Traditional Female Political Representation in Sub-Saharan Africa

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1. Introduction

There is now a fair amount of consensus amongst economists that successful economic development depends on the development of the right political institutions (Acemoglu, Johnson, and Robinson 2001). This research suggests that when it comes to ensuring that the positive effects of economic growth in turn enhance female empowerment, a crucial ingredient is most likely the nature of these institutions and in particular the direct role women play in them. To date, there is relatively little research connecting these two fundamental questions - the role of political institutions in explaining economic development and achieving gender equity. It seems that a key starting point for combining these two research agendas is a focus on Africa. This is not only because it is the poorest part of the world, and relatively understudied, at least by development economists, relative to other parts of the developing world, but that it is, in fact, one of the few places in the world where women have played an important role in both informal (indigenous) and formal political institutions throughout its history. Understanding the implications and determinants of this deep-rooted female political representation in Africa has enormous potential to increase our understanding of the interplay between political institutions, economic development, and gender equity.

Historically, there is a large amount of variation across Africa along this dimension. In fact, African history is replete with well-known female monarchs, chiefs, and constitutional leaders. Their exploits are celebrated and constitute a preponderant feature of African historical traditions. Very early legends include female pharaohs, such as Cleopatra and Nefertiti who ruled ancient Egypt, and the Queen Candaces of Ethiopia in the second century. In the Niger and Chad and Hausa territory, women founded cities, led migrations, and conquered kingdoms. In West Africa, among the Ashanti and other Akan speaking tribes, Queen Mothers, had parallel leadership roles to men. They had their own royal courts, councils, and armies. Several female leaders are important signatores on treaties with the colonists (Lebeuf 1960, Steady 2011).

The origins of female political power in Africa are not well understood. Certain hypotheses have been put forth. Several scholars emphasize the productive role of women in Africa. O'Barr and Firmin-Sellers (1995) state that in many agricultural societies of Sub-Saharan Africa, women derived political status from the key role they played in production (whether patrilineal or matrilineal) and could rule their own affairs. Sudarkasa (1986) links the political control of women throughout much of West Africa to their central role in trade. Women controlled their own economic spheres. They had trade and craft guilds, spoke on matters of taxation and maintenance of public facilities.

Other evidence points to the importance of conflict in determining the political position of women in preindustrial societies. Violence and conflict are forces that promote male solidarity and often lead to female exclusion from leadership (Ross 1986).

Some scholars emphasize the role of outside religions in determining female power and autonomy in Africa. It is commonly argued that in the African societies that adopted Islam, women are precluded from taking part in any political decisions (Lebeuf 1960, Sudarkasa 1986). Alou (2009) points to the example of the Sarraounia which refers to queen or female chief in Hausa language. Organized jihads, where they succeeded acted largely to the detriment to freedom and power of women in the Hausa Empire. In the pre-jihad Hausa states women wielded considerable political power.

Numerous scholars claim that European colonial rule led to decline in female political power across the board (Lebeuf 1960, Ottenberg 1960). Colonial administrative systems allowed European officials to govern through indigenous male authorities, formalizing male institutions while ignoring their female equivalents (O'Barr and Firmin-Sellers 1995). The British system of indirect rule was most explicit in its reliance on indigenous authorities. They often created men's positions into salaried jobs, and ignored women's. The colonists rarely considered the possibility that there were female political structures and the dual-sex systems gave way to single-sex ones in which men appropriated all the power (Hafkin and Bay 1976).

However, there are also many examples where women maintained their political power throughout the colonial period. Generally, indigenous political leadership in the postcolonial era continued its legacies through monarchies, chieftaincies, and the system of village, clan, and lineage headship. Some of these rulers, especially the chiefs and paramount chiefs, were incorporated into the postcolonial parliamentary structure, such as the House of Chiefs in some countries. Others continue to function in semi-autonomous systems of chieftaincies. Based on field research, overall, it appears that many women leaders continue to exert female authority and power in their chiefdoms (Steady 2011).

As a first step in understanding tradition female political representation across Africa, we compiled an original data set designed to characterize female political participation for pre-colonial societies across Africa. This paper describes this data in detail.

2. Data Collection

The starting point in compiling this data was to use George Peter Murdock's (1967) *Ethnographic Atlas* that coded data for 800 ethnic groups in Africa. This data set includes many historical variables at the ethnicity level, such as: the political structure, economic characteristics, inheritance patterns, and also many variables that pertain directly to women: such as, the role of women in the economy, incidence of polygyny, and matrilineality. To this dataset, we added information on whether or not a given ethnicity traditionally allowed women in formal political positions and what type of role they occupied and what powers they had.

The data extend several variables derived from the Standard Cross Cultural Sample (Murdock and White 1969) to a more geographically dense set of ethnic groups in the African continent included in Murdock's *Ethnographic Atlas*. The resulting dataset captures traditional gender data for 322 ethnic groups. We collect our final dataset through (1) literature-based and (2) survey-based data collection.

