Muslim Education in Sub-Saharan Africa*

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Abstract

Muslims in sub-Saharan Africa have been disadvantaged in the formal education sector relative to Christians since the colonial period. Data from the Demographic and Health Surveys (DHS) shows a nearly ubiquitous gap in Muslim educational attainment across Africa, but the magnitude of this inequality in educational attainment varies across countries and over time. Previous work in political science and economics has explored the effect of democracy, ethnic favoritism, and income on educational outcomes, but relatively little work has explored the role of religious affiliation and the mechanisms by which one’s religion affects either the supply or demand for formal education. In this paper, I demonstrate the extent of Muslim disadvantage in educational attainment using data from the DHS, and present a preliminary theory accounting for variation in the ability of Muslim communities to organize as relevant political actors, as well as variation in policy preferences of Muslim organizations. I present analytic narratives from two ethnic groups, the Yoruba of Nigeria and Baganda of Uganda, conducted for the purpose of theory building, and preliminary empirical work on some of the observable implications of the proposed theory.

Keywords: Islam, education, colonialism, Uganda, Nigeria, Africa

*Prepared for the 2013 AALIMS Graduate Student Workshop, April 5, 2013. Note to conference participants: This paper serves as a combination of what will eventually become at least two separate dissertation chapters: the theory chapter and model-building case studies chapter. I also present preliminary empirical evidence.
1 Introduction

Muslim populations in sub-Saharan Africa have been disadvantaged in the formal education sector since the colonial period. Christian missionaries were the primary providers of formal education during colonial rule, and Muslims were often prevented from attending these schools, or did not allow their children to attend these schools for fear of conversion. As formal education was a requirement for most professional jobs and work in government, Muslims were often at a serious disadvantage in the modern labor market as a result of their lack of formal education relative to Christians. Following independence, the inequality in formal education between Christians and Muslims in Africa was greatly reduced in some places, but persisted in others (see Figure 1). Why? In this paper, I examine the ability of Muslim communities to become relevant political actors in the form of Muslim civil society organizations, and the role of these organizations in representing and promoting the welfare of the Muslim population, particularly in the area of education. In doing so, I propose a theory accounting for the emergence, preferences, and efficacy of Muslim organizations in Africa and present analytic narratives from two case studies, Yorubaland in Nigeria, and Buganda in Uganda, which were employed for theory development.

I focus on Muslim organizations for several reasons. First, during the colonial period, Muslim organizations were often a prerequisite for establishing Muslim secular schools, just as Christian organizations were a prerequisite for establishing Christian schools. Since most Muslims were unwilling or unable to attend mission schools (which comprised the majority of schools during the colonial period, at least in British colonial Africa), the ability of Muslims to receive secular education hinged critically on the existence of Muslim secular schools and thus, Muslim organizations. Second, Muslim organizations played a role not only in

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Formal education is also popularly referred to as secular or “western” education in Africa, and I also refer to it as such throughout the paper. Formal education refers to the teaching of non-religious subjects such as math, science, language, history, etc. and is contrasted with religious education, such as Quranic schools and Bible study, for example.
Figure 1: Average years of school over time across countries, by gender and birth decade
establishing schools, but also encouraging Muslims to attend these schools and communicating the value of formal education. Religious elites have enormous potential to influence public opinion and behavior, and so religious organizations play a role in generating both supply and demand for education. This is not to say, however, that all Muslim organizations promoted secular education – some explicitly opposed it. Part of the goal, then, is to explain the emergence and preferences of Muslim organizations, and their relative success in achieving their goals, particularly those pertaining to education. I argue that ethnic group structure and group location within the colonial state together play a role in determining the emergence, preferences, and strength of Muslim organizations. In this paper, I present an analytic narrative of two paired case comparisons I have used to develop the theory, and present some preliminary ideas about quantitative, large-N tests of the hypotheses generated.

