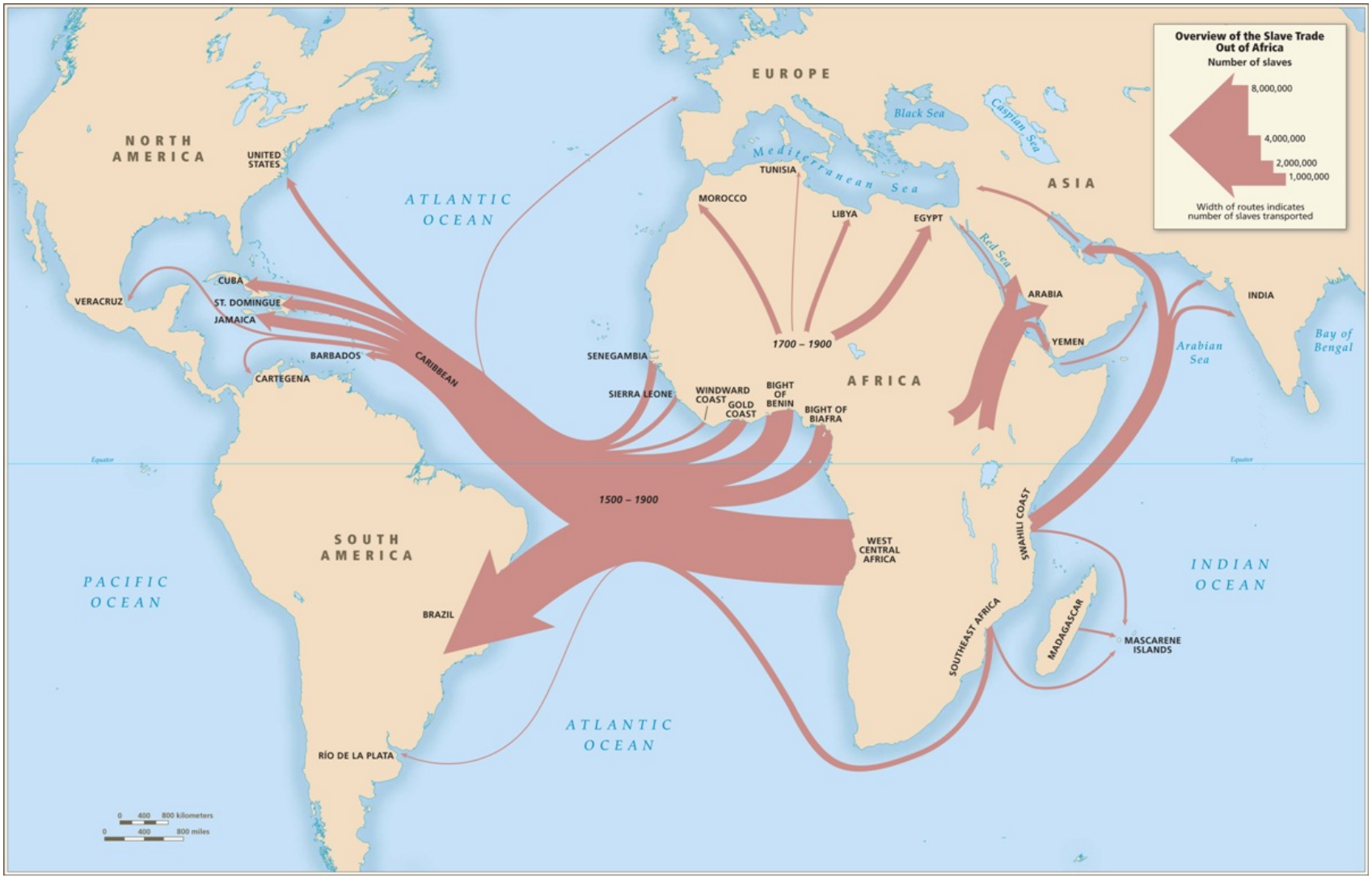
The Slave Trades

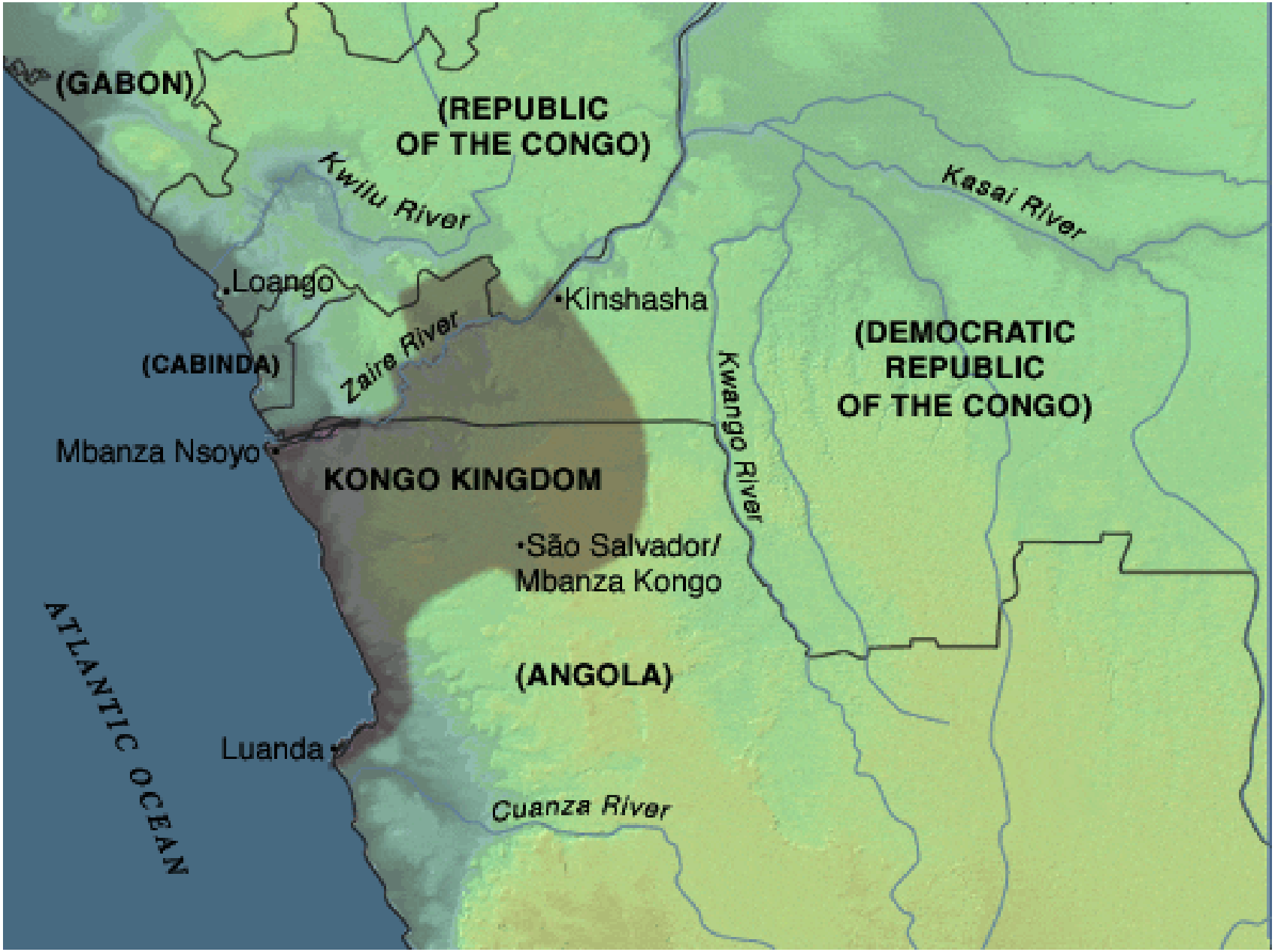
Nathan Nunn
Harvard University

February 21, 2022


Overview of the Slave Trade Out of Africa
Number of slaves
8,000,000
4,000,000
2,000,000
1,000,000
Width of routes indicates number of slaves transported
NORTH AMERICA
UNITED STATES
EUROPE
Black Sea
Caspian Sea
Mediterranean Sea
ASIA
ATLANTIC OCEAN
TUNISIA
MOROCCO
LIBYA
EGYPT
Red Sea
ARABIA
INDIA
CUBA
VERACRUZ
ST. DOMINGUE
JAMAICA
BARBADOS
CARIBBEAN
CARTEGENA
1700 – 1900
YEMEN
Arabian Sea
Bay of Bengal
SENEGAMBIA
SIERRA LEONE
WINDWARD COAST
GOLD COAST
BIGHT OF BENIN
BIGHT OF BIAFRA
AFRICA
Equator
1500 – 1900
SWAHILI COAST
SOUTH AMERICA
WEST CENTRAL AFRICA
INDIAN OCEAN
PACIFIC OCEAN
BRAZIL
SOUTHEAST AFRICA
MADAGASCAR
MASCARENE ISLANDS
ATLANTIC OCEAN
RÍO DE LA PLATA
0 400 800 kilometers
0 400 800 miles

Magnitude of the trades

	1400–1599	1600–1699	1700–1799	1800–1900	1400–1900
Trans-Atlantic	230,516	861,936	5,687,051	3,528,694	10,308,197
Trans-Saharan	675,000	450,000	900,000	1,099,400	3,124,400
Red Sea	400,000	200,000	200,000	505,400	1,305,400
Indian Ocean	200,000	100,000	260,000	379,500	939,500
Total	1,505,516	1,611,936	7,047,051	5,512,994	15,677,497


(GABON)
(REPUBLIC
OF THE CONGO)
Kwilu River
Kasai River
Loango
Kinshasha
(CABINDA)
Zaire River
Kwango River
(DEMOCRATIC
REPUBLIC
OF THE CONGO)
Mbanza Nsoyo
KONGO KINGDOM
São Salvador/
Mbanza Kongo
ATLANTIC OCEAN
(ANGOLA)
Luanda
Cuanza River

A case study: The Kongo Kingdom

Source: Heywood (JAH, 2009)

- The first European to sail to the Kongo Kingdom was Diogo Cão in 1483.
- Kongo king (*manikongo*), Nzinga Nkuwu, and his noblemen soon converted to Christianity.
- Trade begins.
  - Traded copper, textiles, ivory, enslaved people, etc.
- The first people sold and traded were criminals and prisoners of war.
- Portugal's demand switches from commodities to people.
  - Establishment of sugar plantations on Sao Tome began in around 1500.
  - Sugar plantations established in Brazil a few decades later.

The early effects of the trade

Heywood (JAH, 2009)

- There was an increase in kidnappings, false criminal accusations, violence, and civil wars.
  - This severely weakened the authority and power of the King.
- In 1514, King Afonso writes Portugal, concerned about the 'illegal' sale of people in the Kongo, particularly the capture of women and freemen.
  - Complains of the Portuguese colluding with Kongo noblemen to enslave Kongo citizens, even children and relatives of other noblemen.
  - By 1526, Afonso asks for the end of all Portuguese merchants and trade with Portugal, and removal of all Portuguese except missionaries.