Literature-Based Collection

Our primary source of ethnographic data is derived from the sociology and cultural anthropology literatures. We use a set 412 Sub-Saharan ethnic groups drawn from Murdock Ethnographic Atlas as our sample. We extend the bibliography of ethnographic references for the Ethnographic Atlas with any additional literary sources with the potential to cover traditional ethnographic characteristics for this set of societies. To do this, we returned both to the original sources which Murdock used to code the *Atlas* and also to the *Ethnographic Surveys of Africa*. These were put together by the International African Institute in London between 1945 and 1980 and contain summaries of information concerning all significant African ethnicities. The information most relevant for this

project is their description of women's roles in traditional[1] political structures. We also relied on hundreds of additional ethnographic studies on particular ethnic groups across Africa, compiled from various electronic and literary sources. These sources include both primary and secondary literary references on each culture, electronic databases such as the *Human Relation Area Files* (eHRAF) *World Cultures* and Anthropology Plus, and articles published in academic journals. A complete list of references used for the literature-based data collection is available upon request as well as in our website, see http://cournot.sun.ac.za/fppssa/index.html.

Our preferred ethnographic coding process follows the methods outlined by Whyte (1978). We form a gender-balanced team of 12 undergraduate research assistants. In an effort to mitigate bias associated with engendered interpretations of the primary literature, each research assistant is paired with another team member of the opposite gender. The sample is divided equally across each research assistant pair who, for each ethnic group assigned, are tasked with independently reading through the references listed in our bibliography and encoding a set of cultural characteristics on gender characteristics into standardized categorical variables. The research assistants in each pair then reconvene to resolve their independent codes into a single encoding. Where they are in agreement, that code is the final literature-based code. Where they disagree, they try to come to an agreement based on the information available. Where the pair could not agree, the code is set to "Ambiguous".

A principal investigator and a lead research assistant (one female, one male) piloted the preliminary coding procedure and monitored the codings generated by the undergraduate research assistant team. Any codes needing review were identified and discussed with the undergraduate pair responsible. A final systematic review of all the literature-based codes was conducted to identify errors and maintain consistency.

Survey-Based Collection

Of the 412 Sub-Saharan ethnic groups in our sample derived from Murdock, 307 groups had some form of literary sources with information pertinent to the present study. To gather data for the remaining groups, we developed an electronic survey to mimic the variables coded in the literature-based phase. The remaining uncoded groups, along with a random 10% sub-sample of the groups already coded by our undergraduate research assistants as a quality check, constitute a "survey-based" sample.

We identify potential survey respondents as individuals who can credibly comment on pre-colonial characteristics, including academic researchers, members of the ethnic group itself, and other cultural experts. Potential respondents were approached through an outreach campaign to complete the electronic survey of their own volition. Survey responses were then cleaned for consistency with the literature-based data.

One meaningful difference in the survey-based phase is that unlike the literature-based encoding, we could not feasibly train each potential survey respondent on each definition to the same level as we did for the undergraduate research assistant team tasked with literature-based coding.[2]

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[1] We use the term "traditional" to describe cultural characteristics as they *prior* to any widespread colonial influence.

[2] In addition to an initial research assistant training session, explanations and examples were often discussed in detail in person and via email exchanges.

We address this by including definitions and examples for each variable considered by the survey so that each respondent can better understand each specific question.

Data Processing and Finalization

Upon completion of the above data collection, raw data from the literature and survey-based collection phases was then reviewed systematically. The purpose of the final data review is to (1) correct any simple coding errors or anomalies, (2) verify consistency in the coding process, and (3) reconcile data collected from the literature and survey-based sources.

Merging Overlapping Codes

Finally, since our survey-based subsample of groups included a random subsample of groups already covered by the literature-based phase, 27 groups had overlapping ethnographic codes from both the literature-based encoding and the survey responses. We develop a process to merge overlapping survey responses with the literature-based codes. It is important to note that this process strives to keep the dataset consistent with itself. Our reconciliation procedure is as follows. If a variable was missing from the literature-based coding, we used the survey-based code, and *vice versa*. When the codes conflicted, we used the note provided by the literature-based team to reconcile the difference. Evidence from the primary literature, given in the note used by the research assistant to justify their code, was used to generate the final code. In cases in which the note associated with the literature based code indicates that the value was coded, we preferred the most frequently occurring survey response. If the code conflict could not be resolved through the literature-based note, we tried one last search through any available web and print sources to see if any accessible information could resolve the conflict. Any remaining conflicts that cannot be merged through the previous rules we coded to ambiguous in the final dataset.

In the end we are able to code whether a society allowed women to play a role in political institutions in 200 societies. A precondition for this variable to be defined is that they have a political structure to begin with. In the Murdock Atlas, there is a variable which asks about jurisdictional hierarchy beyond the local community. The possible answers range from none (or stateless) which refers to societies with no political authority beyond the community, the next possibility is a chiefdom, which is a form of hierarchical political organization in non-industrial societies usually based on kinship and in which formal leadership is monopolized by select families. These types of political structures can then evolve into an even more complex political structure like a state. We will see that in our data, female political representation is therefore not present in societies without any political structure (i.e. stateless).

