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

Sara Lowes
Nathan Nunn
James A. Robinson
Jonathan Weigel

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Introduction

The broader research question:
- How do formal institutions affect internal cultural norms?

The more narrow research question:
- Do stronger, more formal, and more centralized institutions cause stronger internal norms against rule-breaking/cheating and greater respect for authority?
Reasons to expect formal institutions to generate **stronger** norms against rule-breaking and cheating.

- Formal centralized states make good citizens.
  - Elias (1994) and Weber (1976)
- Strong states generate patterns of (successful) behavior that generate reinforcing internal norms.
  - Peysakhovich and Rand (2016)
Some priors

Reasons to expect formal institutions to generate *weaker* norms against rule-breaking and cheating.

- Extrinsic rules and regulations often crowd-out intrinsic norms for engaging in these activities.
  - Bowles & Reyes (JEL, 2012)
- If the state ensures that all children behave, parents have less incentive to inculcate in their children an intrinsic desire to behave.
  - State enforcement of behavior crowds-out parental inculcation of values.
  - Tabellini (QJE, 2008)
- The same logic applies, but also at the group level.
  - Societies with centralized states benefit less from ‘good’ culture since the state enforces ‘good’ behavior.
The Kuba Kingdom

The Kuba realm: General orientation

[Map of the Kuba Kingdom]
The Kuba Kingdom: A near “natural experiment”

Migration, approx. 1400–1500:

- According to common oral histories, the following groups originally descend from a common ancestor named Woot:
  - Lele, Bushong, Bieeng, Pyaang, and Ngeende.
- After committing incest with his sister, Woot and his sister Mweel fled from their village upstream (on the Kasai/Sankuru).
- This migration is dated to be approximately during the 15th century.
Formation of the Kuba Kingdom, approx. 1620:

- The origin of the Kingdom is traced back to Shyaam, the son of a slave woman (i.e., foreigner).
- Lived among the Mbuun, who were traders connected to the Atlantic trade via the Kongo.
- Transformed a collection of autonomous Bushong chieftaincies into a centralized state, the Kuba Kingdom.
- Kingdom included:
  - Descendants of Woot: Bushong, Bieeng, Pyaang, and Ngeende, but not the Lele.
  - And local groups not descended from Woot: Kete, Cwa, and Coofa.
- Kingdom’s boundaries were determined by surrounding rivers and remained stable over time.
Characteristics of the Kuba Kingdom

The Kingdom developed more ‘sophisticated’ state institutions than neighboring groups:

- More complex and formal political structures
  - Political offices and a balance/division of power (King and councils)
  - Oral constitution
  - Bureaucracy with upward political mobility (*kolms*)
  - Capital city

- Formal legal system
  - Court system that included a judge, jury, and appellate courts

- Taxation and public goods provision
  - Universal taxation based on a system of tribute
  - Police force and a military
  - Elaborate road network
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- Formal legal system
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  - Universal taxation based on a system of tribute
  - Police force and a military
  - Elaborate road network

- What impact did Kuba institutions have on internal norms of obedience towards laws?
King Mbop Mabinc maKyeen, 1947
Title holders (*kolm*), 1956
The Kuba today: Members of the Royal Court
Title holders (*kolm*)
Mary Douglas’ comparison: Bushong and Lele

- Exists an established anthropological literature documenting institutional and economic differences between the:
  1. Central Kuba and Lele.
  2. Bushong and Lele.

- Example from Anthropologist Mary Douglas (1963):
  - “They are historically related, and share many cultural values. On the surface, Lele material culture looks so like a counterpart of Bushong that it is worth comparing the two tribes... Everything that the Lele have or do, the Bushong have more and can do better. They produce more, live better, as well as populating the region more densely than the Lele.” (pp. 41–42)
  - “The Bushong managed to develop a well-organized political system embracing 70,000 people... By contrast, the largest political unit of the Lele, the village, was smaller than the smallest political unit in the Bushong system.” (pp. 50–51)
Treatment and comparison groups

Children of Woot
- Lele
- Central Kuba
  - Bushong
- Peripheral Kuba
  - Ngeende
  - Pyang
  - Bulaang
  - Bieeng

Descendants of other Ancestors
- Non Kuba
  - Bindi
  - Kete
  - Luluwa
  - Luntu
  - etc.

Kuba Kingdom
1. Estimate the reduced-form effect of the Kuba Kingdom on norms of rule-following among descendants today.
   i. Kuba vs. rest of the sample
   ii. Central Kuba vs. Lele (children of Woot only)
   iii. Bushong vs. Lele (children of Woot only)

2. Examine threats to inference:
   - Selection of migrants into our sample
   - Geography
   - Other cultural characteristics that may affect rule-following in experiments

3. Test for channels:
   - Direct evidence for effect on parental investments (Tabellini, 2008)
   - Other channels:
     - Current individual income
     - Colonial history
     - Post-colonial history (Mobutu)
Research design

- Examine the rule-following behavior of individuals with ancestors who lived within and outside of the Kuba Kingdom.
- All individuals sampled live in the Provincial capital, Kananga (about 300km South of Mushenge).
  - Logistically much easier.
  - Experiments are less likely to directly (& mechanically) reflect the institutional environment.
  - This helps isolated deeply-held values.
Sampling procedure
The sample

- Surveys and games were undertaken in June, July, & August of 2013 and 2014.
  - Visit 0: Screening survey
  - Visit 1: Full survey
  - Visit 2: DG/UG
  - Visit 3: RAG
- Sample includes individuals for which:
  - Their origin territory is Mweka or a contiguous territory.
  - Their self-reported ethnicity is one of the ethnicities found within Mweka territory (Kuba, Lele, Kete).
- The final (full) sample includes 499 individuals.
## Ethnic groups in the sample