The broader dissertation project contributes to several literatures. First, this dissertation contributes to a growing body of work in political science and economics that explores the determinants of educational attainment in Africa, as well as a recent revival of the literature examining the relationship between education and democracy. Recently, scholars have identified ethnic favoritism and democracy as important determinants of educational outcomes in Africa (Kramon and Posner, 2012; Harding and Stasavage, 2011), while Bleck (2011), taking a cue from the works of earlier scholars examining the relationship between education and civic culture (Almond and Verba, 1989; Lipset, 1983) explores the relationship between education (Islamic or formal) and levels of political knowledge and political participation. Studies of the determinants of educational attainment in Africa often control for religious affiliation, but few have examined religious identity as a key independent variable. Several scholars have explored the long-term effects of Christian missionaries on educational outcomes (Gallego and Woodberry, 2010; Numm, 2011), but include little discussion of how missionaries interacted with and affected the Muslim communities they encountered upon arrival in Africa.
Second, this dissertation explores the legacies of colonialism. Scholars have taken opposing views with regard to the long term effects of colonialism. Mamdani (1996) presents the classic case of colonialism’s destructive impact on African societies, and many others have followed in his stead. However, Lange (2009), Lee and Shultz (2012), and others examine outcomes across and within colonial empires, and their work reveals important variation in the long-term impact of colonialism in Africa. Additionally, while colonialism is commonly associated with missionary work and the spread of Christianity, relatively little work has examined the colonial experience of Muslim populations. This dissertation works towards filling that gap.

Third, this dissertation explores the relationship between Islam and well-being. A number of studies have found a negative relationship between Islam and a variety of measures of well-being, particularly those related to women and children (Blaydes and Linzer, 2008; Fish, 2011; Filmer and Prichett, 1999). In general, these works do not examine variation across Muslim populations, despite the great diversity of these populations and variation in outcomes related to well-being. This dissertation does not merely explore differences in outcomes between Muslims and non-Muslims, but rather how these differences vary over time and space, and identifies the conditions under which Muslim disadvantage has been overcome.

Finally, in this work I explore the role of civil society, namely, Muslim organizations, in the politics of the distribution of resources. Muslims in Africa have not tended to form Islamist political parties, but the organizations they have created nonetheless engage in politics. In exploring the emergence and efficacy of a particular type of civil society group, I hope to shed light on the role these kinds of groups play in African societies. African civil society is often considered quite weak, but this work aims to help explain the conditions under which strong civil society groups emerge or not.

Methodologically, I employ the nested analysis as discussed by Lieberman (2005), using
a model building small-N analysis (SNA) to develop the theory, followed by a model-testing large-N analysis (LNA). In this paper, I present the findings from the SNA, a paired case comparison of two ethnic groups varying on the dependent variable of interest (Christian-Muslim differential in educational attainment) while holding constant several plausible but insufficient explanatory variables. This strategy allows me to examine other variables accounting for the variation in the DV, in particular my intuition about the interaction between ethnic group structure and group location within the colonial state. Because these cases were deliberately chosen for the purpose of model-building, and because parts of the theory have been informed by these cases, they cannot, strictly speaking, be considered tests of the theory. Rather, model-testing using a large-N analysis will be the next step in the project. In this paper I present some preliminary large-N tests, but have not yet collected all the data necessary for the full analysis.

The remainder of the paper proceeds as follows. Section II provides a brief history of the arrival of Islam and Muslim education in Africa. Section III presents a preliminary theory about the emergence and effect of Muslim organizations in Africa. Section IV provides analytic narratives of the paired case comparison, the Baganda of Uganda and Yoruba of Nigeria. Section V presents data collected to date, and discusses further tests of the theory. Section VI concludes.