3. Data Summary

The primary variable of this study is aimed at assessing political representation of women in pre-colonial societies. Drawing from the Standard Cross Cultural Survey, this variable characterizes the gender distribution amongst local or intermediate political leaders. We expansively define a local or political leader as an individual who has authority or significant influence over members of the same

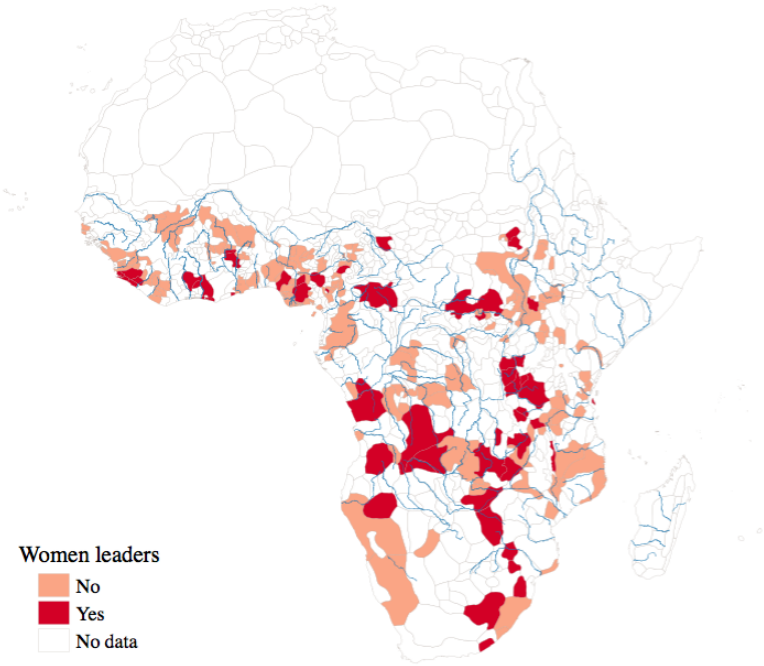
ethnic group beyond a single familial lineage. Such leaders may include village paramount chiefs, monarchs, village headmen and women, or other individuals with formalized influence such as "Queen mothers".

The traditional data collection phase of this study has revealed illuminating examples of female political leadership in indigenous African societies. Moreover, there is clearly variation in the roles for women in traditional political institutions and the degree to which they may influence decisions for the society. There are cases in which female leadership seem to effectively remove any notion of gender. For example, the Mamprusi people of northern Ghana and Togo are known to allow women to exercise political authority as village chiefs, or *pwaanaba*, translated roughly as "female king". As female Mamprusi chiefs wear male clothing and must leave their current husband in order to ascend to the role (Drucker-Brown 1968). Furthermore, the Mamprusi royalty enables the senior pwaanaba considerable influence on political outcomes within the society and tasks her with military defense of the village by way of her charge to protect various sacred shrines. Some African peoples have designated special yet limited roles for women to preside over the society alongside a male majority. The Dilling of southern Sudan reserve a special position for at least one woman amongst the *ginadi*, clan elders who form the political leadership body of the group. She is expected to represent women of the tribe in political and judicial affairs (Hawkesworth 1932). The Pimbwe of modern day Tanzania have traditionally been organized under a paramount chief, the *Mwene*, who administered subject villages alongside his wife, the queen mother. While this highest level of political authority within the group allowed women virtual gender equality, this was not necessarily the case with local leaders and village chiefs (Willis 1966). There are also cases in which women were only allowed to attain a limited leadership status in times of war or duress. While the paramount chief of the Xhosa of southern Africa had to be a member of the royal family, extenuating circumstances might allow a woman to temporarily act as a regent over the entire group (Soga 2013).

In our sample of 200 societies, 24.5% allow women to form important roles in the traditional political structures.

The map below depicts the geographic distribution of traditional female political representation across pre-colonial ethnic homelands of the continent.

Figure 1: Political Leadership



4. Ethnic Group-Level Correlations

Our key variable of interest, traditional female political representation, is defined at the ethnic group level. We now turn to other ethnic level variables to determine what characterizes ethnic groups who allow women to have some traditional political power. We first consider some standard geographic and demographic variables. The first column of Table 1 presents the average (and their standard deviation) of these variables for pre-colonial ethnic groups which allow for female political representation. The second column reports the averages of the same variables for those societies that do not. The third column checks to see if the difference in the average of these variables across the two types of political structures is statistically significant.

Table 1 – Geographic and Demographic Correlates

Variable	Female Representation	No Female Representation	Equivalence of Means
Land Area	40282 (46851)	24267 (40285)	16014 (7188)**
Ruggedness[3]	88680 (88775)	64351 (64791)	24329 (12145)**
Arable Land[4]	0.20 (0.16)	0.24 (0.21)	0.04 (0.03)
Cereal Crop Suitability[4]	232 (313)	139 (321)	93 (55)*
Root Crop Suitability[4]	297 (494)	154 (269)	143 (58)***
Distance to River	76 (52)	73 (60)	3 (10)
Distance to Coast	554 (426)	571 (427)	17 (73)
Mineral Deposits[5]	5.8 (13.6)	1.9 (6.2)	3.9 (1.4)***
Population Density[6]	14.0 (41.8)	20.8 (36.2)	6.8 (6.5)
Percent Christian[7]	0.58 (0.34)	0.53 (0.35)	0.05 (0.06)
Percent Islam[7]	0.16 (0.34)	0.13 (.28)	0.04 (0.05)
Observations	49	151	

Table Notes: Standard deviations are in parentheses. A single * denotes statistical significance at the 10% level, ** for 5%, and *** for 1%. Data Sources: Nunn and Puga (2012), GAEZ, USGS MRDS, Joshua Project. See footnotes for details.