<table>
<thead>
<tr>
<th>Reported Ethnicity</th>
<th>Number of Participations</th>
<th>Percentage of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luluwa</td>
<td>160</td>
<td>27.97</td>
</tr>
<tr>
<td>Kuba</td>
<td>80</td>
<td>13.99</td>
</tr>
<tr>
<td>Kete</td>
<td>63</td>
<td>11.01</td>
</tr>
<tr>
<td>Luntu</td>
<td>58</td>
<td>10.14</td>
</tr>
<tr>
<td>Lele</td>
<td>44</td>
<td>7.69</td>
</tr>
<tr>
<td>Bindi</td>
<td>40</td>
<td>6.99</td>
</tr>
<tr>
<td>Luba</td>
<td>22</td>
<td>3.85</td>
</tr>
<tr>
<td>Dekese</td>
<td>10</td>
<td>1.75</td>
</tr>
<tr>
<td>Songe</td>
<td>9</td>
<td>1.57</td>
</tr>
<tr>
<td>Tetela</td>
<td>7</td>
<td>1.22</td>
</tr>
<tr>
<td>Tshokwe</td>
<td>2</td>
<td>0.35</td>
</tr>
<tr>
<td>Others (1 of each)</td>
<td>4</td>
<td>0.70</td>
</tr>
<tr>
<td>Total</td>
<td>499</td>
<td>100</td>
</tr>
</tbody>
</table>
The experimental setting
In each of four rounds, an individual has 3,000CF (30 \times 100) to divide between themselves and another ‘player’.

(Note: 3,000CF is twice the median daily income in our sample)

The division rules are:

1. In your mind, associate a color (black or white) with yourself and the other color with the other player.
2. Roll the die (3 sides are black and 3 sides are white).
3. If the color associated with yourself is rolled, put the money in the envelope marked for yourself.
4. If the color associated with the other player is rolled, put the money in the envelope marked for them.
5. Perform this division task 30 times.
During the RAG, the game was played in private (in the tent).

After the division was made, envelopes were sealed and the envelop for the other player was placed in a bag outside of the tent door.

At the end of experiment, the bag with the envelopes was taken by the enumerator and brought back to the main office.
Resource allocation game

Four variants:

1. Division: oneself vs. citizen of Kananga.
2. Division: oneself vs. coethnic.
3. Division: oneself vs. non-coethnic.
4. Division: oneself vs. provincial government.

On average, 1,500 CF (of 3,000) should be allocated to the other party in each game.
Kuba vs. non-Kuba: All rounds

Average amount allocated to other party

- Kananga Citizen (p=0.23)
- Coethnic (p=0.03)
- Non-Coethnic (p=0.01)
- Government (p=0.01)
- Average (p=0.01)

90% CI

Non-Kuba
Kuba Ethnicity

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Distribution differences: Kuba vs. non-Kuba

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The amount given in RAG: average over 4 rounds

- Non-Kuba
- Kuba
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Distribution differences: Central Kuba vs. Lele

Amount given in RAG: average over 4 rounds
Distribution differences: Bushong vs. Lele

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## Kuba vs. others

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</tbody>
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RAG: Kuba vs. others

Average amount allocated to other party

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>90% CI</th>
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<tr>
<td>Bindi (p=0.36)</td>
<td></td>
</tr>
<tr>
<td>Kete (p=0.27)</td>
<td></td>
</tr>
<tr>
<td>Kuba</td>
<td></td>
</tr>
<tr>
<td>Lele (p=0.31)</td>
<td></td>
</tr>
<tr>
<td>Luluwa (p=0.00)</td>
<td></td>
</tr>
<tr>
<td>Luntu (p=0.04)</td>
<td></td>
</tr>
</tbody>
</table>
A second experiment provides an additional measure of an individual’s proclivity to cheat vs. follow the rules.

Had participants play a version of the standard ultimatum game (UG).

Recall the sequence of play in the UG:

1. Player 1 proposes a division between herself and player 2.
2. Player 2 observes the division and chooses to either accept or reject the division.
Theft in the ultimatum game

- During the UG, proposals were made in private (in the tent).
- Player 1 proposed a division by placing ten 100CF-bills into two different envelopes that were then sealed.
- Division was not observed by the enumerator and the sealed envelopes were brought back to office.
- Nothing prevented the participants from simply putting some of the money in their pockets instead of the envelopes.
  - 4.8% of all participants did this at least once.
  - **Kuba:** 10.0% stole.
  - **non-Kuba:** 3.8% stole.
  - The average amount stolen was 35 CF.
    - **Kuba:** 86 CF.
    - **non-Kuba:** 26 CF.
Are the Kuba exceptional?