The subsequent centuries

Heywood (JAH, 2009)

- Jaga invasion (or uprising), 1568–1570.
  - Were victims of Kongo's slave trade that fought back.
- The process continues as the external demand for enslaved people increases further.
- Many accounts of enslavement through violence, kidnapping, trickery, etc.
  - By this time most of those enslaved are 'Kongo citizens'.
- Large-scale civil war, 1665–1709
  - Political competition was closely tied with enslavement.
- This led to the eventual collapse of the Kingdom.

The deep penetration of the Atlantic trade

- Walter Hawthorne in his book *Planting Rice and Harvesting Slaves* writes:

  "the Atlantic slave trade was insidious because its effects penetrated deep into the social fabric of the Upper Guinea Coast–beyond the level of the state and to the level of the village and household . . . Hence, in many areas, the slave trade pitted neighbor against neighbor. . . " (pp. 106–107).

Table 1. The Method of Enslavement of Koelle's Informants

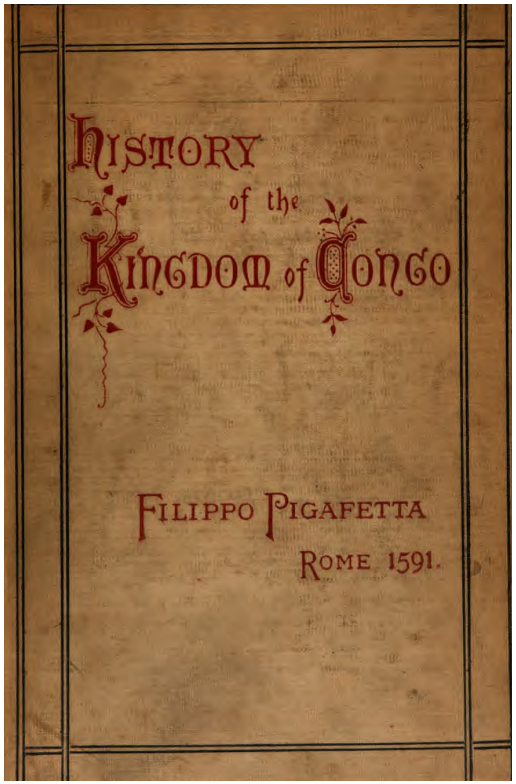
Manner of Enslavement	Percentage
Taken in a war	24.3%
Kidnapped or seized	40.3%
Sold/tricked by a relative, friend, etc.	19.4%
Through a judicial process	16.0%

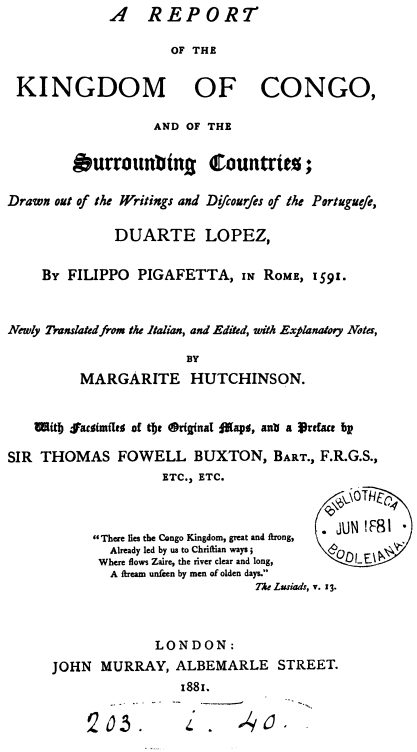
Notes: The data are from Sigismund Koelle's Linguistic Inventory. The sample consists of 144 informants interviewed by Koelle for which their means of enslavement is known.

Manner of enslavement: Examples

- Sold/tricked by a relative, friend, etc:
  - "sold by his relatives"
  - "sold by his family"
  - "sold by his brother because they could not agree"
  - "sold by a supposed friend"
  - "a treacherous friend enticed him on board a Portuguese vessel"
- Through the judicial system:
  - "sold by the king on account of slaying a man"
  - "sold on account of his family being accused of occasioning the king's death by means of witchcraft"
  - "sold on account of his sister being accused of witchcraft"
  - "sold on account of adultery"

Evidence from earlier periods




A REPORT
OF THE
KINGDOM OF CONGO,
AND OF THE
Surrounding Countries;
Drawn out of the Writings and Discourses of the Portuguese,
DUARTE LOPEZ,
BY FILIPPO PIGAFETTA, IN ROME, 1591.
Newly Translated from the Italian, and Edited, with Explanatory Notes,
BY
MARGARITE HUTCHINSON.
With Facsimiles of the Original Maps, and a Preface by
SIR THOMAS FOWELL BUXTON, BART., F.R.G.S.,
ETC., ETC.
BIBLIOTHECA BODLEIANA JUN 1881
"There lies the Congo Kingdom, great and strong,
Already led by us to Christian ways;
Where flows Zaire, the river clear and long,
A stream unseen by men of olden days."
The Lusiads, v. 13.
LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1881.
203. i. 40.

- Duarte Lopes, who was in Kongo from 1578–1583, noted that "as a result of necessity, father sold son, and brother, brother so that each person obtained food in any manner they could". — Heywood (1999, p. 7)

Consequences of the trade

- Ethnic fractionalization
  - Ties between village federations deteriorate
  - Villages raid one another
- Political fractionalization and weakening of states
  - Intra-community raiding and kidnapping
  - Kingdoms experience civil wars
- Break-down of traditional judicial systems
  - Judicial system comes to be used as tool for enslavement

Long-term effects of the trade?

Two different views:

1. Detrimental to economic development (Basil Davidson; Walter Rodney; Patrick Manning; Joseph Inikori)

   A consequence of the trade was to "alter the direction of the economic process in Africa away from development and towards underdevelopment and dependence." (Inikori, 1992, p. 108)

2. No (John Fage, David Northrup)

   "while it is true that the slave trade was cruel and produced a climate of fear and suspicion, its social and economic effects which can be measured were surprisingly benign." (Northrup, 1978, p. 174)

Data sources: Shipping records

- Atlantic slave trade.
  - Know port of embarkation.
- Indian Ocean slave trade.
  - Know region of embarkation.
- Saharan slave trade.
  - Know destinations.
  - Know which caravan of transport.
- Red Sea slave trade.
  - Know port of embarkation.

Data sources: Ethnicity data

- Atlantic slave trade.
  - 53 samples, 80,656 individuals, 229 ethnicities
- Indian Ocean slave trade.
  - 6 samples, 21,048 individuals, 80 ethnicities
- Saharan slave trade.
  - 2 samples, 5,385 individuals, 23 ethnicities
- Red Sea slave trade.
  - 2 samples, 67 individuals, 32 ethnicities

Jean-Baptiste Debret, 1768–1848

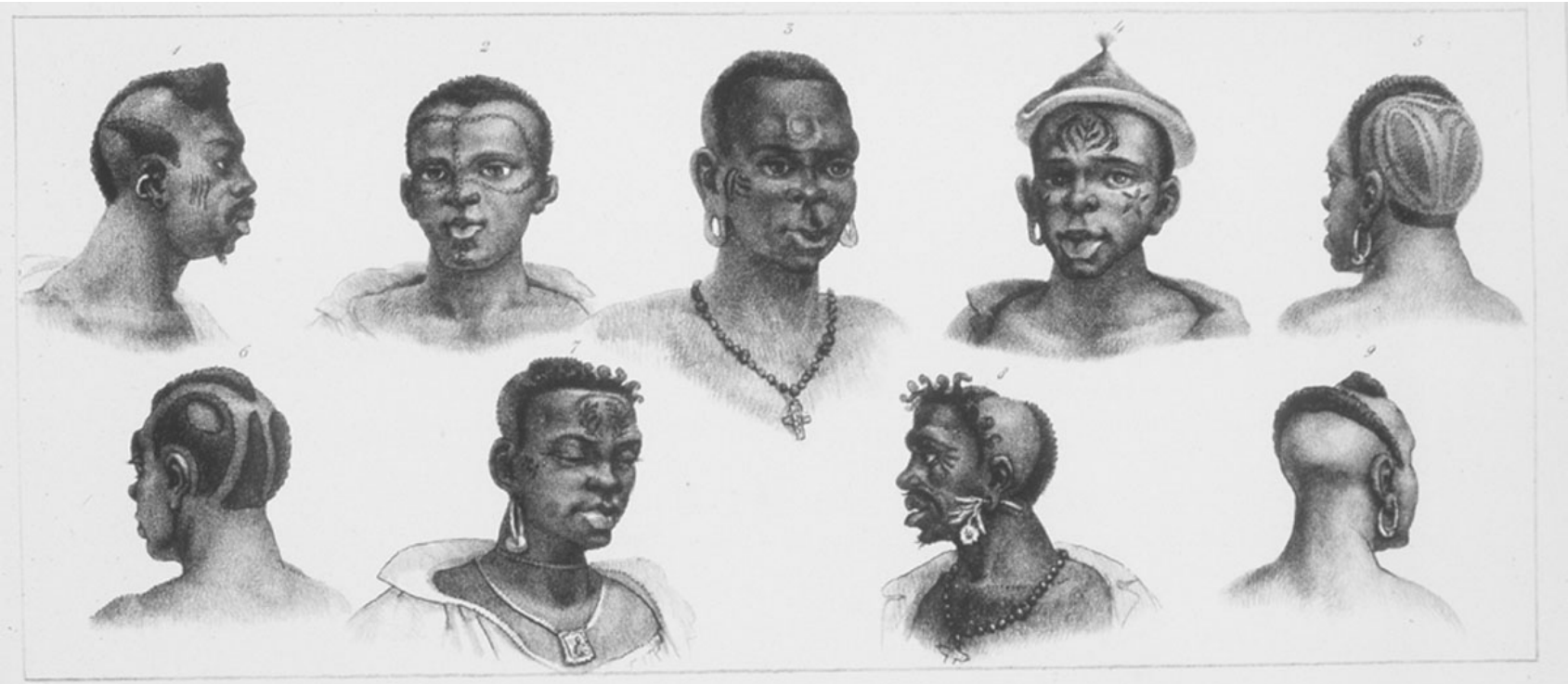


Figure: Painting by Jean Baptiste Debret showing the ethnic markings and hairstyles of enslaved males in Brazil.