Pre-colonial societies that allow female representation in their governing structures are significantly larger in terms of land area and more likely to have rugged terrain. There are also significant differences in terms of crop suitability, where female political representation is more likely in societies where the soil is more suited to root vegetables. We also notice from Table 1 that pre-colonial societies with female political representation are also those with significantly more mineral deposits.

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[3] Source: Nunn and Puga (2012). https://diegopuga.org/data/rugged/. We take simple averages of the 30 arc-second terrain ruggedness index (TRI) measure at the ethnic group level.

[4] Source: FAO GAEZ (2016). http://www.fao.org/nr/gaez/en/. Data is derived from agro-ecological crop suitability projections for low input, rain-fed crops. Arable land is measured as the share of cells in the ethnic region for which projected agroclimatic suitability for low input, rain-fed crops is estimated to be 40% or greater for at least one of the following crops: barley, buckwheat, cassava, millet, groundnut, maize, oat, potato, rice, rye, sorghum, sweet potato,wheat, yam.

[5] Source: USGS Mineral Resources Data System (2017). https://mrdata.usgs.gov/mrds/. We take a simple count of all known mineral deposits within a 10 kilometer buffer of each ethnic region.

[6] Source: Gridded Population of the World, Version 4 (GPWv4): Administrative Unit Center Points with Population Estimates. http://sedac.ciesin.columbia.edu/data/collection/gpw-v4. We take means of population density for all raster cells with non-missing values within an ethnic region. If any ethnic regions contain only missing values for GPW cells, we set the population density value to 0 for the region.

[7] Source: Joshua Project (2017). https://joshuaproject.net/. Joshua Project data give estimates on the share Christian people and primary religion indicators for an ethnic group. We construct a measure estimating the share of adherents of Islam as follows. If the people group's primary religion is Islam, Percentage Islam = (1 - Percentage Christian), otherwise it is 0. We next merge the Joshua Project people groups (points in space) over the ethnic regions from Murdock's Ethnolinguistic Map (polygons in space) by a simple spatial overlay. Religious sub-population shares are estimated by taking the mean of the share estimates across all member people groups within the ethnic region.

We now consider variables that may reflect measures of the degree of contact members of each ethnic group had with outsiders. These include measures of the number conflicts between 1400 and 1900 located in a given ethnic homeland. The measure of external conflict counts the number of conflicts in a pre-colonial ethnic homeland in which the actors which are not indigenous to Africa (from example, European, Ottoman, and so forth) were involved. The African conflict measures the number of conflicts in which only African actors are involved. Another set of variables describe whether a Catholic or Protestant mission was established in a given ethnic homeland. This data comes from a map published by William R. M. Roome in 1924. From the Old World Trade Routes Project, put together by T. Matthew Ciolek, we also have information on the distance between a given ethnic homeland and the nearest trade and pilgrimage routes. These include trade routes dating back to between 500 and 1900.

Table 2 – Colonial Contact Correlates

Variable	Female Representation	No Female Representation	Equivalence of Means
External Conflict[8]	0.65 (0.48)	0.41 (0.49)	0.24 (0.08)***
African Conflict[8]	0.51 (0.51)	0.40 (0.49)	0.11 (0.08)
Catholic Missions[9]	1.3 (2.9)	0.5 (0.9)	0.8 (0.3)***
Protestant Missions[9]	3.3 (4.9)	1.5 (2.6)	1.8 (0.5)***
Slave Trade[10]	1.9 (6.4)	1.0 (4.8)	0.9 (0.9)
Distance to Pilgrimage Route[11]	1466 (1234)	890 (950)	576 (175)***
Distance to Trade Route[11]	1998 (1432)	1375 (1140)	623 (208)**
Distance to Railway[12]	332 (255)	410 (254)	-78 (44)*
Distance to Port[13]	1879 (824)	1909 (819)	29 (141)
Observations	49	151	

[8] Source: Conflict Catalog (Brecke 1999). "A database of all recorded violent conflicts since 1400 AD in which 32 or more people were killed". From the original data, we select the subset of African conflicts from 1400 to 1900 A.D., georeference the conflict as best possible, and indicate if the conflict is between indigenous or external actors.

[9] Source: Roome (1924), digitized by Nathan Nunn. https://scholar.harvard.edu/nunn/pages/data-0. We count the number of mission stations (Catholic and Protestant) within an ethnic region.

[10] Source: Nunn and Wantchekon (2011). https://scholar.harvard.edu/nunn/pages/data-0. We sum all Atlantic and Indian ocean slave exports and divide by ethnic region land area to derive a measure that is 'slaves exported per square kilometer' for the region.