The diagram shows the amount of missing data (CF) for different ethnic groups, with 90% confidence intervals (CI). The groups listed are Bindi, Kete, Kuba, Lele, Luluwa, and Luntu. The Kuba group has the highest amount of missing data, followed by Bindi and Kete. Luluwa and Luntu have the least amount of missing data. The p-values for these groups are provided in parentheses, with Kuba having the lowest p-value of 0.02, indicating a statistically significant amount of missing data.
### Regression estimates

<table>
<thead>
<tr>
<th></th>
<th>Average amount allocated to other party (of 3000 CF) in the RAG:</th>
<th>Amount of money missing in UG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full sample</td>
<td>Central Kuba &amp; Lele</td>
</tr>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Kuba ethnicity indicator</strong></td>
<td>-111.51***</td>
<td>-141.21**</td>
</tr>
<tr>
<td></td>
<td>(42.19)</td>
<td>(70.84)</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>499</td>
<td>105</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.01</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**Panel A. No covariates**

**Panel B. With baseline covariates**

<table>
<thead>
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<th>Average amount allocated to other party (of 3000 CF) in the RAG:</th>
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</tr>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Kuba ethnicity indicator</strong></td>
<td>-88.47**</td>
<td>-165.37**</td>
</tr>
<tr>
<td></td>
<td>(41.39)</td>
<td>(70.92)</td>
</tr>
<tr>
<td><strong>Covariates:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>1.72</td>
<td>-6.50</td>
</tr>
<tr>
<td></td>
<td>(5.18)</td>
<td>(13.47)</td>
</tr>
<tr>
<td><strong>Age squared</strong></td>
<td>-0.008</td>
<td>0.071</td>
</tr>
<tr>
<td></td>
<td>(0.055)</td>
<td>(0.150)</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>-2.99</td>
<td>-127.53*</td>
</tr>
<tr>
<td></td>
<td>(30.41)</td>
<td>(73.70)</td>
</tr>
<tr>
<td><strong>Survey year = 2014</strong></td>
<td>182.00***</td>
<td>246.06***</td>
</tr>
<tr>
<td></td>
<td>(31.03)</td>
<td>(72.58)</td>
</tr>
<tr>
<td><strong>Mean of dep var</strong></td>
<td>1,001.75</td>
<td>895.24</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>499</td>
<td>105</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.08</td>
<td>0.16</td>
</tr>
</tbody>
</table>
Our causal estimates suggest that: institutions $\Rightarrow$ culture ($-$ve)
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Likely reverse causality: culture $\Rightarrow$ institutions ($+ve$)
  - Societies that have an intrinsic desire for law and order implement institutions that help ensure this.
Our causal estimates suggest that: institutions $\Rightarrow$ culture ($-ve$)

Likely reverse causality: culture $\Rightarrow$ institutions ($+ve$)
  - Societies that have an intrinsic desire for law and order implement institutions that help ensure this.

Potential bias in observational data:
  - Our less-identified estimates are always larger (i.e., less negative) than our better-identified estimates.
  - Suggestive evidence from other studies (e.g., Tabellini, 2010): institutions $\Leftrightarrow$ culture ($+ve$)
Potential threats to inference

1. Differential selection of immigrants to Kananga
2. Differences in geography of ancestral villages
3. Other cultural traits that could affect participants’ behavior and may be mistakenly interpreted by us as ‘rule-following’
   - Trust (in the researchers)
   - Altruism (towards player 2)
   - Understanding of the game
## Reasons for migration

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

*Notes*: The table reports the reason for moving to Kananga among the individuals in our sample that were not born in Kananga.
## Balance: Reasons for migration (1st gen migrants)

<table>
<thead>
<tr>
<th>Reasons for Migrating to Kananga</th>
<th>Full sample (n=244)</th>
<th>Central Kuba vs. Lele sample (n=65)</th>
<th>Bushong vs. Lele sample (n=51)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample mean</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Sample mean</td>
</tr>
<tr>
<td>Educational opportunities</td>
<td>0.357</td>
<td>0.177** (0.078)</td>
<td>0.600</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.077 (0.064)</td>
<td></td>
</tr>
<tr>
<td>Economic opportunities</td>
<td>0.234</td>
<td>-0.020 (0.070)</td>
<td>0.154</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.000 (0.068)</td>
<td></td>
</tr>
<tr>
<td>Moved with parents (as child)</td>
<td>0.201</td>
<td>-0.167** (0.065)</td>
<td>0.108</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.163** (0.065)</td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td>0.094</td>
<td>0.018 (0.048)</td>
<td>0.077</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.057 (0.045)</td>
<td></td>
</tr>
<tr>
<td>Outcast from village</td>
<td>0.041</td>
<td>0.030 (0.033)</td>
<td>0.046</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.032 (0.033)</td>
<td></td>
</tr>
<tr>
<td>Disagreement with others</td>
<td>0.033</td>
<td>-0.040 (0.029)</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0.025 (0.029)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0.041</td>
<td>0.003 (0.033)</td>
<td>0.015</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.022 (0.033)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: The table reports balance statistics for each of our three samples of interest, without and with our baseline controls. An observation is an individual in our sample.
## Balance: Immigration-related characteristics

<table>
<thead>
<tr>
<th></th>
<th>Full sample (n=499)</th>
<th>Central Kuba vs. Lele sample (n=105)</th>
<th>Bushong vs. Lele sample (n=82)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample mean</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Sample mean</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant indicator</td>
<td>0.537 (0.061)</td>
<td>0.045 (0.061) 0.032 (0.061)</td>
<td>0.552 (0.0991)</td>
</tr>
<tr>
<td>Fraction of life in Kananga</td>
<td>0.665 (0.046)</td>
<td>-0.114** (0.046) -0.088* (0.045)</td>
<td>0.553 (0.0833)</td>
</tr>
<tr>
<td>Proportion of 5 closest friends that are coethnic</td>
<td>0.455 (0.041)</td>
<td>-0.110*** (0.041) -0.102** (0.041)</td>
<td>0.377 (0.0618)</td>
</tr>
<tr>
<td>Share of own-ethnicity in neighborhood</td>
<td>0.303 (0.036)</td>
<td>-0.249*** (0.036) -0.236*** (0.036)</td>
<td>0.117 (0.0304)</td>
</tr>
<tr>
<td>Ethnic diversity of neighborhood</td>
<td>0.572 (0.023)</td>
<td>0.097*** (0.023) 0.090*** (0.023)</td>
<td>0.666 (0.0316)</td>
</tr>
</tbody>
</table>