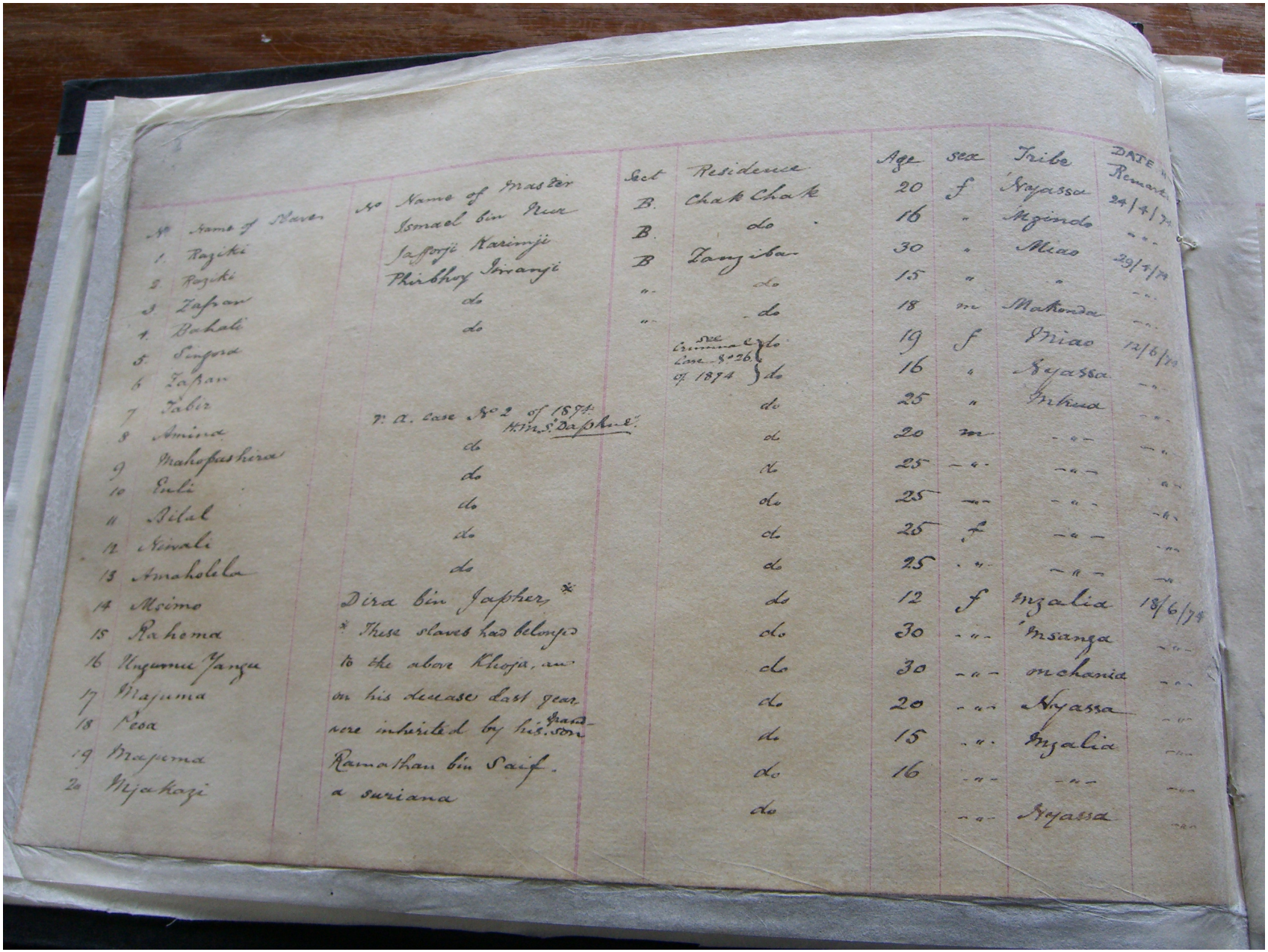
Trans-Atlantic trade, 1450–1799

Region	Years	Num. Ethnic.	Num. Obs.	Record Type
Valencia, Spain	1482–1516	77	2,675	Crown Records
Puebla, Mexico	1540-1556	14	115	Notarial Records
Dominican Republic	1547–1591	26	22	Records of Sale
Peru	1548–1560	16	202	Records of Sale
Mexico	1549	12	80	Plantation Accounts
Peru	1560–1650	30	6,754	Notarial Records
Lima, Peru	1583–1589	15	288	Baptism Records
Colombia	1589–1607	9	19	Various Records
Mexico	1600–1699	28	102	Records of Sale
Dominican Republic	1610–1696	33	55	Government Records
Chile	1615	6	141	Sales Records
Lima, Peru	1630–1702	33	411	Parish Records
Peru (Rural)	1632	25	307	Parish Records
Lima, Peru	1640–1680	33	936	Marriage Records
Colombia	1635–1695	6	17	Inventories
Guyane (French Guiana)	1690	12	69	Plantation Records
Colombia	1716–1725	33	59	Government Records
French Louisiana	1717–1769	23	223	Notarial Records
Dominican Republic	1717–1827	11	15	Government Records
South Carolina	1732–1775	35	681	Runaway Notices
Colombia	1738–1778	11	100	Various Records
Spanish Louisiana	1770–1803	79	6,615	Notarial Records
St. Dominique (Haiti)	1771–1791	25	5,413	Sugar Plantations
Bahia, Brazil	1775–1815	14	581	Inventories
St. Dominique (Haiti)	1778–1791	36	1,280	Coffee Plantations
Guadeloupe	1788	8	45	Newspaper Reports
St. Dominique (Haiti)	1788–1790	21	1,297	Fugitive Lists
Cuba	1791–1840	59	3,093	Registers
St. Dominique (Haiti)	1796–1797	56	5,632	Plantation Inventories

Trans-Atlantic trade, 1800–1900

Region	Years	Num. Ethnic.	Num. Obs.	Record Type
American Louisiana	1804–1820	62	223	Notarial Records
Salvador, Brazil	1808–1842	6	456	Records of Manumission
Trinidad	1813	100	12,460	Registers
St. Lucia	1815	62	2,333	Registers
Bahia, Brazil	1816–1850	27	2,666	Lists
St. Kitts	1817	48	2,887	Registers
Senegal	1818	17	80	Captured Ship
Berbice (Guyana)	1819	66	1,127	Registers
Salvador, Brazil	1819–1836	12	871	Manumission Certificates
Salvador, Brazil	1820–1835	11	1,106	Probate Records
Sierra Leone	1821–1824	68	605	Child Registers
Rio de Janeiro, Brazil	1826–1837	31	772	Prison Records
Anguilla	1827	7	51	Registers
Rio de Janeiro, Brazil	1830–1852	190	2,921	Free Africans' Records
Rio de Janeiro, Brazil	1833–1849	35	476	Death Certificates
Salvador, Brazil	1835	13	275	Court Records
Salvador, Brazil	1838–1848	7	202	Registers
St. Louis/Goree, Senegal	1843–1848	21	189	Emancipated List
Bakel, Senegal	1846	16	73	Sales Records
d'Agoué, Benin	1846–1885	11	70	Church Records
Sierra Leone	1848	132	12,425	Linguistic and British Census
Salvador, Brazil	1851–1884	8	363	Records of Manumission
Salvador, Brazil	1852–1888	7	269	Registers
Cape Verde	1856	32	314	Census
Kikoneh Island, Sierra Leone	1896–1897	11	185	Fugitive Records
Total			**80,656**	
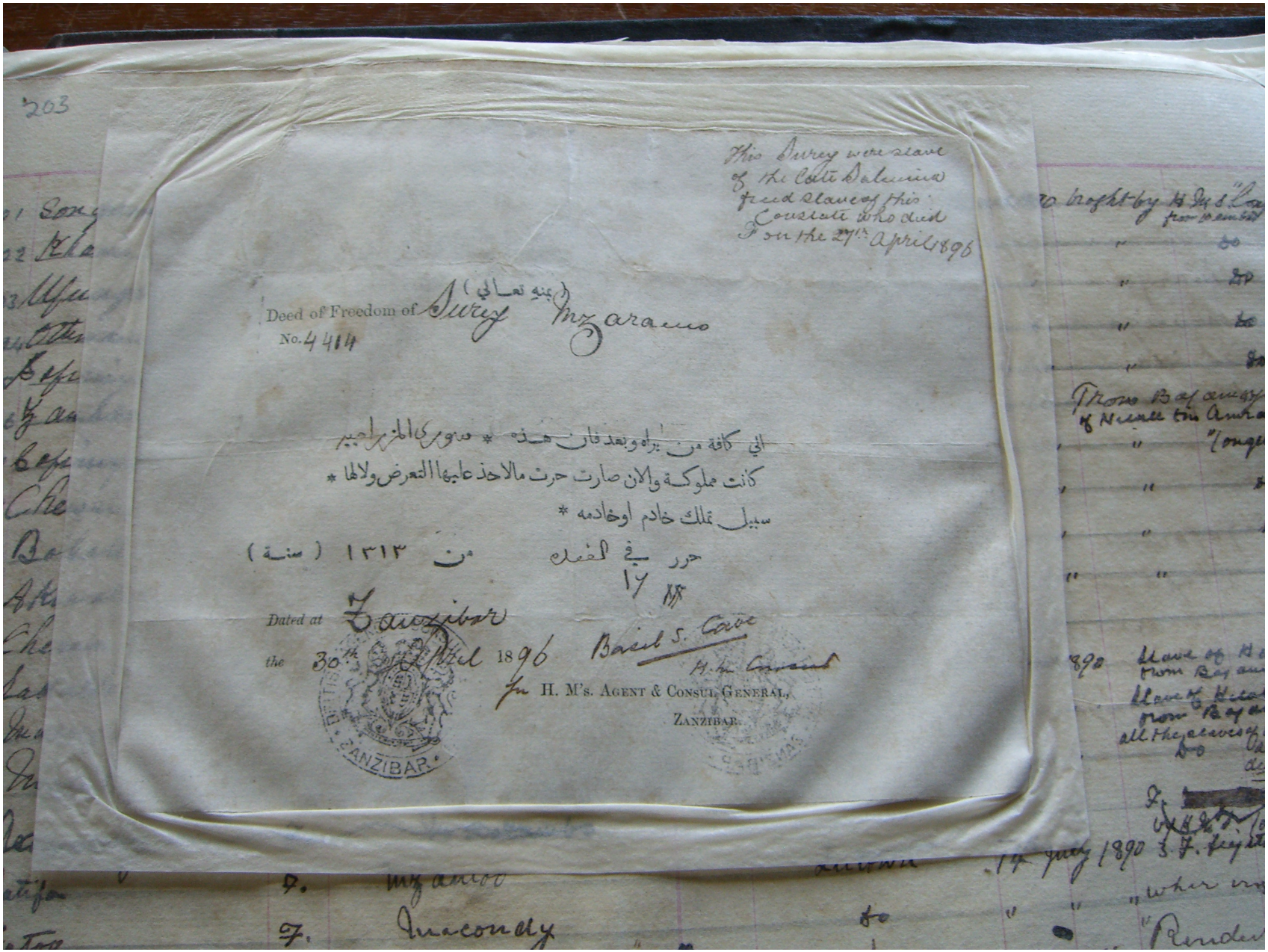




