Baseline covariates	Yes	Yes	Yes
Mean of dep var	2.52	2.45	2.57
Observations	499	105	82
R -squared	0.000	0.067	0.057

Notes: The table reports OLS estimates of equation (1) with self-reported measures of trust as outcome variables. The dependent variable is measured on a 1, 2, 3, 4 scale and is increasing in trust. The responses are: (1) not at all, (2) not very much, (3) somewhat, (4) completely. "Kuba ethnicity indicator" is a variable that equals one if the individual's self reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect. *, **, and *** indicate significance at the 10, 5, and 1% levels.

Table A12: RAG when player 2 is the provincial government, controlling for trust of the provincial government.

	Average amount allocated to the Provincial Government (of 3000 CF) in the RAG:					
	Full sample		Central Kuba vs. Lele		Bushong vs. Lele	
	(1)	(2)	(3)	(4)	(5)	(6)
Kuba ethnicity indicator	-105.59**	-102.15*	-238.86***	-237.76***	-283.36***	-283.91***
	(52.81)	(52.73)	(85.54)	(86.20)	(97.60)	(98.16)
Trust in governmentt, 1-4		33.30*		7.21		19.34
		(18.88)		(42.14)		(49.86)
Baseline covariates	Yes	Yes	Yes	Yes	Yes	Yes
Mean of dep var	990.93	990.93	866.67	866.67	885.37	885.37
Observatons	499	499	105	105	82	82
R-squared	0.09	0.09	0.19	0.19	0.19	0.20

Notes: The table reports OLS estimates of equation (1). The trust in the provincial government variable is measured on a 1, 2, 3, 4 scale and is increasing in trust. The responses are: (1) not at all, (2) not very much, (3) somewhat, (4) completely. "Kuba ethnicity indicator" is an indicator variable that equals one if the individual's self-reported tribe is Kuba. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect.

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