### Notes
The table reports balance statistics between Kuba and non-Kuba individuals in each of our three samples of interest. Differences are reported without and with controls for our baseline set of covariates.
### Average amount allocated to other party (of 3000 CF) in the RAG:

<table>
<thead>
<tr>
<th></th>
<th>Kuba vs. all others</th>
<th>Central Kuba vs. Lele</th>
<th>Bushong vs. Lele</th>
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<tr>
<td><strong>Kuba ethnicity indicator</strong></td>
<td>-43.42**</td>
<td>-170.00***</td>
<td>-231.50***</td>
</tr>
<tr>
<td></td>
<td>(42.48)</td>
<td>(73.26)</td>
<td>(84.99)</td>
</tr>
<tr>
<td><strong>Immigrant indicator</strong></td>
<td>200.15***</td>
<td>339.21</td>
<td>437.42</td>
</tr>
<tr>
<td></td>
<td>(54.13)</td>
<td>(262.7)</td>
<td>(322.2)</td>
</tr>
<tr>
<td><strong>Frac of life in Kananga</strong></td>
<td>159.34**</td>
<td>278.51</td>
<td>431.41</td>
</tr>
<tr>
<td></td>
<td>(73.59)</td>
<td>(316.85)</td>
<td>(386.26)</td>
</tr>
<tr>
<td><strong>Proportion of 5 closest friends that are coethnics</strong></td>
<td>-30.09</td>
<td>73.25</td>
<td>185.1</td>
</tr>
<tr>
<td></td>
<td>(54.39)</td>
<td>(116.09)</td>
<td>(136.01)</td>
</tr>
<tr>
<td><strong>Share of own-ethnicity in neighborhood</strong></td>
<td>-207.2**</td>
<td>-211.13</td>
<td>-107.79</td>
</tr>
<tr>
<td></td>
<td>(95.54)</td>
<td>(234.27)</td>
<td>(256.85)</td>
</tr>
<tr>
<td><strong>Ethnic diversity of neighborhood</strong></td>
<td>92.59</td>
<td>64.64</td>
<td>252.38</td>
</tr>
<tr>
<td></td>
<td>(72.48)</td>
<td>(239.90)</td>
<td>(260.13)</td>
</tr>
</tbody>
</table>

### Amount of money missing in UG

<table>
<thead>
<tr>
<th></th>
<th>Kuba vs. all others</th>
<th>Central Kuba vs. Lele</th>
<th>Bushong vs. Lele</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kuba ethnicity indicator</strong></td>
<td>69.74***</td>
<td>123.02***</td>
<td>129.01*</td>
</tr>
<tr>
<td></td>
<td>(26.69)</td>
<td>(61.22)</td>
<td>(73.28)</td>
</tr>
<tr>
<td><strong>Immigrant indicator</strong></td>
<td>2.96</td>
<td>191.14</td>
<td>22.57</td>
</tr>
<tr>
<td></td>
<td>(34.01)</td>
<td>(219.51)</td>
<td>(277.85)</td>
</tr>
<tr>
<td><strong>Frac of life in Kananga</strong></td>
<td>14.65</td>
<td>304.01</td>
<td>162.18</td>
</tr>
<tr>
<td></td>
<td>(46.23)</td>
<td>(264.76)</td>
<td>(333.06)</td>
</tr>
<tr>
<td><strong>Proportion of 5 closest friends that are coethnics</strong></td>
<td>17.50</td>
<td>178.00*</td>
<td>135.2</td>
</tr>
<tr>
<td></td>
<td>(34.17)</td>
<td>(97.00)</td>
<td>(117.28)</td>
</tr>
<tr>
<td><strong>Share of own-ethnicity in neighborhood</strong></td>
<td>11.16</td>
<td>186.23</td>
<td>148.31</td>
</tr>
<tr>
<td></td>
<td>(60.02)</td>
<td>(195.75)</td>
<td>(221.48)</td>
</tr>
<tr>
<td><strong>Ethnic diversity of neighborhood</strong></td>
<td>40.66</td>
<td>-50.24</td>
<td>-65.51</td>
</tr>
<tr>
<td></td>
<td>(45.53)</td>
<td>(200.45)</td>
<td>(224.30)</td>
</tr>
</tbody>
</table>

**Baseline covariates:** Yes, Yes, Yes, Yes, Yes, Yes  

**Mean dep var:** 1,001.51, 896.39, 914.20, 35.28, 60.57, 56.79  

**Observations:** 496, 104, 81, 496, 104, 81  

**$R$-squared:** 0.13, 0.20, 0.24, 0.03, 0.14, 0.14  

**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. Coefficients are reported with robust standard errors in parentheses. *, **, and *** indicate significance at the 10, 5, and 1% levels.
Are there differences in geography?
Are there differences in geography?
### Balance: Geography