No	Name of Slaves	No	Name of Master	Sect	Residence	Age	sex	Tribe	DATE Remarks
1	Rajiki		Ismael bin Ruta	B.	Chak Chak	20	f	Nyassa	24/4/74
2	Rajiki		Jafferji Karimji	B.	do	16	"	Mgindo	" "
3	Zafran		Thirbhoy Jivanji	B	Zanzibar	30	"	Miao	29/4/74
4	Bahali		do	"	do	15	"	"	" "
5	Singora		do	"	do	18	m	Makonda	" "
6	Zafar				See Criminal Cycle Case No 26 of 1874 do	19	f	Miao	12/6/74
7	Zabir				do	16	"	Nyassa	" "
8	Amina				do	25	"	Intwa	" "
9	Mahopushira				do	20	m	" "	" "
10	Buli				do	25	" "	" "	" "
11	Bilal				do	25	" "	" "	" "
12	Nivali				do	25	f	" "	" "
13	Amaholela				do	25	"	" "	" "
14	Msimo				do	12	f	Mzalia	13/6/74
15	Rahema				do	30	" "	Msanga	" "
16	Ungumu Yangu				do	30	" "	Mchania	" "
17	Majuma				do	20	" "	Nyassa	" "
18	Pesa				do	15	" "	Mzalia	" "
19	Mapema				do	16	" "	" "	" "
20	Myakazi				do		" "	Nyassa	" "

v. a. case No 2 of 1874 Mrs. Daphne

Dira bin Jaffer *

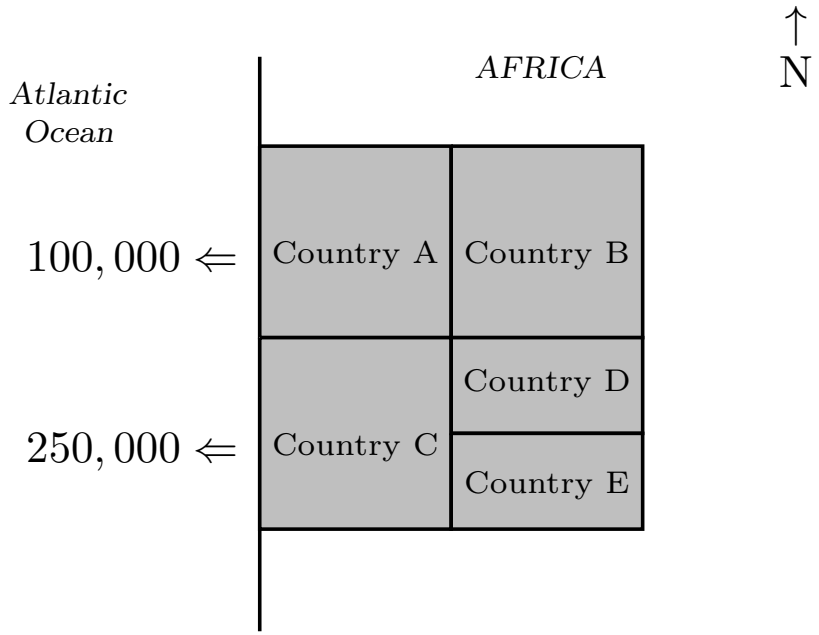
* These slaves had belonged to the above Khoja, and on his decease last year were inherited by his son Ramathan bin Saif.

a suriana


This Surey was slave
of the late Salumina
freed slaves of this
Consulate who died
on the 27th April 1896
Deed of Freedom of Surey Mzaramo
No. 4414
اني كافة من يراه وبعد فان هذه * صورى المزراجير
كانت مملوكة والان صارت حرة مالاحد عليها التعرض ولالها *
سبيل تملك خادم اوخادمه *
حرر في الغضه من ١٣١٣ (سنة)
١٦
Dated at Zanzibar
the 30th April 1896
Basil S. Cave
H. M. Consul
for H. M's. Agent & Consul General,
Zanzibar.
ZANZIBAR.



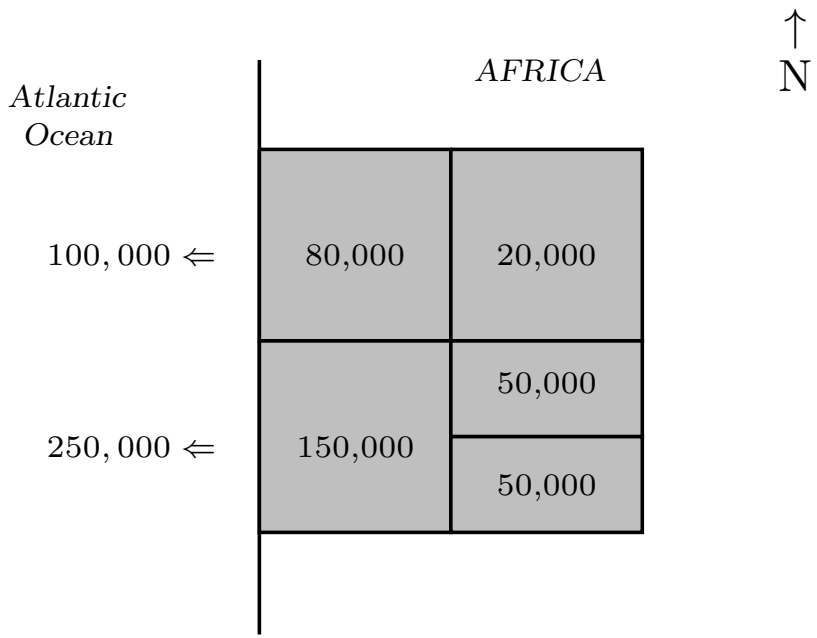
Constructing Estimates



From the ethnicity data, I calculate:

$$\begin{aligned} \text{A} : \text{B} &= 4 : 1 \\ \text{C} : \text{D} : \text{E} &= 3 : 1 : 1 \end{aligned}$$

Calculations



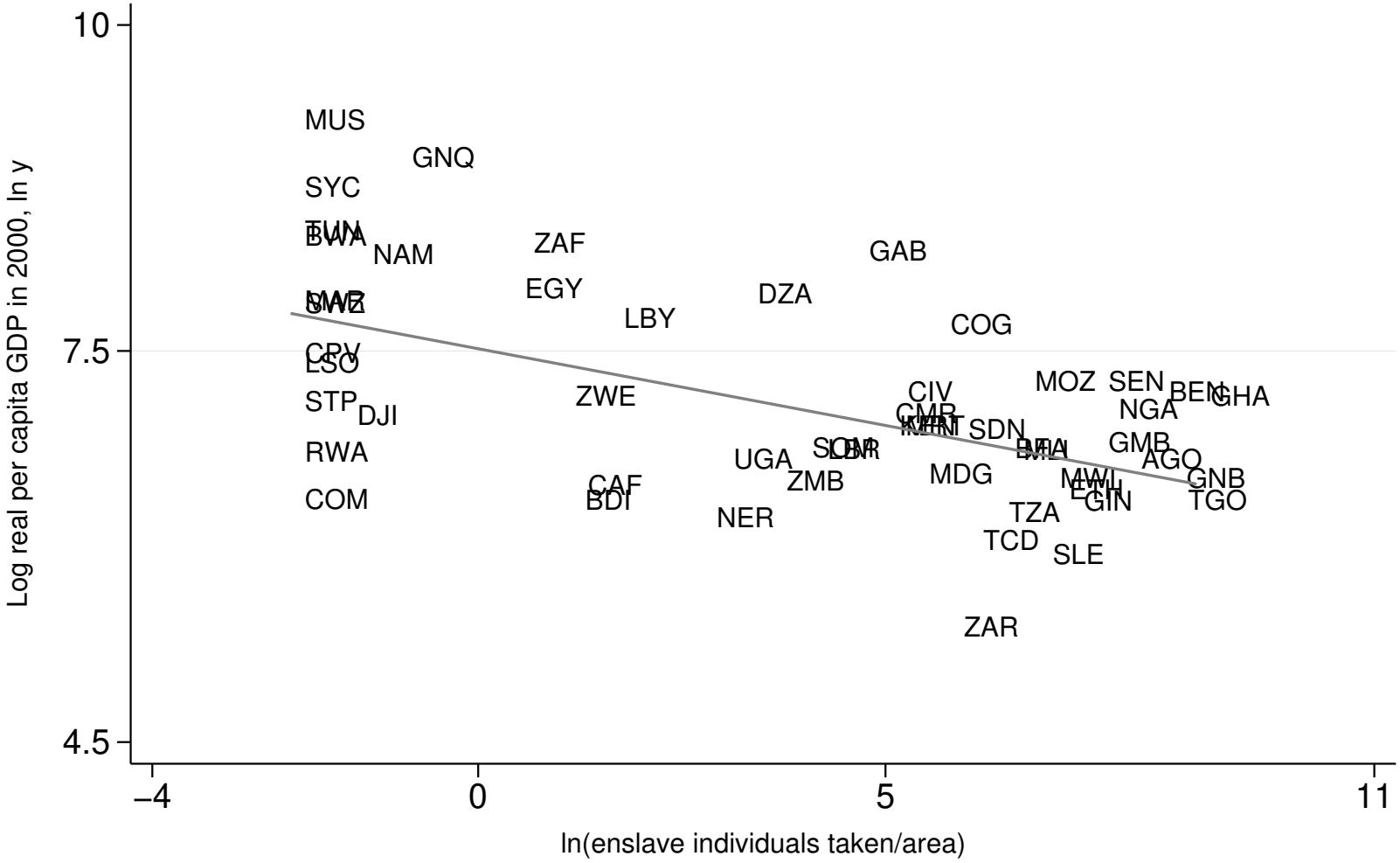
$$\text{A}= 100,000 \times 4/5 = 80,000$$
$$\text{B}= 100,000 \times 1/5 = 20,000$$
$$\text{C}= 250,000 \times 3/5 = 150,000$$
$$\text{D}= 250,000 \times 1/5 = 50,000$$
$$\text{E}= 250,000 \times 1/5 = 50,000$$

Estimated total number enslaved and taken from the continent

Country	Trans-Atlantic Trade	Indian Ocean Trade	Trans-Saharan Trade	Red Sea Trade	**All Slave Trades**	**Share of Total**
Angola	3,616,027	0	0	0	**3,616,027**	**23.1%**
Nigeria	1,411,758	0	555,796	59,337	**2,026,891**	**12.9%**
Ghana	1,603,335	0	0	0	**1,603,335**	**10.2%**
Ethiopia	0	0	813,899	633,357	**1,447,256**	**9.2%**
Mali	524,102	0	509,950		**1,034,052**	**6.6%**
Sudan	615	0	408,260	454,913	**863,788**	**5.5%**
Dem. Rep. of Congo	752,828	0	0	0	**752,828**	**4.8%**
Mozambique	382,337	274,024	0	0	**656,402**	**4.2%**
Chad	823	0	409,367	118,673	**528,863**	**3.4%**
Tanzania	10,834	507,595	0	0	**518,429**	**3.3%**
Benin	461,782	0	0	0	**461,782**	**2.9%**
Senegal	222,359	0	98,732	0	**321,091**	**2.0%**
Togo	280,842	0	0	0	**280,842**	**1.8%**
Guinea	242,691	0	0	0	**242,691**	**1.5%**

Bivariate (unconditional) relationship

Nunn (QJE, 2008)



(coef = –.118, s.e. = .025, N = 52, R2 = .31)

Econometric Issues

1. Unobserved/omitted country characteristics
   - Areas that initially had poor institutions or domestic slavery may have selected into the slave trade and these characteristics persist today.
   - The effect of the slave trade may be overestimated: $\hat{\beta}_{\text{OLS}}$ will be biased away from zero.