2 Muslim Education in Africa

Muslims constitute approximately one-third of the population in sub-Saharan Africa today, and the region is home to 15% of the global Muslim population (Lugo 2010). There are thirteen majority Muslim countries in sub-Saharan Africa, and seventeen countries with Muslim populations ranging from 5% to 49% of the total population. Figure 2 shows African countries in order of the size of their Muslim population.
In most African countries, Islam arrived before Christianity. Islam arrived in West Africa as early as 800 AD through trans-Saharan trade networks, and arrived on the East African coast around the same period, by way of the Indian Ocean (Insoll 2003). Islam reached Central Eastern and Southern Africa as late as the nineteenth century, again, predominantly through trade networks. During the pre-colonial period, Islam in Africa was associated with trade, wealth, and intellectual advances. Cities throughout the Sahel, including such landmarks as Timbuktu and Jenne, were centers both of learning and commerce, and major trading thoroughfares. The trans-Saharan trade was particularly important in the Sahelian states of Ghana, Mali, Songhay, and Kanem from 800-1600 AD (Austen 2010). Along with Islam came literacy, and the development of Qur’anic schools and Islamic scholarship. Thus, in terms of economic and educational status, Muslims appear to have fared at least as well as, if not better than, their traditionalist counterparts during the pre-colonial period.

The arrival of colonial powers and Christian missionaries drastically changed the status...
of Muslims vis-a-vis non-Muslims in Africa. In West Africa, centers of commerce began to spring up along the coastline, whereas previously the largest economic centers were located near the Sahara. Christian missionaries in West Africa tended to hug the coastline, where the Muslim population was sparse, while in East Africa they penetrated the interior to a greater extent, where Islam had arrived only recently. These missionaries, from a number of Christian denominations, including Catholic, Anglican, Methodist, and Presbyterian, among others, began establishing schools wherever they settled. There has been a plethora of recent research examining the long-term effects of missionary activity on a variety of outcomes, including education, group status, and governance (Gallego and Woodberry, 2010; Baldwin, 2010; Woodberry, 2012; Nunn, 2011). These studies have found that Protestant missionary activity in the colonial period, as opposed to Catholic missionary activity or no missionary activity, is correlated with higher educational status in the current period (Nunn, 2011; Becker and Woessman, 2009). Gallego and Woodberry (2010) argue that competition between Catholic and Protestant missionaries was important for improving educational outcomes, especially compared to Catholic areas with no Protestant competition.

A number of these works make the case that the distribution of missionaries, and thus missionary activity, was somewhat random, which allows for the derivation of causal inferences about the effect of missionary activity on later outcomes. However, little of the work examining the effect of missionary activity on any number of outcomes acknowledges the possibility that missionary location was likely related to whether a community or region was predominantly Muslim, or test this possibility in a systematic way. Given that both the British and the French prevented, at least on some occasions, missionary activity in Muslim majority areas, this oversight in previous studies seems problematic. The distribution and location of Muslim populations likely affected the location of mission stations, efficacy of mission education, and the long-term trends in schooling within countries. In most of these studies, Christians are compared to “non-Christians”, although today most non-Christians
in Africa are in fact Muslim. It is therefore important not only to understand the effect missionaries had on those they converted, but also how they interacted with the pre-existing Muslim population.

The data I have used to explore variation in educational attainment among Christians and Muslims across and within countries comes primarily from the Demographic and Health Surveys (DHS). These surveys have been conducted in over eighty countries around the world, and there have been six survey rounds to date, starting in the late 1980s. The primary goal of the surveys is to collect comparable information across countries on reproductive and child health and, as such, the survey targets women of reproductive age (between 15 and 49 years of age). However, most surveys also collect more limited information about other household members. Most of the surveys include questions about the respondents’ ethnic and religious affiliation, in addition to information on health and education. I use survey data from twenty African countries that have religiously mixed populations. Including countries like Niger or Rwanda, with very small populations of Christians and Muslims, respectively, was not possible because the number of religious minority group members in the survey sample was too small to conduct the analysis.