<table>
<thead>
<tr>
<th>Sample</th>
<th>Maize suitabity index, 0-100</th>
<th>Cassava suitability index, 0-100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample mean</td>
<td>Sample mean</td>
</tr>
<tr>
<td>Full sample (n=499)</td>
<td>23.10</td>
<td>46.69</td>
</tr>
<tr>
<td></td>
<td>(0.217)</td>
<td>(0.554)</td>
</tr>
<tr>
<td></td>
<td>Kuba vs. non-Kuba difference</td>
<td>-0.249</td>
</tr>
<tr>
<td></td>
<td>(0.224)</td>
<td>(0.566)</td>
</tr>
<tr>
<td></td>
<td>Accounting for baseline covariates</td>
<td>Not accounting for baseline covariates</td>
</tr>
<tr>
<td>Central Kuba vs. Lele sample (n=105)</td>
<td>23.07</td>
<td>47.34</td>
</tr>
<tr>
<td></td>
<td>(0.609)</td>
<td>(1.508)</td>
</tr>
<tr>
<td></td>
<td>Kuba vs. non-Kuba difference</td>
<td>-0.159</td>
</tr>
<tr>
<td></td>
<td>(0.676)</td>
<td>(1.591)</td>
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<tr>
<td></td>
<td>Accounting for baseline covariates</td>
<td>Not accounting for baseline covariates</td>
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<tr>
<td>Bushong vs. Lele sample (n=82)</td>
<td>23.12</td>
<td>47.60</td>
</tr>
<tr>
<td></td>
<td>(0.613)</td>
<td>(1.529)</td>
</tr>
<tr>
<td></td>
<td>Kuba vs. non-Kuba difference</td>
<td>-0.080</td>
</tr>
<tr>
<td></td>
<td>(0.670)</td>
<td>(1.596)</td>
</tr>
<tr>
<td></td>
<td>Accounting for baseline covariates</td>
<td>Not accounting for baseline covariates</td>
</tr>
</tbody>
</table>

**Notes:** The table reports balance statistics between Kuba and non-Kuba individuals in each of our three samples of interest. Differences are reported without and with controls for our baseline set of covariates.
### Balance: Confounders in the experiment

<table>
<thead>
<tr>
<th>Sample mean</th>
<th>Kuba vs. non-Kuba difference</th>
<th>Sample mean</th>
<th>Kuba vs. non-Kuba difference</th>
<th>Sample mean</th>
<th>Kuba vs. non-Kuba difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trust in international organizations, 1-4</strong></td>
<td>2.846 -0.100 (0.119)</td>
<td>2.867 -0.151 (0.194)</td>
<td>2.927 -0.060 (0.224)</td>
<td>2.816 -0.048 (0.104)</td>
<td>2.876 -0.213 (0.161)</td>
</tr>
<tr>
<td><strong>Trust in other nationalities, 1-4</strong></td>
<td>3.074 0.0147 (0.109)</td>
<td>3.267 -0.129 (0.153)</td>
<td>3.354 -0.041 (0.162)</td>
<td>2.846 -0.103 (0.117)</td>
<td>2.867 -0.021 (0.196)</td>
</tr>
<tr>
<td><strong>Trust in Universities, 1-4</strong></td>
<td>321.3 -10.63 (26.06)</td>
<td>282.9 17.44 (39.18)</td>
<td>280.5 16.75 (42.04)</td>
<td>336.6 -12.49 (23.49)</td>
<td>301.9 -15.28 (38.52)</td>
</tr>
<tr>
<td><strong>DG allocation to citizen of Kananga</strong></td>
<td>304.7 -21.86 (27.15)</td>
<td>231.2 -2.075 (37.03)</td>
<td>219.7 -26.55 (39.00)</td>
<td>319.8 -12.46 (21.43)</td>
<td>272.8 -0.863 (36.74)</td>
</tr>
<tr>
<td><strong>Average DG allocation to all parties</strong></td>
<td>0.140 0.00541 (0.0230)</td>
<td>0.098 0.0488 (0.0329)</td>
<td>0.0523* (0.0272)</td>
<td>0.087 0.00327 (0.0163)</td>
<td>0.063 0.0624*** (0.0256)</td>
</tr>
<tr>
<td><strong>Proportion incorrect of four math questions, 0-1</strong></td>
<td>0.113 0.0647** (0.0314)</td>
<td>0.098 0.0488 (0.0329)</td>
<td>0.0244 (0.0335)</td>
<td>0.087 0.00327 (0.0163)</td>
<td>0.063 0.0624*** (0.0256)</td>
</tr>
<tr>
<td><strong>Proportion incorrect of six RAG questions, 0-1</strong></td>
<td>0.070 0.0615*** (0.0236)</td>
<td>0.063 0.0624*** (0.0256)</td>
<td>0.0523* (0.0272)</td>
<td>0.087 0.00327 (0.0163)</td>
<td>0.063 0.0624*** (0.0256)</td>
</tr>
<tr>
<td><strong>Proportion incorrect of six UG questions, 0-1</strong></td>
<td>0.0298 (0.0596)</td>
<td>0.0152 (0.0581)</td>
<td>0.0546 (0.0636)</td>
<td>0.00276 (0.0358)</td>
<td>0.0152 (0.0581)</td>
</tr>
</tbody>
</table>

**Notes:** The table reports balance statistics between Kuba and non-Kuba individuals in each of our three samples of interest. Differences are reported without and with controls for our baseline set of covariates.
Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider especially important?

1. Obedience
2. Feeling of responsibility
3. Tolerance/respect for others
4. Unselfishness/generosity
5. Imagination
6. Self expression
7. Independence
8. Determination/perseverance
9. Hard work
10. Thrift
11. Religious faith
Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider especially important?

1. Obedience
2. Feeling of responsibility
3. Tolerance/respect for others
4. Unselfishness/generosity
5. Imagination
6. Self expression
7. Independence
8. Determination/perseverance
9. Hard work
10. Thrift
11. Religious faith
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1. Obedience
2. Feeling of responsibility
3. Tolerance/respect for others
4. Unselfishness/generosity
5. Imagination
6. Self expression
7. Independence
8. Determination/perseverance
9. Hard work
10. Thrift
11. Religious faith
Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider especially important?