2. Measurement error in the estimates of the total number of individuals enslaved
   - Overall noise in the data, i.e. attenuation bias: $\hat{\beta}_{\text{OLS}}$ will be biased towards zero.
   - Under-representation of those enslaved from the interior: $\hat{\beta}_{\text{OLS}}$ will be biased towards zero.

Empirical strategies

1. Control for observable characteristics.
2. Examine the historical evidence on selection during the slave trades.
3. Instrumental variables.

Selection during the slave trades

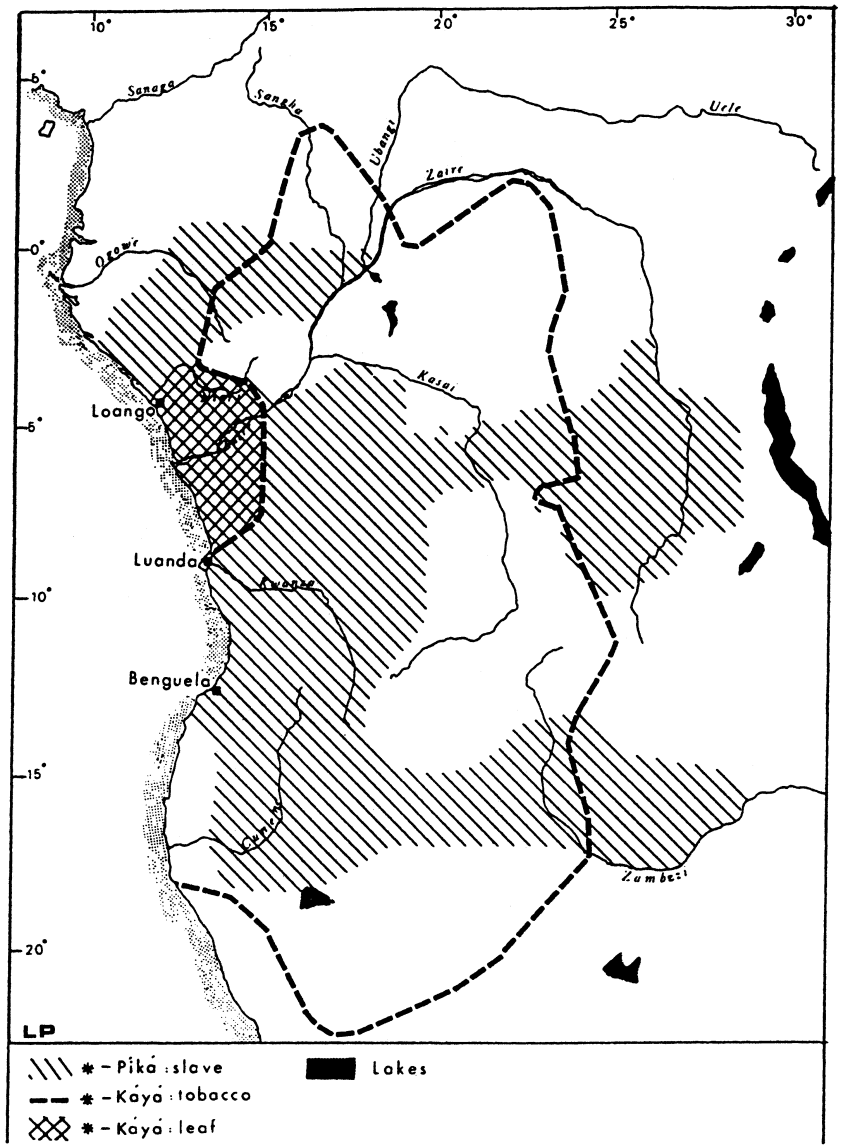
- Initial prevalence of domestic slavery:
  - Did internal slavery predate the external slave trades?
- Initial prosperity:
  - Were the initially least prosperous societies targeted?

But, wasn't there always slavery?

- Debate in the historical literature: John Fage vs. Walter Rodney
- Some mention of domestic 'slaves' (or servants) in the early 16th century, but they were considered 'a part of the family'.
- Were also prisoners of war and criminals
  - No sense in which there was a "market" for enslaved people.
  - They were not 'chattel'.
- Linguistic evidence from Anne Hilton and Jan Vansina.
  - E.g., The term pika (or peça) originally meant 'servant' (also piece/unit in Portuguese), but after 1500 came to refer to a "traded slave."
  - The diffusion of the term is connected with the coast.

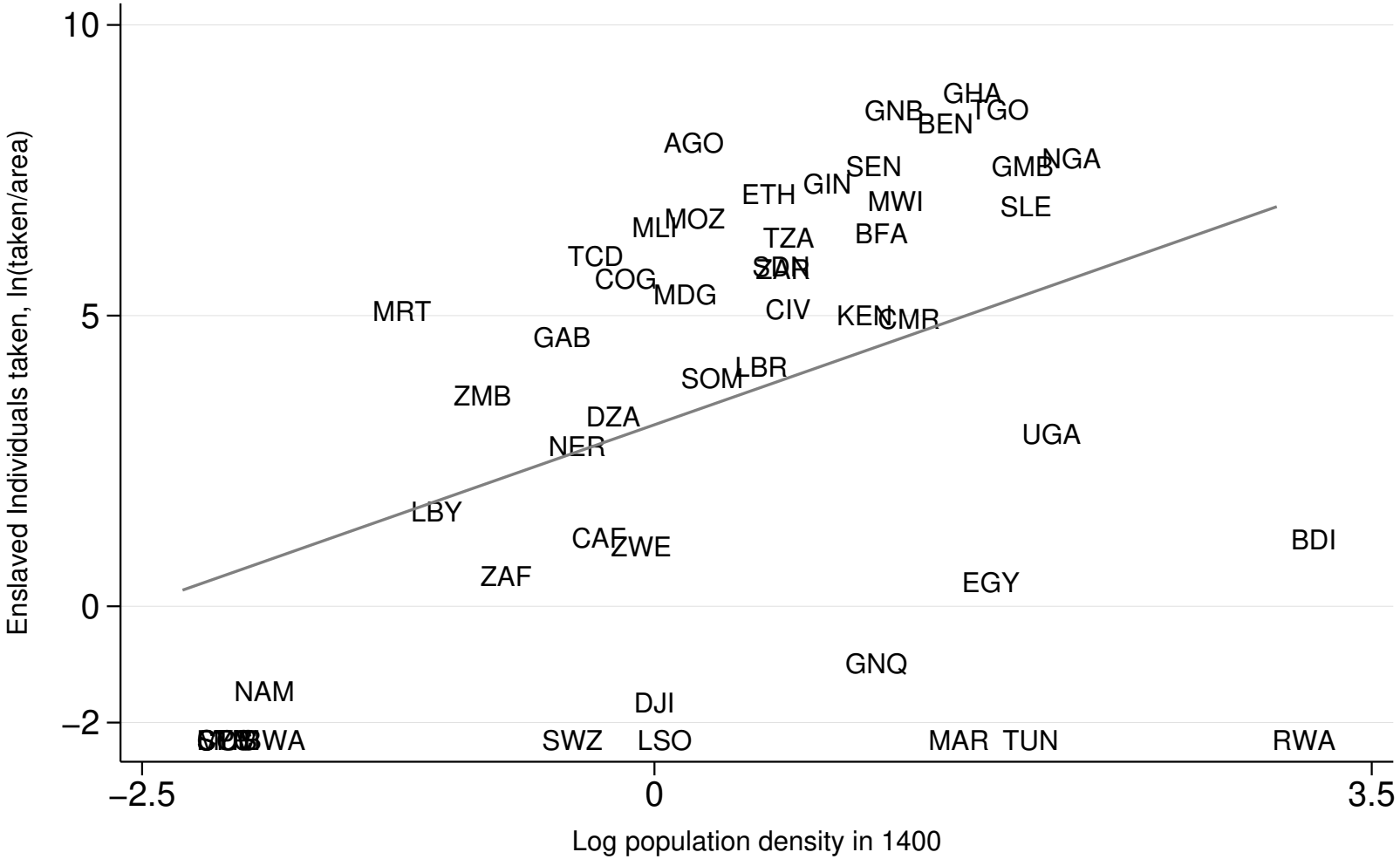
Linguistic evidence

Source: Vansina (HIA, 1989)



Pre-trade prosperity and subsequent enslavement

Nunn (QJE, 2008)



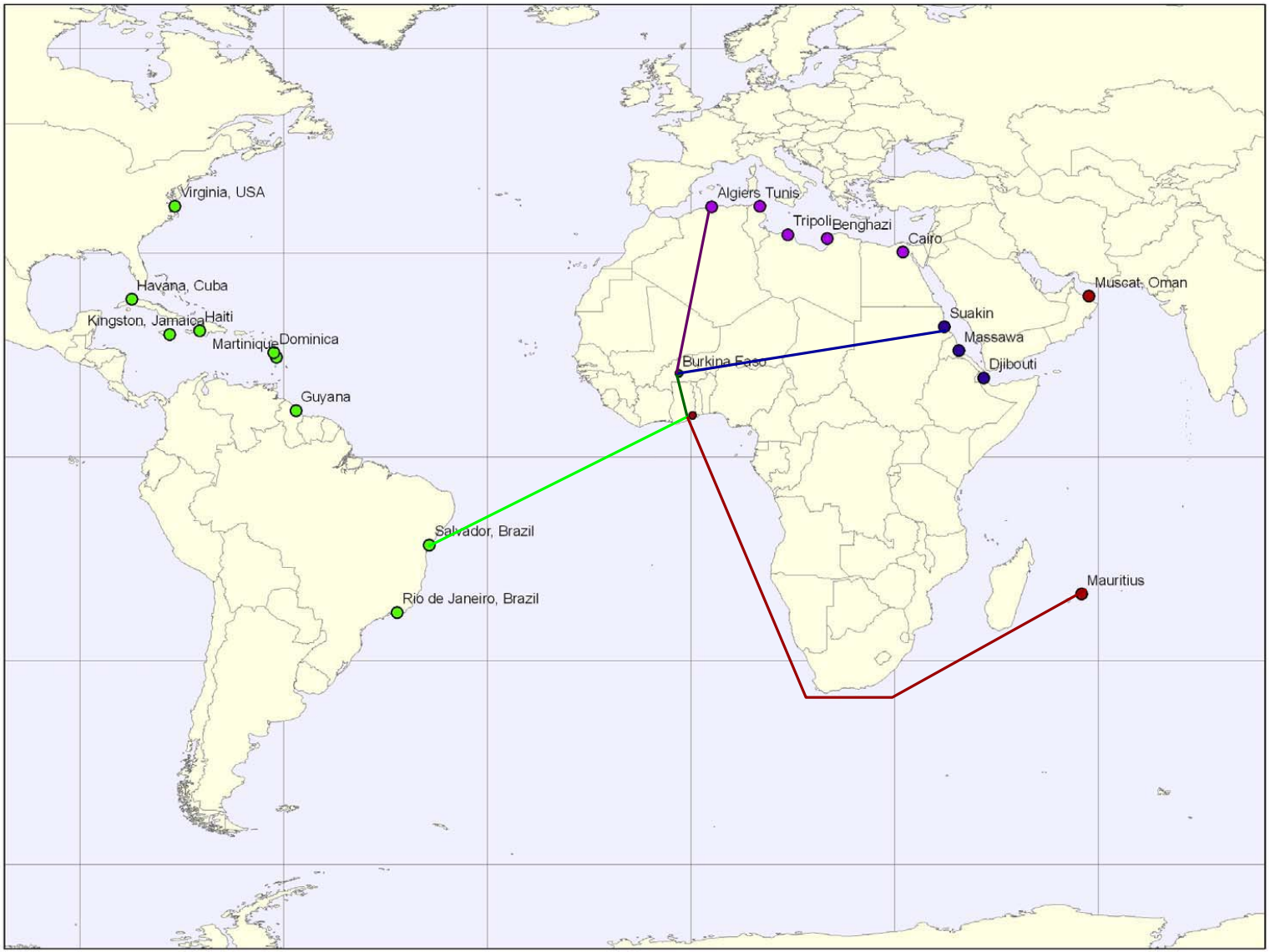
(beta coef = .42, t−stat = 3.30, N = 52, R2 = .18)