Each country has a different set of codes for religion, some including many more categories for Christian denominations than others. For all analyses presented here, I code all forms of Christianity as “Christian”. There is only ever one coding for Muslim in each country, so the dichotomous variable for Muslim is more straightforward. I drop all observations of traditional religions, “other”, or “no religion”. In most cases, this population is small, but there are a few countries in which this results in dropping a significant amount of data. Overall, however, since over 90% of Africans ascribe to either Christianity or Islam, I choose to focus only on these two religious groups. It is worth noting, however, that in general, those ascribing to traditional religions tend to have as low or lower educational attainment than

\[^2\text{This is the same data source used by Kramon and Posner (2012); Harding and Stasavage (2011).}\]
Muslims. Also worth noting is the fact that the question on schooling does not ask about the type of school, which in theory could refer to formal or informal school, although it is likely respondents would assume the question referred to formal school. Figures 3 and 4 show aggregate Muslim educational disadvantage across countries, in the absence of any controls, while Figures 5 and 6 show the trends in schooling at the end of the colonial period. Clearly, Muslim men and women were at a disadvantage compared to their Christian counterparts at this time, although the magnitude of the gap in schooling between Christians and Muslims varies dramatically across countries.

As the household survey data makes apparent, across countries and empires, Muslims were disadvantaged in the formal education sector during the colonial period. Numerous accounts across countries suggest that Muslims rarely frequented Christian schools. Those who did often ended up converting to Christianity, changing their names to Christian names, or at the very least, attending and participating in Christian religious services. But while evidence from the DHS data show that Muslims had higher rates of non-schooling than
Figure 5: % of Men with no schooling, by religious affiliation (X = Christian, M = Muslim)

Figure 6: % of Women with no schooling, by religious affiliation (X = Christian, M = Muslim)
Christians, many of them did attend school. In most countries, somewhere between five and fifty percent attended at least one year of school. Which schools did these children attend, and where?

Historical accounts of this period, and my own interviews in Uganda, Ghana and Nigeria, suggest that in many cases, Muslim communities began to establish their own schools, providing both formal and Islamic education. Often, Muslim communities formed organizations that set up and managed schools, and sometimes received grants from the colonial government (Abernethy 1969; Trimingham 1964; Kasozi 1986). Could the existence, preferences, or efficacy of these organizations account for the observed variation in Muslim disadvantage in educational attainment? Were some Muslim communities able to organize themselves more effectively than others? Why? These are the questions this paper, and the dissertation project as a whole, seeks to answer. In the next section, I present a theory that attempts to explain variation in the emergence and effects of Muslim organization as politically relevant actors in Africa.

3 Theory

The theory presented herein attempts to explain the emergence, preferences, and strength of Muslim organizations as politically relevant actors in Africa, and the conditions under which these organizations have reduced or exacerbated social inequalities between Muslims and non-Muslims, particularly in the area of formal education. Previous work has examined when and where Muslim institutions or organizations have been successful in providing or acquiring public goods (Patel 2007; Blaydes 2010) but these works do not provide a theory of when and where Muslim organizations will emerge, the types of goods/resources they will seek (and for whom), or where they succeed or fail in acquiring these goods. Patel (2007) argues that Shiite Muslims in Iraq were better able than Sunni Muslims to coordinate because of the
relatively more hierarchical structure of the Shiite religious authorities. While both Shiite and Sunni leaders could organize local collective action via Friday mosques, Shiite leaders were much more effective in coordinating the behavior of the Shiite population across Friday mosques: “The lack of an institutional hierarchy among Iraq’s Sunni clerics and different sources of financial support make it difficult for Sunni preachers to coordinate sermons across mosques, hindering the emergence of a cohesive Sunni Arab identity and leadership above the local level.” (53)

Most African Muslims are Sunni, and not Shiite, so Patel’s explanation is unlikely to explain variable success in coordination and organization across Muslim populations in Africa. However, a key intuition of this paper, building on Patel’s work, is that social structures can influence religious structures. I suggest that the structure of the Muslim community was particularly malleable, relative to the Christian community, precisely because of the relative absence of hierarchical structures. Muslim populations in Africa have had to create their own organizational structures in a way that Catholics and other Christians with pre-existing hierarchical structures did not have to, at least in recent history.3 Because Muslim populations had to independently generate organizational structures, there is likely to be great variation in the structure of Muslim communities.