1. Obedience
2. Feeling of responsibility
3. Tolerance/respect for others
4. Unselfishness/generosity
5. Imagination
6. Self expression
7. Independence
8. Determination/perseverance
9. **Hard work**
10. **Thrift**
11. **Religious faith**
Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider especially important?

1. Related to rule-following:
   - Obedience
   - Responsibility
   - Tolerance/respect for others
   - Unselfishness/generosity

2. Not related to rule-following:
   - Imagination
   - Self expression
   - Independence
   - Determination/perseverance
### Evidence for the Tabellini mechanism

| Fraction of qualities that are viewed as being important to teach children at home |
|-------------------------------------------------|--------------------------------|--------------------------------|
| All eleven qualities listed                      | Four qualities related to rule-following | Four qualities unrelated to rule-following |
| 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                        | -0.062*                         | -0.131**                        | -0.137*                                        | -0.078**                        | -0.159**                        | -0.165**                        |
|                                                 | (0.035)                         | (0.062)                         | (0.071)                                        | (0.038)                         | (0.066)                         | (0.074)                                        |
| Baseline covariates                             | Yes                             | Yes                             | Yes                                           | Yes                             | Yes                             | Yes                                           |
| Mean dep var                                    | 0.54                            | 0.52                            | 0.53                                           | 0.67                            | 0.63                            | 0.66                                           |
| Observations                                    | 499                             | 105                             | 82                                             | 499                             | 105                             | 82                                             |
| R-squared                                       | 0.06                            | 0.13                            | 0.11                                           | 0.04                            | 0.15                            | 0.11                                           |
| Notes:                                          |                                  |                                  |                                                 |                                  |                                  |                                                 |
| The table reports OLS estimates of equation (1). |                                  |                                  |                                                 |                                  |                                  |                                                 |
| The dependent variable is the fraction of qualities that the respondent reports being important to teach children at home. In columns 1-3, the dependent variable is the average across eleven quantities. In columns 4-6, the dependent variable is the average across four qualities that are related to rule-following: obedience; responsibility; tolerance/respect for others; unselfishness/generosity. In columns 7-9, the dependent variable is the average across four qualities that are unrelated to rule-following: independence, imagination, self expression, determination/perseverance. “Kuba ethnicity indicator” is a variable that equals one if the individual’s self reported tribe is Kuba. Standard errors are clustered at the origin village level. All regressions control for a gender indicator, age, age squared, and a survey year fixed effect. Coefficients are reported with robust standard errors in parentheses. *, **, and *** indicate significance at the 10, 5, and 1% levels.
Evidence for the Tabellini mechanism

Average fraction of traits viewed as important

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>90% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bindi</td>
<td></td>
<td>0.42</td>
</tr>
<tr>
<td>Kete</td>
<td></td>
<td>0.02</td>
</tr>
<tr>
<td>Kuba</td>
<td></td>
<td>0.05</td>
</tr>
<tr>
<td>Lele</td>
<td></td>
<td>0.13</td>
</tr>
<tr>
<td>Luluwa</td>
<td></td>
<td>0.03</td>
</tr>
<tr>
<td>Luntu</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Evolution of Culture and Institutions: Evidence from the Kuba Kingdom
There are other potential channels that underly our results, some of which are less general and specific to the Congolese context:

1. Difference individuals’ current income and prosperity
2. Differences in colonial experience
3. Differences in post-colonial experience (i.e., Mobutu)
Are the effects due to persistent differences in income?