[11] Source: Old World Trade Routes (OWTRAD) Project (2012). http://ciolek.com/owtrad.html. We combine spatial information for trade, caravan, and pilgrimage routes used in the African continent between 200 and 1930 CE. We calculate the distance in kilometers from the centroid of an ethnic region to the nearest trade route (any type of route) and the nearest pilgrimage route (any route used specifically for the Hajj to Mecca).

[12] Source: Nunn and Wantchekon (2011). https://scholar.harvard.edu/nunn/pages/data-0. We calculate the distance in kilometers from from the centroid of an ethnic region to the nearest colonial railway.

[13] Source: Geodatabase of Ancient Ports and Harbours (de Graauw, Maione-Downing, and McCormick 2013). https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/22612. We calculate the distance in kilometers from from the centroid of an ethnic region to the nearest ancient port or harbor.

Table Notes: Standard deviations are in parentheses. A single * denotes statistical significance at the 10% level, ** for 5%, and *** for 1%. Data Sources: Brecke (1999), Roome (1924), Nunn and Wantchekon (2011), OWTRAD, de Graauw et al. (2013). See footnotes for details.

Pre-colonial societies that allow female representation in their governing structures are more likely to have experienced external conflict. This finding is somewhat consistent with recent work by Dube and Harish (2017) which finds that European polities led by Queens over the 15th and 20th centuries were more likely to engage in war than polities led by kings.

Both Catholic and Protestant missions were significantly more likely to set up in the ethnic homelands of societies with female political representation. These findings could be related to recent work by Nunn (2014), who finds that Protestant missions in Africa had a large positive impact on the long-run education of females.

On the other hand societies with indigenous female political representation were located further away from pilgrimage and trade routes, suggesting less direct contact with colonial explorers.

We next explore factors that determine agricultural practices in these pre-colonial societies. These data come from the Murdock Atlas. In Table 1, we considered the soil suitability to certain crops in each ethnic homeland. In Table 3 below we consider the primary crops actually grown in the ethnic homelands. Intensive agriculture refers to a system of cultivation that uses large amounts of labour and capital relative to land area. Whereas extensive agriculture refers to using small amounts of labour and capital in relation to area of land being farmed. The variable female labour represents and index that measures the degree to which female labour is used in agriculture in a given pre-colonial ethnic group.

Table 3 - Pre-Colonial Economic Activity Correlates

Variable	Female Representation	No Female Representation	Equivalence of Means
Primary Crop Cereal	0.58 (0.50)	0.67 (0.47)	0.09 (0.08)
Primary Crop Root	0.26 (0.44)	0.15 (0.36)	0.10 (0.06)
Intensive Agriculture	0.24 (0.43)	0.20 (0.40)	0.04 (0.07)
Extensive Agriculture	0.71 (0.46)	0.64 (0.48)	0.07 (0.08)
Agriculture Dependency	60.4 (12)	60.4 (14)	0.1 (2.4)
Animal Dependency	17.2 (9.9)	18.2 (11.3)	1.0 (1.9)
Female Labour	0.64 (0.49)	0.57 (0.50)	0.07 (0.10)
Bovine	0.53 (0.50)	0.46 (0.50)	0.07 (0.09)
Observations	49	151	

Table Notes: Standard deviations are in parentheses. Data Sources: Murdock Atlas.

It is interesting to note from Table 3, that there are no significant differences with regards to agricultural practices across societies with and without female political representation. Previous research has emphasized how differences in gender roles across societies have their origins in the form of agriculture traditionally practiced in the pre-industrial period (Boserup 1970). Important

differences derive from the role women play in shifting cultivation and plough cultivation. There is recent empirical research demonstrating this hypothesis by exploiting variation in soil suitability to certain crops, which use relatively more female labour compared to others (Alesina, Giuliano, and Nunn 2013). We do not find any such correlations in our data. That suitability to certain crops is not significantly correlated with traditional female political representation.

We next consider pre-colonial cultural and political traits of societies in Table 4. These variables come from the Murdock Atlas.

Table 4 - Pre-Colonial Ethnic Correlates

Variable	Female Representation	No Female Representation	Equivalence of Means
Stateless	0.02 (0.16)	0.22 (0.41)	-0.19 (0.07)***
Petty Chief	0.32 (0.47)	0.54 (0.50)	-0.21 (0.09)*
Paramount Chief	0.42 (0.50)	0.20 (0.40)	0.23 (0.08)***
Large State	0.22 (0.42)	0.05 (0.22)	0.17 (0.5)***
Patrilineal Succession	0.54 (0.50)	0.55 (0.50)	-0.01 (0.10)
Matrilineal Succession	0.26 (0.44)	0.21 (0.41)	0.05 (0.08)
Matrilineal Inheritance	0.23 (0.42)	0.20 (0.40)	0.02 (0.08)
Classless	0.21 (0.41)	0.52 (0.50)	-0.31 (0.09)***
Aristocracy	0.66 (0.48)	0.27 (0.45)	0.38 (0.8)***
Observations	49	151	

Table Notes: Standard deviations are in parentheses. A single * denotes statistical significance at the 10% level, ** for 5%, and *** for 1%. Data Sources: Murdock Atlas.