In particular, I suggest that ethnic group structure played an important role in influencing the structure of Muslim communities in Africa. There is a large body of literature documenting the political salience of ethnicity in Africa, as well as a growing literature that explores the long-term effects of ethnic group structure on outcomes such as democracy and

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3This is not to say that all denominations of Christianity are hierarchical. However, historically, most of the most prominent Christian denominations in Africa were hierarchically organized to some degree, and this structure is in part what allowed for the organization of the missionary project in the first place. These denominations include Catholic, Anglican, Methodist, and Presbyterian. The fact that the spread of Christianity was a purposeful project, whereas the spread of Islam was more a by-product of trade than a missionary project, meant that Christianity would likely have more structure and more financial support from outside Africa than Islam. Later, the African Independent Churches (AIC), Pentecostal churches, and others would develop and spread with arguably less structure. This process is well worth looking into, but beyond the scope of this paper.
governance (Gennaioli and Rainer, 2005; Bandyopadhyay and Green, 2012). I suggest that the organization of Muslims in ethnic groups with centralized authority was easier than in ethnic groups with decentralized authority, because coordination was better facilitated in a centralized rather than decentralized setting. As noted by Patel (2007) Muslim communities with a hierarchical and centralized structure they could draw upon were better able to coordinate activities across space than those without this structure. Although Patel (2007) examines the variable efficacy of Shiites and Sunnis with respect to their organizational structures, I suggest that ethnic group structure can also play a role in Muslim organization and coordination. Here, the sect of Islam is not the key organizing principle, but rather the structure of society in which Muslims find themselves. Groups with centralized structures, I suggest, were able to coordinate more easily than those with decentralized structures, and this also allowed Muslims within those groups to coordinate more easily than those in decentralized groups.

The second intuition underlying the theory is that the location of Muslim populations, either located at the center or periphery of the state, was important for determining their preferences toward formal education and modernity more generally, due to their degree of exposure to 1) Christian missionaries and 2) the modern economy. Exposure to, and competition with, Christian missionaries meant that both Christians and Muslims took actions to gain and keep converts to their respective faiths. A main draw of Christianity was the provision of social services by missionaries, including health care and education. Muslims in competition with Christian missionaries, therefore, would be more likely to organize to provide these services as well. Meanwhile, exposure to the modern economy, or at the very least, the colonial economy, meant that one’s economic opportunities were closely related to educational status. Those living closer to the political center, and thus, with access to

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4 Chaney (2008) makes a similar argument about the role of Muslim-Christian competition in promoting the study of logic and the expansion of Muslim science in particular.
jobs for which formal education was a prerequisite, were likely to place a higher value on formal education than those living far from the center. Proximity to the political center of either the colonial or post-Independence state also affected the political relevance of Muslim populations and therefore, the demands they could make upon sitting governments.