<table>
<thead>
<tr>
<th>Sample</th>
<th>Subjective income scale, 1-5</th>
<th>ln Annual income</th>
<th>ln Monthly income</th>
<th>Unemployment indicator</th>
<th>Non-dirt floor</th>
<th>Metal roof</th>
<th>Meals per day</th>
<th>Nights hungry in last week</th>
<th>Educational attainment, 0-4</th>
<th>Height</th>
<th>Weight-to-height ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full sample (n=499)</td>
<td>Central Kuba vs. Lele sample (n=105)</td>
<td>Bushong vs. Lele sample (n=82)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
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<td>Accounting for baseline covariates</td>
<td>Sample mean</td>
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<td>Sample mean</td>
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<td>Accounting for baseline covariates</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kuba vs. non-Kuba difference</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Kuba vs. non-Kuba difference</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.162</td>
<td>0.238**</td>
<td>0.188*</td>
<td>2.257</td>
<td>0.012</td>
<td>0.020</td>
<td>2.220</td>
<td>-0.066</td>
<td>-0.009</td>
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</tr>
<tr>
<td></td>
<td>(0.104)</td>
<td>(0.103)</td>
<td></td>
<td>(0.170)</td>
<td>(0.178)</td>
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<td>(0.195)</td>
<td>(0.206)</td>
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<td>13.05</td>
<td>0.161</td>
<td>0.207</td>
<td>13.17</td>
<td>-0.043</td>
<td>-0.308</td>
<td>13.15</td>
<td>-0.100</td>
<td>-0.353</td>
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<td>(0.290)</td>
<td>(0.289)</td>
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<td>(0.554)</td>
<td>(0.579)</td>
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<td>(0.614)</td>
<td>(0.652)</td>
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<tr>
<td></td>
<td>10.74</td>
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<td>0.152</td>
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<td>0.073</td>
<td>-0.086</td>
<td>10.66</td>
<td>0.012</td>
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<td>(0.248)</td>
<td>(0.247)</td>
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<td>0.671</td>
<td>-0.073</td>
<td>-0.148</td>
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<td>(0.059)</td>
<td>(0.056)</td>
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<td>(0.094)</td>
<td>(0.082)</td>
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<td>(0.105)</td>
<td>(0.090)</td>
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</tr>
<tr>
<td></td>
<td>0.367</td>
<td>0.218***</td>
<td>0.210***</td>
<td>0.571</td>
<td>0.123</td>
<td>0.062</td>
<td>0.561</td>
<td>0.132</td>
<td>0.087</td>
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<td></td>
<td>(0.058)</td>
<td>(0.059)</td>
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<td>(0.098)</td>
<td>(0.102)</td>
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<td>(0.110)</td>
<td>(0.117)</td>
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<tr>
<td></td>
<td>0.930</td>
<td>-0.065**</td>
<td>-0.050</td>
<td>0.838</td>
<td>-0.005</td>
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<td>(0.031)</td>
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<td>(0.074)</td>
<td>(0.073)</td>
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<td>(0.081)</td>
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<tr>
<td></td>
<td>1.449</td>
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<td>0.025</td>
<td>0.036</td>
<td>1.439</td>
<td>-0.132</td>
<td>-0.079</td>
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<td>(0.066)</td>
<td>(0.065)</td>
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<td>(0.107)</td>
<td>(0.109)</td>
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<td>(0.124)</td>
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<tr>
<td></td>
<td>0.615</td>
<td>-0.256*</td>
<td>-0.246*</td>
<td>0.524</td>
<td>-0.115</td>
<td>-0.188</td>
<td>0.537</td>
<td>-0.117</td>
<td>-0.218</td>
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<tr>
<td></td>
<td>(0.134)</td>
<td>(0.135)</td>
<td></td>
<td>(0.172)</td>
<td>(0.178)</td>
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<td>(0.189)</td>
<td>(0.192)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>3.024</td>
<td>0.373***</td>
<td>0.187**</td>
<td>3.524</td>
<td>-0.311**</td>
<td>-0.100</td>
<td>3.573</td>
<td>-0.283**</td>
<td>-0.168</td>
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</tr>
<tr>
<td></td>
<td>(0.111)</td>
<td>(0.084)</td>
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<td>(0.135)</td>
<td>(0.107)</td>
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<td>(0.132)</td>
<td>(0.110)</td>
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<tr>
<td></td>
<td>166.03</td>
<td>1.776*</td>
<td>0.473</td>
<td>167.42</td>
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<td>0.879</td>
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<td>0.310</td>
<td>1.212</td>
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<td>(0.885)</td>
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<td>(1.642)</td>
<td>(1.412)</td>
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<td>(1.772)</td>
<td>(1.612)</td>
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</tr>
<tr>
<td></td>
<td>0.356</td>
<td>-0.001</td>
<td>0.002</td>
<td>0.347</td>
<td>-0.003</td>
<td>-0.003</td>
<td>0.344</td>
<td>-0.011</td>
<td>-0.011</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td></td>
<td>(0.012)</td>
<td>(0.012)</td>
<td></td>
<td>(0.012)</td>
<td>(0.013)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**: The table reports balance statistics between Kuba and non-Kuba individuals in each of our three samples of interest. Differences are reported without and with controls for our baseline set of covariates.

Sara Lowes Nathan Nunn James A. Robinson Jonathan Weigel
The Evolution of Culture and Institutions: Evidence from the Kuba Kingdom
Understanding channels: Are the effects working through historical experience?

Are the findings due to the different colonial and post-colonial experience of Kuba and non-Kuba descendants?

1. **Colonial period**
   - The Kuba may have been treated differently during colonialism.

2. **Post-Colonial period**
   - The Kuba may have been treated differently during the Mobutu regime.
Measures of colonial contact
Measures of colonial contact
### Balance: Colonial contact

<table>
<thead>
<tr>
<th></th>
<th>Full sample (n=499)</th>
<th>Central Kuba vs. Lele sample (n=105)</th>
<th>Bushong vs. Lele sample (n=82)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample mean</td>
<td>Kuba vs. non-Kuba difference</td>
<td>Sample mean</td>
</tr>
<tr>
<td>Mission station</td>
<td>0.752</td>
<td>-0.091 (0.071)</td>
<td>0.781</td>
</tr>
<tr>
<td></td>
<td>-0.094 (0.070)</td>
<td></td>
<td>0.0206 (0.096)</td>
</tr>
<tr>
<td>Power station</td>
<td>0.100</td>
<td>-0.090*** (0.026)</td>
<td>0.076</td>
</tr>
<tr>
<td></td>
<td>-0.084*** (0.027)</td>
<td></td>
<td>-0.187** (0.078)</td>
</tr>
<tr>
<td>Railway line</td>
<td>0.543</td>
<td>0.276*** (0.064)</td>
<td>0.724</td>
</tr>
<tr>
<td></td>
<td>0.264*** (0.067)</td>
<td></td>
<td>0.418*** (0.109)</td>
</tr>
<tr>
<td>Mines</td>
<td>0.002</td>
<td>-0.0024 (0.0024)</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>-0.0021 (0.0022)</td>
<td></td>
<td>0.000 (0.000)</td>
</tr>
</tbody>
</table>

#### Colonial Influence

**Notes:** The table reports balance statistics between Kuba and non-Kuba individuals in each of our three samples of interest. Differences are reported without and with controls for our baseline set of covariates.
### Accounting for colonial contact