The first thing to note from Table 4 is that female political representation is positively correlated with political complexity. That is, female political representation was significantly more likely in pre-colonial societies with a paramount chief or in large states as compared to petty chiefdoms and stateless societies. Likewise, female political representation is more likely in societies with social stratification (particularly in the form of an aristocratic class) compared to classless societies. In contrast to what one might expect, we do not see a significant correlation between tradition female political representation and whether the society had matrilineal succession or inheritance.

The three figures below show how some of these important correlations vary geographically across the continent.

Figure 2: Political Leadership and State Development

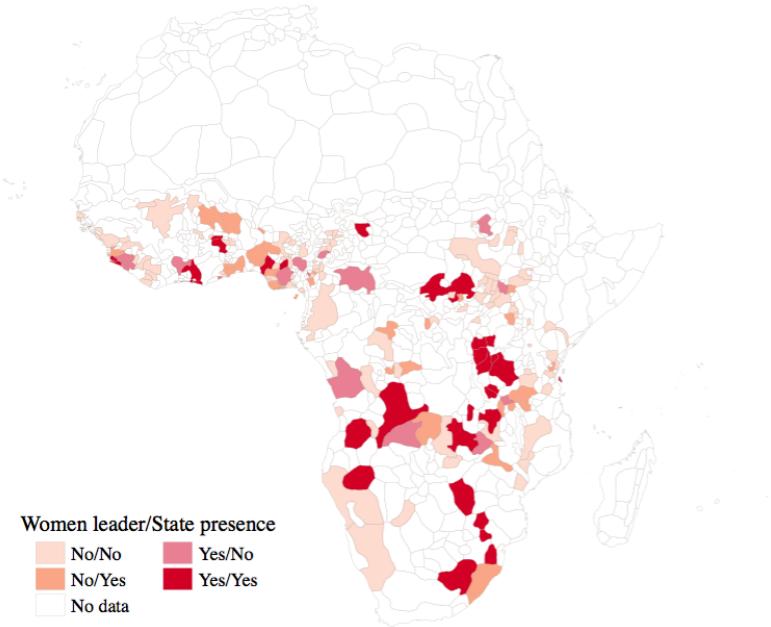


Figure 3: Political Leadership and Missions

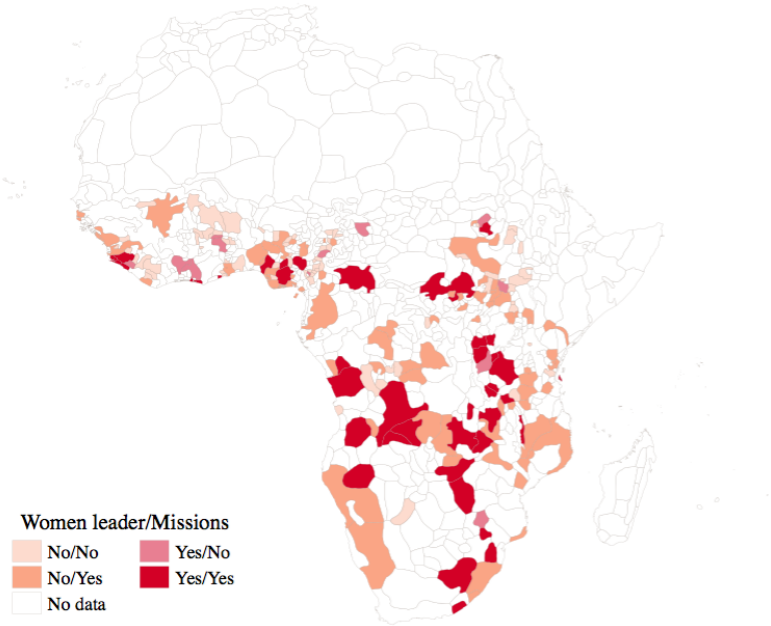
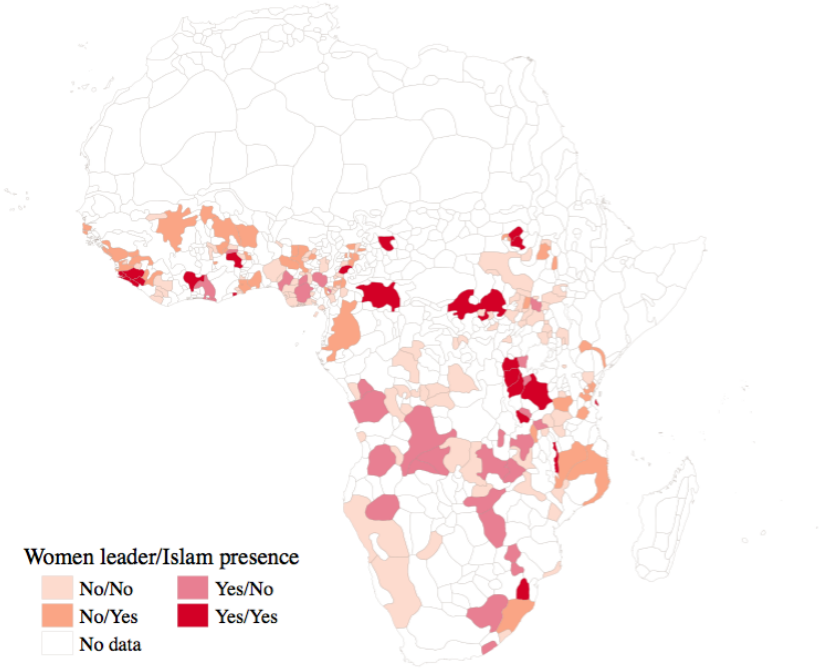