Instrumental variables

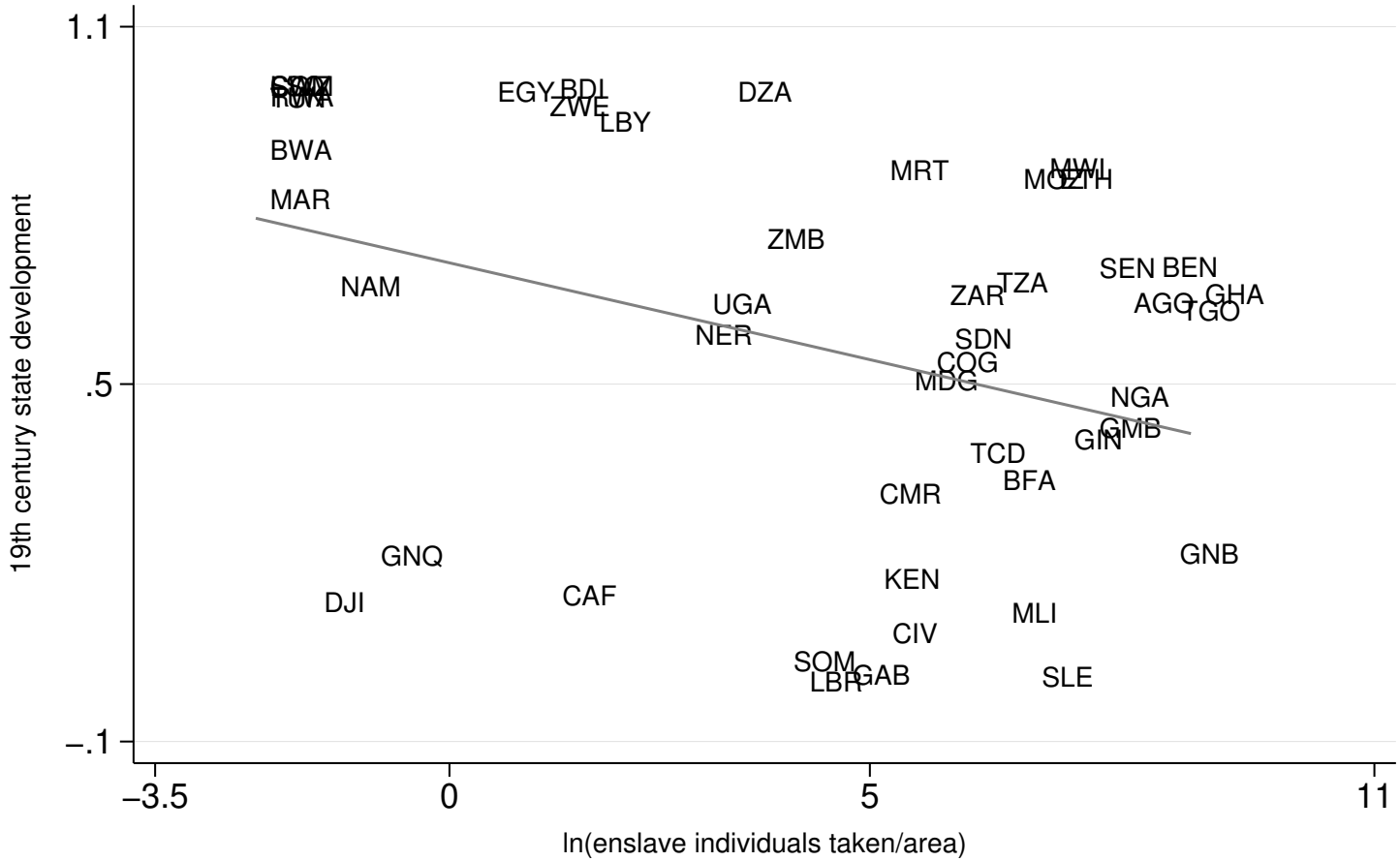
- Instruments
  - Must be uncorrelated with unobservable country characteristics ε, but correlated with the number enslaved.
  - Use the distance from each country's interior to the closest major slave market in each of the four slave trades.

- Crucial assumptions (in economic language)
  1. Location of demand influenced the location of supply.
  2. Location of supply did not influence the location of demand.

Instruments: Distances to locations of demand

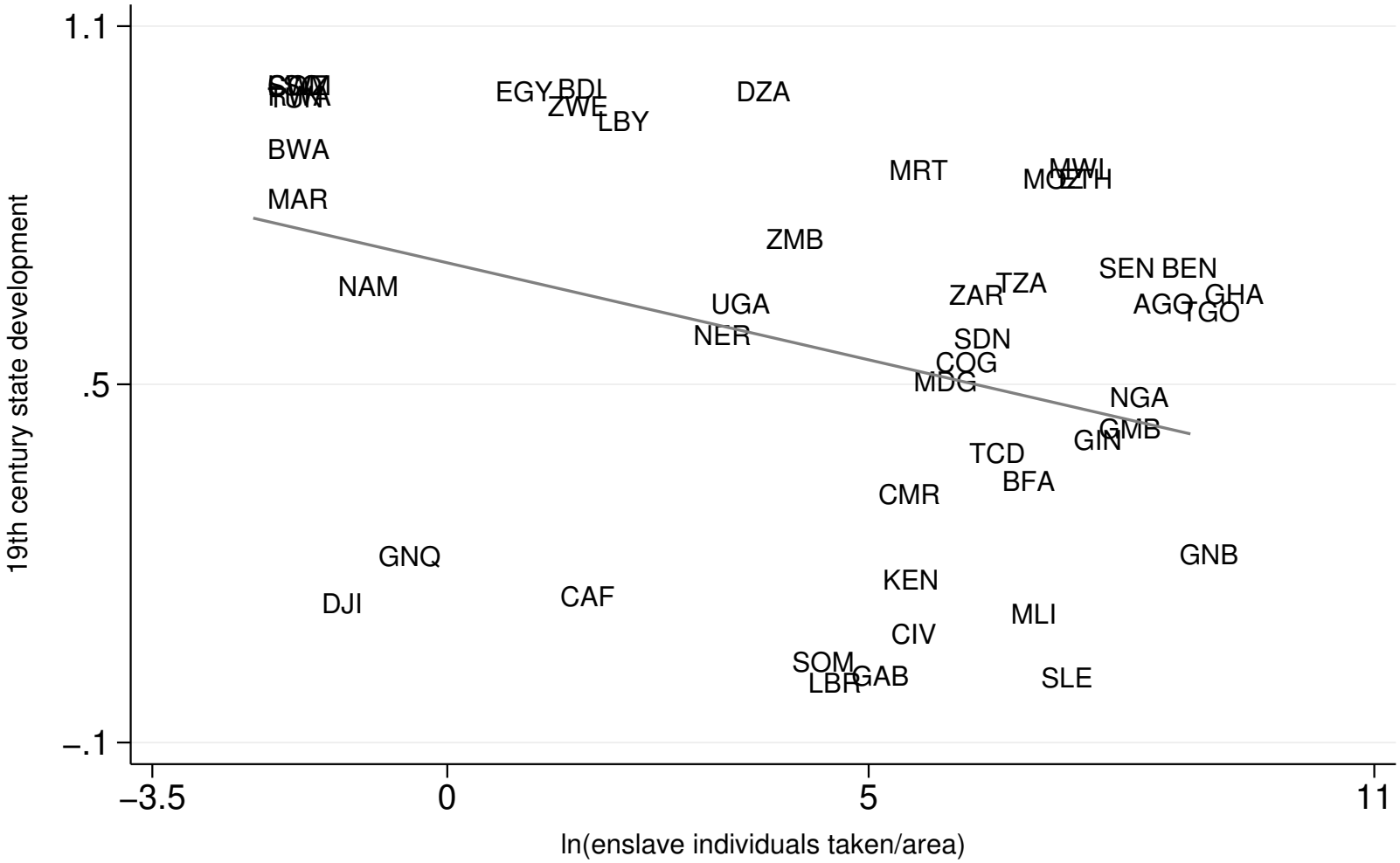


Thinking about channels: Ethnic diversity



(beta coef = −.37, t−stat = −2.63, N = 47, R2 = .13)

Thinking about channels: State development



(beta coef = −.37, t−stat = −2.63, N = 47, R2 = .13)

Other long-term effects of the slave trades from the empirical literature

- Polygyny (men having multiple wives)
  - Edlund and Ku (2011), Dalton and Leung (2014), and Bertocchi and Dimico (2015)
- Female genital cutting
  - Corno, La Ferrara, and Voena (2020)
- Gender roles
  - Teso (2019)
- HIV prevalence
  - Bertocchi and Dimico (2015)
- Stronger supernatural 'witchcraft' beliefs
  - Gershman (2018)
- Conflict
  - Zhang and Kibriya (2016)
- Financial development
  - Levine, Lin, and Xie (2017)