Further, I suggest that the interaction between ethnic group structure and group location predict the emergence, strength and preferences of Muslim organizations, and through these organizations, the variation we observe in educational inequalities. Where centrality and centralization overlapped, Muslim groups were more likely to develop strong organizations and place a high value on formal education. With centrality but decentralized social structure, there was a high value for formal education but low organizational capacity due to coordination constraints. Meanwhile, a peripheral and decentralized group would have both low demand for formal education and low organizational capacity. Finally, when centralization existed far from the political center, Muslims were able to organize but did not necessarily consider modernity as highly desirable. In fact, those benefitting from modernity could be perceived as a political and economic threat, including fellow Muslims. The predictions of the theory are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Centralized group</th>
<th>Decentralized group</th>
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<tr>
<td>Close to colonial center</td>
<td>Strong Muslim Organization, high value of formal education</td>
<td>Weak Muslim Organization, high value of formal education</td>
</tr>
<tr>
<td></td>
<td>→ lowest educational inequality</td>
<td>→ low educational inequality</td>
</tr>
<tr>
<td>Far from colonial center</td>
<td>Strong Muslim Organization, low value of formal education</td>
<td>Weak Muslim Organization, low value of formal education</td>
</tr>
<tr>
<td></td>
<td>→ highest educational inequality</td>
<td>→ high educational inequality</td>
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There are two primary hypotheses to be evaluated. The first is that Muslims in centralized and hierarchical ethnic groups were more easily able to coordinate across space, all else equal, than Muslims in decentralized groups, particularly when there was Muslim
representation among the leadership. I suggest that Muslims who found themselves in centralized, hierarchical social groups in Africa, usually ethnic groups, were able to “borrow” the technology of hierarchy, and use it to coordinate across the group, advancing policies which benefitted Muslim members of the group. Those in decentralized groups would be more likely to organize locally, giving birth to many different organizations and generally lacking coordination across space.

The second hypothesis is that the closer Muslim populations were to the political and economic center of the state, the more likely they would demand the goods of modernity, including formal education. There are at least two mechanisms relating proximity to the colonial center and demand for formal education. One, proximity to the colonial center usually meant proximity to Christian missionaries and thus competition to gain and keep converts to the faith. Second, proximity to the center was related to proximity to jobs requiring formal education – for example, positions in the civil service and government administration. It is likely both of these mechanisms were at play.

Another component of the theory, which has yet to be fully developed, will attempt to explain how Muslim communities interacted with one another across ethnic groups, including across ethnic groups with varying levels of centralization. Fieldwork conducted to date was designed to explore Muslim organization within, rather than across, groups. Fieldwork in the coming months will attempt to explore the conditions under which Muslim populations organize nationally, locally, or both.

This paper adds to the work on the origins and spread of Islam, and on the effect of pre-colonial centralization on democracy and development. Michalopoulos, Naghavi and Prarolo (2012) find that predominantly Muslim ethnic groups in Africa tend to be both pastoralist and relatively more centralized than groups with lower levels of Muslim representation. On the one hand, this finding appears at odds with the common notion that Islam tends to be
non-hierarchical in nature\(^1\) but on the other, it helps explain the emergence of hierarchical groups at the periphery of the colonial state, which are precisely the groups expected to have the highest levels of educational inequalities. Thus, if the theory is correct and the findings of Michalopoulos, Naghavi and Prarolo (2012) valid, percentage Muslim of a group should be correlated with the magnitude of the inequality in educational attainment, as well as absolute levels of Muslim educational attainment. I test this claim in section V.

A number of scholars have also explored the effect of pre-colonial centralization on democracy and development, with mixed results. Gennaioli and Rainer (2005) find that African countries with a greater percentage of inhabitants who are members of centralized ethnic groups have lower levels of corruption and stronger rule of law than those whose inhabitants predominantly come from decentralized groups. Bandyopadhyay and Green (2012) also find that within Uganda, pre-colonial centralization is correlated with GDP, asset ownership, and poverty levels at the sub-national level. They also find, however, that public goods, such as immunization rates and school enrollment, are not correlated with centralization. Meanwhile, Hariri (2012) finds that precolonial state development is correlated with regime type today – namely, that older states are more likely to be autocratic than states that did not have strong state structures at the time of colonization. He argues that older states were more likely to resist institutions brought by colonial powers, institutions that would eventually pave the way for democracy in the post-colonial period.