Figure 4: Political Leadership and Islam



5. Individual-Level Contemporary Correlations

We now turn to individual-level data from the Demographic Health Surveys (DHS). These are surveys which have been conducted in 45 countries in Africa since the 1990s. These surveys interview a national representative sample of between 10,000 and 20,000 women (aged 15-49) in each country. In Table 5 below we compared individual characteristics of women residing in an ethnic homeland where women historically had a role in the indigenous political structure compared to residing in an ethnic homeland where historically only men and political roles.

Table 5 – Contemporary Correlates – Comparison of Means

Variable	Female Representation	No Female Representation
Illiterate	0.28 (0.45)	0.51 (0.50)
No education	0.20 (0.40)	0.39 (0.49)
Primary	0.44 (0.50)	0.33 (0.47)
Secondary (or more)	0.36 (0.48)	0.28 (0.45)
Polygynous	0.18 (0.38)	0.31 (0.46)
Age at marriage	19.5 (4.4)	18.1 (4.2)
Age at first sex	17.9 (3.5)	16.5 (2.8)
Age at first birth	20.1 (3.9)	19.0 (3.7)
Fertility	2.5 (2.7)	3.0 (2.9)
Proportion Daughters	0.493 (0.329)	0.490 (0.318)
HH Decision Power:		
Own Health	0.66 (0.47)	0.46 (0.50)
Large Purchases	0.60 (0.49)	0.42 (0.49)
Daily Needs	0.66 (0.47)	0.48 (0.50)
Visits to Family	0.68 (0.47)	0.57 (0.49)
Index	1.93 (1.19)	1.44 (1.24)
Own house	0.42 (0.49)	0.35 (0.48)
Own land	0.38 (0.49)	0.31 (0.46)
Work	0.61 (0.49)	0.64 (0.48)
Paid Work	0.68 (0.47)	0.68 (0.47)
Family Work	0.15 (0.36)	0.18 (0.38)
Violence not Justified	3.64 (1.71)	3.53 (1.80)
Observations	184217	274753

Table Notes: Standard deviations are in parentheses. Data Source: Demographic Health Surveys.

By comparing the first and second columns in Table 5, we see that indigenous female political representation is strongly correlated with several positive attributes for women today. In particular traditional female political representation is associated with lower illiteracy rates for women today. Likewise women are more educated in such ethnic homelands. They are also less likely to be in polygynous marriages, marry older, engage in sex at an older age, and have their first child when older. Correspondingly fertility rates are lower and they are slightly more likely to have a higher proportion of daughters (relative to sons).

Table 5 also includes variables which capture women's relative bargaining position in the household. The DHS surveys have a module focused on capturing relative decision making power within the household, where they ask women: "Who usually decides about X ?", where the possible responses are: "respondent"; "husband"; or "respondent and husband jointly"; and X refers to "major household purchases", "health care for the wife", "daily purchases", and "visits to the wife's family and relatives". We create a variable which is equal to one if the respondent has any decision making

within the household (i.e., alone or with her husband) and equal to zero if instead only her husband decides with regards to the different household decisions. We see from Table 5 that these four indicators of women's relative bargaining power within the household are all significantly higher for women residing in ethnic homelands with a tradition of female political representation (Column 1) compared to only male political representation (Column 2). This is also the case if we construct an additive index of these four indicators.

It is also the case that women residing in ethnic homelands with indigenous female political representation are more likely to have some ownership rights to both their house and their land.

In accord with our finding in the previous section, where we did not find any significant correlation between women's role in traditional agricultural practices and whether a society allowed women in their political institutions. We also do not see any correlation in contemporary measures of women labour force activity.

Finally, although we do see significant correlations between traditional female political representation and contemporary measures of women's relative bargaining power, we do not see that this positive effect manifests itself in stricter norms against wife beating. The final variable in Table 5 is an index constructed from a series of questions which ask whether women think it is justified for a husband to beat his wife under various circumstances (disobedience, neglects the children, argues with the husband, burns the food, leaves the house without permission). This variable is not significantly correlated with indigenous female political representation.

Table 5 simply compares the raw averages from the data, of the described variables, across women who reside in ethnic homelands with indigenous female political representation compared to residing in an ethnic homeland where only men played a role in political institutions. In the two tables below we instead run fixed effects estimations on our variables of interest as a function of our measure of traditional female political representation. In Table 6 below we include region fixed effects (representing East, West, Central, and Southern Africa) into our estimation. This implies that we are essentially comparing the effects on women (from residing in an ethnic homeland with female political representation compared to without) within a region.