Trust and the slave trade: Fon saying

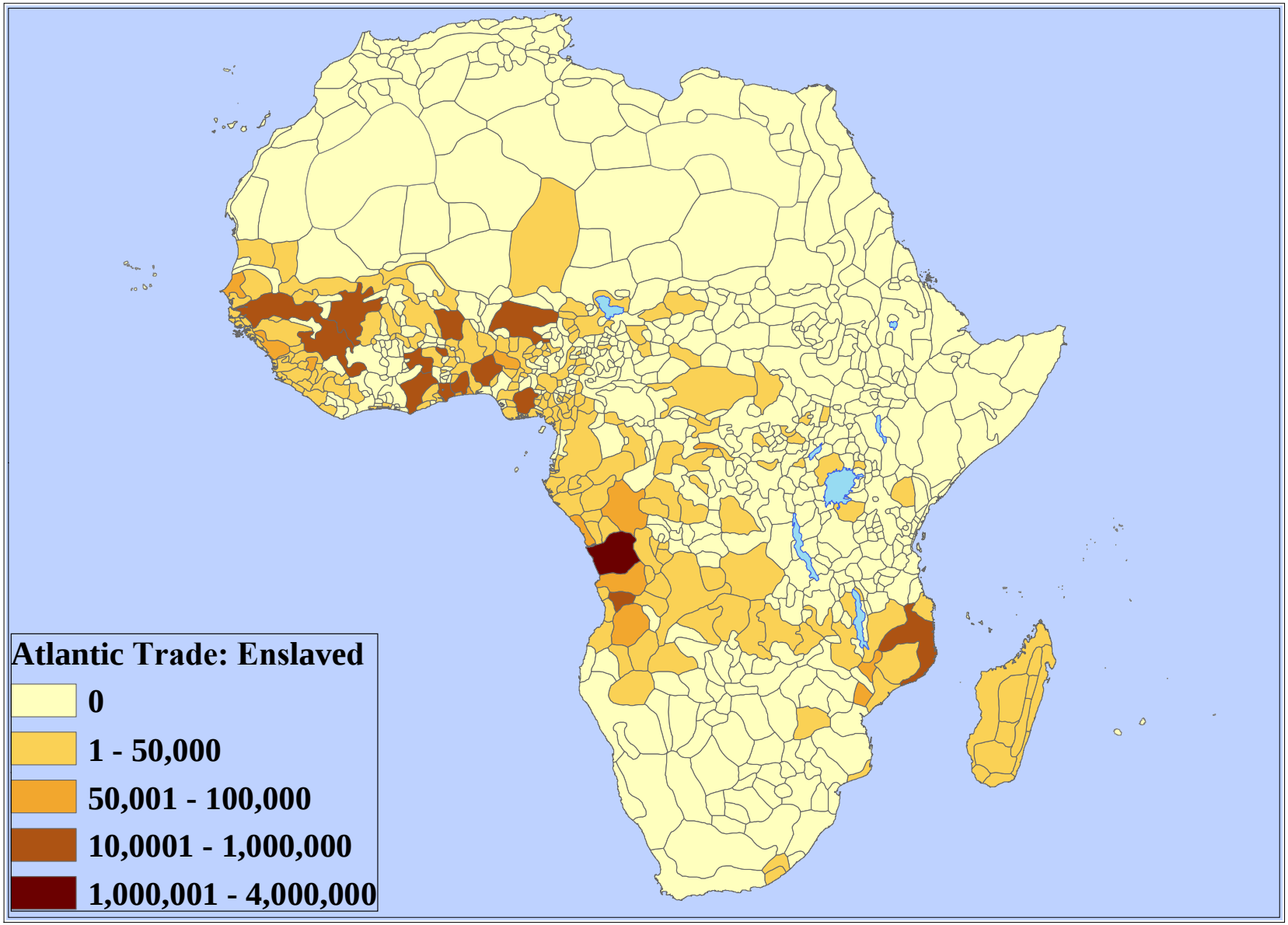
- "*Me elo na sa we du*."
- "This person will sell you and eat the money."
- Or less literally, "this person will sell you and enjoy it."
- The saying is also used to describe someone who is deceitful and capable of something awful.

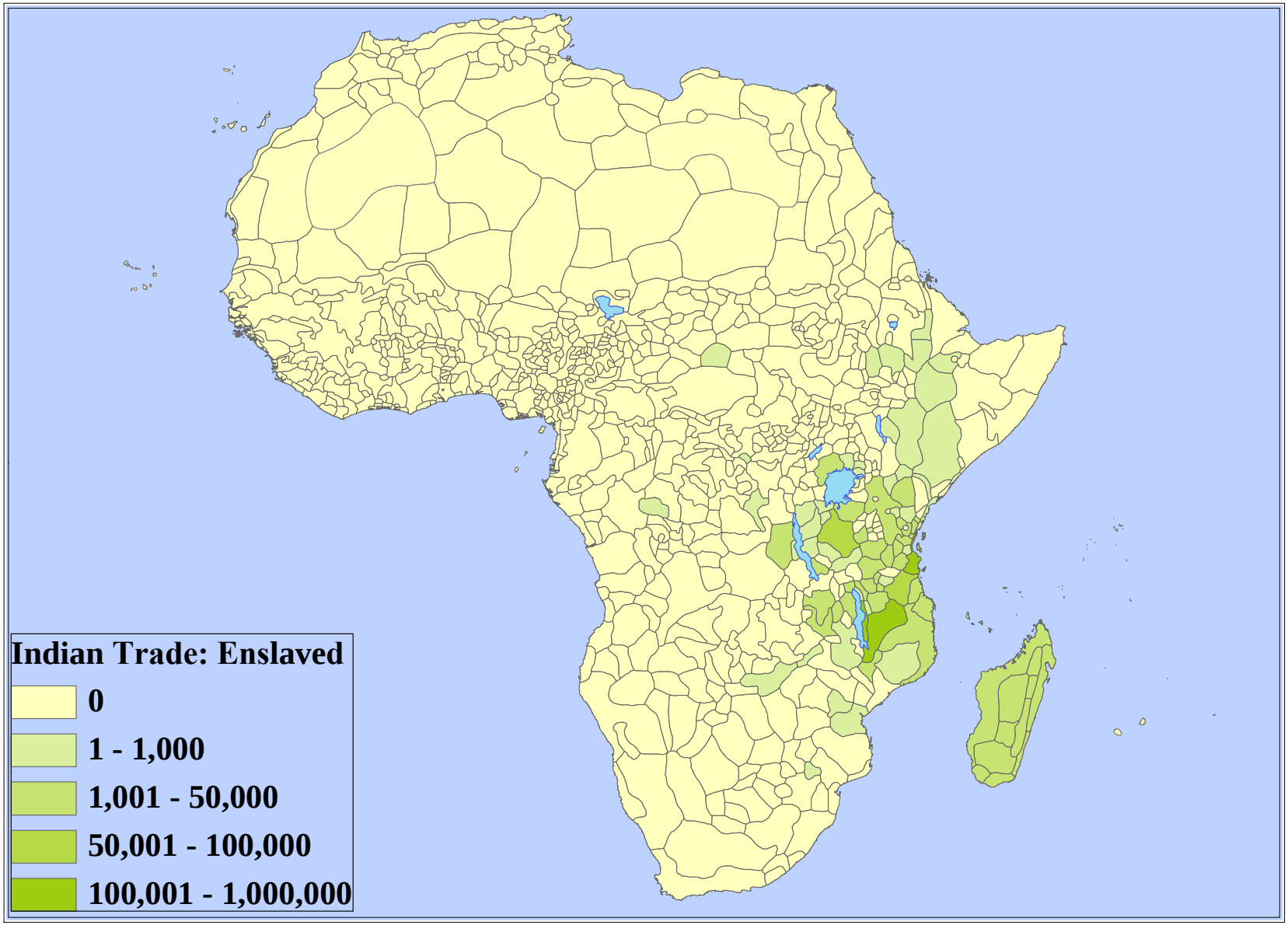
Wolof saying

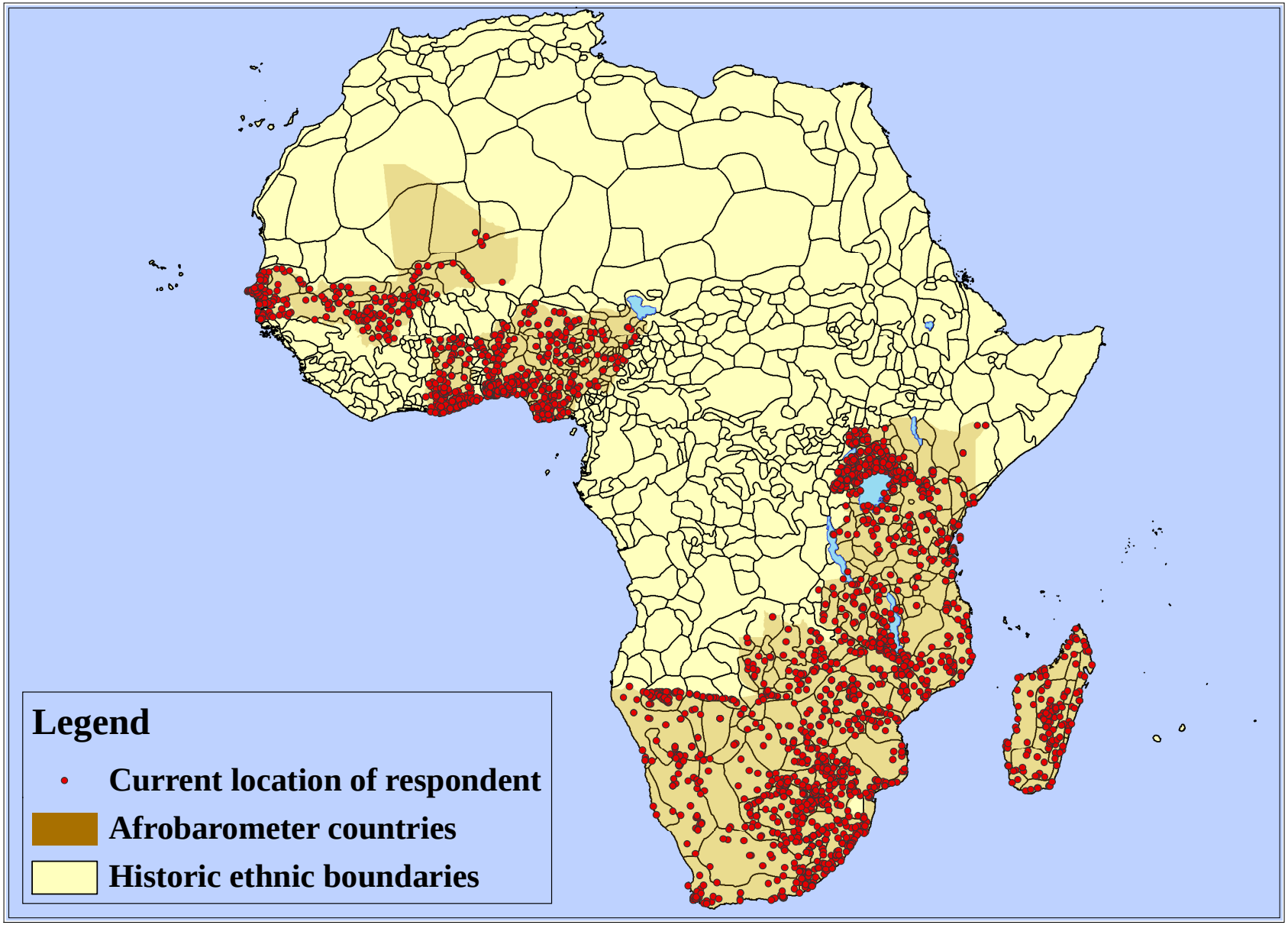
- "*Ki meun na la diaye, lekke sa ndiegue*."
- "This person can sell you and enjoy the benefits from the sale."
- The saying is very common and is often used as a joke or an exaggeration (to say that that someone is less innocent than they seem).
  - It is used to describe someone who is deceitful and capable of something awful, even if they do not look like it.
  - It is even used to describe family, friends, and children.