<table>
<thead>
<tr>
<th></th>
<th>Kuba vs. all others</th>
<th>Central Kuba vs. Lele</th>
<th>Bushong vs. Lele</th>
<th>Kuba vs. all others</th>
<th>Central Kuba vs. Lele</th>
<th>Bushong vs. Lele</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td><strong>Kuba ethnicity indicator</strong></td>
<td>-103.25**</td>
<td>-198.53*</td>
<td>-253.64*</td>
<td>51.00</td>
<td>134.54**</td>
<td>164.74*</td>
</tr>
<tr>
<td></td>
<td>(48.90)</td>
<td>(109.34)</td>
<td>(139.40)</td>
<td>(34.17)</td>
<td>(62.30)</td>
<td>(90.67)</td>
</tr>
<tr>
<td>Colonial indicators (within 30km in 1951):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mission station</td>
<td>5.49</td>
<td>-99.57</td>
<td>22.74</td>
<td>18.07</td>
<td>-80.95</td>
<td>-109.67</td>
</tr>
<tr>
<td></td>
<td>(36.08)</td>
<td>(85.21)</td>
<td>(124.57)</td>
<td>(17.34)</td>
<td>(74.80)</td>
<td>(80.30)</td>
</tr>
<tr>
<td>Power station</td>
<td>0.46</td>
<td>-223.96</td>
<td>-266.83</td>
<td>-26.74</td>
<td>20.40</td>
<td>31.87</td>
</tr>
<tr>
<td></td>
<td>(52.73)</td>
<td>(166.14)</td>
<td>(175.16)</td>
<td>(20.55)</td>
<td>(34.22)</td>
<td>(40.18)</td>
</tr>
<tr>
<td>Railway line</td>
<td>57.56*</td>
<td>-16.04</td>
<td>-23.54</td>
<td>25.71</td>
<td>26.76</td>
<td>25.69</td>
</tr>
<tr>
<td></td>
<td>(32.25)</td>
<td>(122.93)</td>
<td>(144.43)</td>
<td>(16.15)</td>
<td>(33.08)</td>
<td>(39.61)</td>
</tr>
<tr>
<td>Mine</td>
<td>-82.57*</td>
<td></td>
<td></td>
<td>38.99*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(44.46)</td>
<td></td>
<td></td>
<td>(23.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline covariates</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mean dep var</td>
<td>1,001.75</td>
<td>895.24</td>
<td>912.50</td>
<td>35.07</td>
<td>60.00</td>
<td>56.09</td>
</tr>
<tr>
<td>Observations</td>
<td>499</td>
<td>105</td>
<td>82</td>
<td>499</td>
<td>105</td>
<td>82</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.09</td>
<td>0.20</td>
<td>0.22</td>
<td>0.03</td>
<td>0.10</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Notes: The table reports OLS estimates for equation (1). "Kuba ethnicity indicator" is a variable that equals one if the individual's self-reported tribe is Kuba. Standard errors are clustered at the origin village level. 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.
If the Kuba were treated differently by the Mobutu government, then today we may observe different attitudes towards the former President.

We ask individuals their views about Mobutu (very negative, negative, neutral, positive, very positive).

1. Their perception of Mobutu himself: 1–5 scale.
2. Their view of the Mobutu’s impact: 1–5 scale.

However, respondents may not answer honestly and/or they may not be fully aware of their true attitudes.

We also use an implicit association test (IAT) to measure these attitudes.

See Lowes, Nunn, Robinson, and Weigel (AERPP, 2015)
The single-target IAT

Sara Lowes Nathan Nunn James A. Robinson Jonathan Weigel

The Evolution of Culture and Institutions: Evidence from the Kuba Kingdom
The single-target IAT
The single-target IAT
The single-target IAT
The single-target IAT
The single-target IAT
Validating the single-target IAT in Kananga (n=543)

Average association of target with good rather than bad images

<table>
<thead>
<tr>
<th>Target</th>
<th>95% CI</th>
<th>Standardized difference in response speed (bad-good)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snakes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sara Lowes Nathan Nunn James A. Robinson Jonathan Weigel

The Evolution of Culture and Institutions: Evidence from the Kuba Kingdom
### Balance: Post-colonial experience

#### Colonial Influence

<table>
<thead>
<tr>
<th>Sample mean</th>
<th>Kuba vs. non-Kuba difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission station</td>
<td>0.752 (-0.091) (0.071)</td>
</tr>
<tr>
<td>Power station</td>
<td>0.100 (-0.090*** (0.026)</td>
</tr>
<tr>
<td>Railway line</td>
<td>0.543 (0.276*** (0.064)</td>
</tr>
<tr>
<td>Mines</td>
<td>0.002 (-0.0024) (0.0024)</td>
</tr>
</tbody>
</table>

#### Post Colonial Influence

<table>
<thead>
<tr>
<th>Sample mean</th>
<th>Kuba vs. non-Kuba difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of Mobutu, 1-5 scale</td>
<td>4.090 (-0.123) (0.146)</td>
</tr>
<tr>
<td>Perception of Mobutu, 1-5 scale</td>
<td>3.894 (-0.054) (0.162)</td>
</tr>
<tr>
<td>Mobutu ST-IAT D-Score</td>
<td>0.104 (-0.078) (0.060)</td>
</tr>
</tbody>
</table>

**Notes:** The table reports balance statistics between Kuba and non-Kuba individuals in each of our three samples of interest. Differences are reported without and with controls for our baseline set of covariates.
Conclusions

Findings:

- Descendants of those living within the Kuba Kingdom are measured to have less respect for authority and are more likely to cheat/steal.
- Evidence of formal state institutions having negative effects on intrinsic norms.
- Evidence of parental cultural-investments responding to a history of state formation.

Caveats:

- We only consider one bundle of treatment (state formation).
- Still do not have a full understanding of the nature of the exact mechanism(s) behind the crowding-out we find.