Table 6 – Contemporary Correlates – Region Fixed Effects Estimations

Variable	Coefficient on Female Representation
Illiterate	-0.13 (0.05)***
No education	-0.08 (0.05)*
Education Level	0.18 (0.11)*
Polygynous	-0.08 (0.04)*
Age at marriage	1.06 (0.46)**
Age at first sex	1.38 (0.45)***
Age at first birth	1.29 (0.43)***
Fertility	-0.42 (0.15)***
Proportion Daughters	-0.0003 (0.001)
HH Decision Power:	
Own Health	0.11 (0.04)***
Large Purchases	0.13 (0.05)***
Daily Needs	0.09 (0.03)***
Visits to Family	0.06 (0.03)*
Index	0.30 (0.11)***
Own house	-0.03 (0.04)
Own land	0.03 (0.04)
Work	-0.02 (0.04)
Paid Work	0.04 (0.07)
Family Work	-0.03 (0.03)
Violence not Justified	-0.23 (0.25)
Observations	458970

Table Notes: Clustered (at the ethnic group level) standard errors are in parentheses. A single * denotes statistical significance at the 10% level, ** for 5%, and *** for 1%. Data Source: Demographic Health Surveys.

We see that some of the differences found in Table 5 do not remain robust but a number of them do. In particular, women are significantly more educated in ethnic homelands with female political representation compared to their counterparts who reside in the same region in Sub-Saharan Africa but have a traditional political structure with only men. Likewise, these women are significantly less likely to be in polygynous marriages. They also marry, have sex, and give birth at later ages and correspondingly have lower fertility. We also see that they have significantly higher relative household decision-making power.

In Table 7 below we report analogous results to Table 6 from an estimation, where we instead include country fixed effects. Since we only have 200 ethnic groups spread all across Sub-Saharan Africa, this is quite a restrictive estimation strategy as we lose a fair amount of variation in our key variable of interest. This follows, since for a small set of countries, we were only able to code one ethnic group, so we lose all variation when including country fixed effects for this set of countries.

For another small subset of countries, we have more than one ethnic group in our sample but still a small number and at times, the ethnic groups within a country have the similar rules regarding whether women are allowed in the traditional political institutions. So again we lose any variation we have in our key variable of interest for this set of countries as well.

Nevertheless, in Table 7 below we include country fixed effects into our estimation. This implies that we are essentially comparing the effects on women (from residing in an ethnic homeland with female political representation compared to without) within a given country.

Table 7 – Contemporary Correlates – Country Fixed Effects Estimations

Variable	Coefficient on Female Representation
Illiterate	-0.07 (0.03)**
No education	-0.05 (0.03)**
Education Level	0.12 (0.06)**
Polygynous	-0.04 (0.02)**
Age at marriage	0.54 (0.27)**
Age at first sex	0.46 (0.11)***
Age at first birth	0.51 (0.15)***
Fertility	-0.09 (0.08)
Proportion Daughters	0.003 (0.002)*
HH Decision Power:	
Own Health	0.01 (0.03)
Large Purchases	0.01 (0.03)
Daily Needs	0.05 (0.02)***
Visits to Family	-0.004 (0.03)
Index	0.16 (0.07)***
Own house	0.02 (0.05)
Own land	0.03 (0.04)
Work	-0.02 (0.02)
Paid Work	-0.02 (0.04)
Family Work	-0.01 (0.03)
Violence not Justified	-0.04 (0.08)
Observations	458970

Table Notes: Clustered (at the ethnic group level) standard errors are in parentheses. A single * denotes statistical significance at the 10% level, ** for 5%, and *** for 1%. Data Source: Demographic Health Surveys.

We see that some of the significant differences found in Table 6 do not remain robust but a number of them do. In particular, women are significantly more educated in ethnic homelands with female political representation compared to their counterparts who reside in the same country but have a traditional political structure with only men. Likewise, these women are significantly less likely to be

in polygynous marriages. They also marry, have sex, and give birth at later ages and have a relatively higher proportion of daughters. The results on relative bargaining power still hold but are somewhat less statistically significant.

6. Discussion and Conclusions

This paper is concerned with explaining the observed variation in traditional female political representation across pre-colonial ethnic groups in Sub-Saharan Africa and in turn how this variable might impact on outcomes for women today.

A key finding is that gender roles in traditional agricultural practices do not seem to be correlated with traditional female political representation. This suggests that a role for women in pre-colonial political institutions does not necessarily directly follow their involvement in economic institutions. Instead what seems to be a more relevant factor is the political complexity of a society and the corresponding social hierarchy within. Both political and cultural sophistication are associated with a more important role for women in traditional political institutions.

We do find some evidence of persistent effects of indigenous female political power on contemporary measures of female autonomy. Women who currently reside in ethnic homelands which traditionally involved women politically are today better educated, marry later, have children later and correspondingly lower fertility rates. They are also less likely to be in polygynous marriages and also have higher relative bargaining power in their marital homes.

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