Yoruba saying

- "*Bí a bá ta arán ilé ẹni lópọ̀, a kì í rí i rà lọ́wọ̀n-ọ́n mọ́*."
- "If one sells a member of one's household cheap, one will not be able to buy him back at a great value."
- The saying is used to refer to someone who spoils the reputation of someone in his family.
  - The saying teaches that speaking badly of family members also embarrasses oneself.
  - And you will never be able to regain your reputation.


Atlantic Trade: Enslaved
0
1 - 50,000
50,001 - 100,000
10,0001 - 1,000,000
1,000,001 - 4,000,000


Indian Trade: Enslaved
0
1 - 1,000
1,001 - 50,000
50,001 - 100,000
100,001 - 1,000,000


Legend
Current location of respondent
Afrobarometer countries
Historic ethnic boundaries

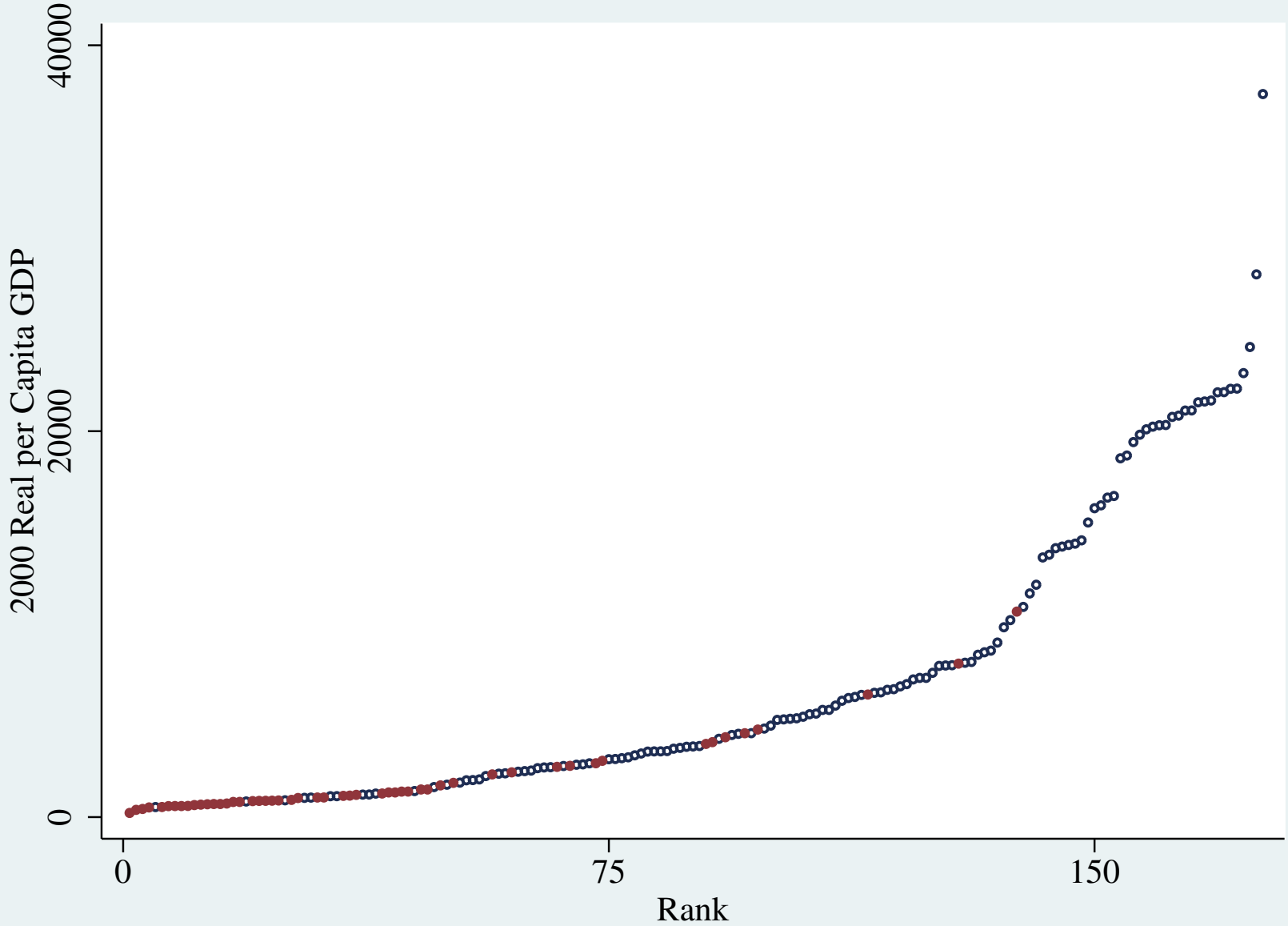
Estimated effects on trust

Souce: Nunn and Wantchekon (AER, 2011)

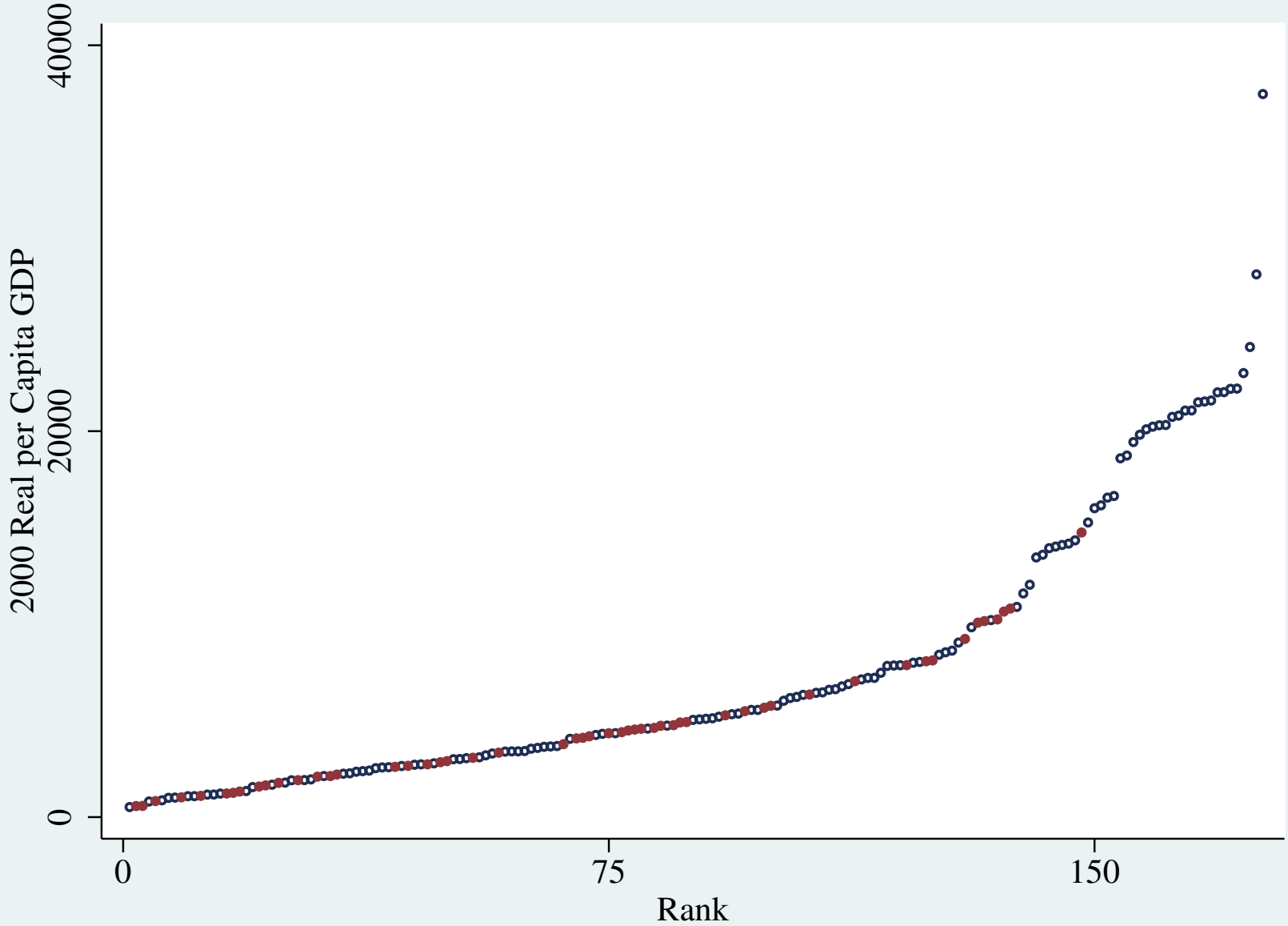
	Trust of relatives	Trust of neighbors	Trust of local council	Intra-group trust	Inter-group trust
	(1)	(2)	(3)	(4)	(5)
ln (1+enslaved/area)	-0.133***	-0.159***	-0.111***	-0.144***	-0.097***
	(0.037)	(0.034)	(0.021)	(0.032)	(0.028)
Individual controls	Yes	Yes	Yes	Yes	Yes
District controls	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	20,062	20,027	19,733	19,952	19,765
Number of ethnicity clusters	185	185	185	185	185
Number of district clusters	1,257	1,257	1,283	1,257	1,255
R-squared	0.13	0.16	0.20	0.14	0.11

Notes: The table reports OLS estimates. The unit of observation is an individual. Standard errors are adjusted for two-way clustering at the ethnicity and district levels. The individual controls are for age, age squared, a gender indicator variable, 5 living conditions fixed effects, 10 education fixed effects, 18 religion fixed effects, 25 occupation fixed effects, and an indicator for whether the respondent lives in an urban location. The district controls include ethnic fractionalization in the district and the share of the district's population that is the same ethnicity as the respondent. ***, ** and * indicate significance at the 1, 5 and 10% level.

Africa without the slave trades?



Africa without the slave trades?



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