\(^{1}\)I do not have a good explanation for this incongruence, although the theory I present implicitly assumes that ethnic group hierarchical organization and Islam are not incompatible
to calculate the percentage of the population belonging to centralized groups by country. Part of the challenge, perhaps, stems from the fact that sub-national measures of centralization are aggregated up to the county level without an a clear understanding of what it means to have a single, multiple, or no centralized groups within a country. How do groups with varying levels of centralization interact with each other and the state in the colonial or post-colonial setting? This paper attempts to explore this question more deeply, and in doing so examines another potential effect of pre-colonial centralization – its effect on the ability of civil society (in this case, Muslim organizations) to organize and become relevant political actors. The analysis here explores variation in centralization both within and across countries, without assuming that sub-national measures of centralization can be aggregated up to the national level.

In the next section, I present analytic narratives of two ethnic groups, the Yoruba of Nigeria and the Baganda of Uganda, constructed from primary and secondary sources and which were employed for the development of the theory proposed.

4 Analytic Narrative: Islam and Education in Buganda and Yorubaland

The Yoruba of southwest Nigeria and Baganda of central Uganda were chosen as a paired case comparison for the purpose of theory building, an exercise that has been described by others a model-building small-N analysis (mb-SNA) \cite{Lieberman2005}. This design is inductive in nature and preferable when a theory is not yet fully developed and/or empirical data is not available to evaluate the theory. In this case, both were true. The theory is still under development, and there is little data available about Muslim organizations in Africa. Lieberman describes, the “Mb-SNA involves using various case materials to develop well-specified theoretical accounts of cross-country variation on the outcome of interest.” (443).
It should be noted that these cases were selected for the explicit purpose of theory-building, and as such, cannot strictly be considered evidence in support of the proposed theory.

The cases of the Yoruba and Baganda were carefully chosen to vary the dependent variable of interest, the Muslim-Christian disparity in educational attainment, while holding constant factors that constitute plausible yet insufficient explanations for this variation. Specifically, this paired comparison examines two ethnic groups that were 1) favored by the colonial administration, 2) centrally located within the colonial state, and 3) Muslim minority populations. Each of these three factors constitutes a plausible explanation for variation in Muslim disadvantage in the education sector. However, they are insufficient to explain important variation in Muslim disadvantage – while rates of schooling were similar among the Baganda and Yoruba at the end of the colonial period, as was the gap in education between Christians and Muslims, the Baganda have been relatively more successful in closing this gap than have the Yoruba. Today, Yoruba Muslim adults and children have lower rates of schooling than Yoruba Christians, while there is no such difference observed between Baganda Christians and Muslims.

4.1 Muslim Educational Attainment: The Yoruba and Baganda Compared

The Yoruba are located in the southwest corner of Nigeria, which was at the center of the British colony (see Figure 7). The Yoruba in general have very high levels of education, but, as in most of Africa, at the end of the colonial period, Muslim Yoruba had far fewer years of education on average than Christian Yoruba. The earliest DHS in Nigeria did not, unfortunately, ask respondents their ethnic identity, so I am unable to estimate precisely the educational differential using this data, but the region “southwest” serves as a reasonable proxy for Yoruba since 80% of the population in the southwest in the 2008 survey (which
did ask about ethnicity) are Yoruba. To examine educational attainment at the end of the
colonial period, I examine educational outcomes for individuals born in the 1940s, who would
have attended primary school in the late forties and early fifties, if they had attended at all. On
average, Muslims born in the 1940s had 2.14 fewer years of school than Christians.

In a regression analysis using the 2008 survey data, where I can examine the
Yoruba specifically, I find that this educational advantage persists over time for both
men and women. In the full sample, Muslim Yoruba women have 2.42 fewer years of
school than Christian Yoruba. The addition of controls for birth year, urban/rural,
and wealth quintile reduces the gap to only 2.06 years. Meanwhile, Muslim Yoruba men
have 1.69 fewer years of school than Christian Yoruba, including controls. Among Yoruba children between the ages of 5 and 18, 96.3%
of Christian children and 89.7% of Muslim children were in school at the time of the survey.

As noted, these are very high rates of schooling, which reflects the historical advantage of
the Yoruba as a group. The addition of controls reduced the magnitude of the effect of being
“Muslim”, but it remained significant. Schooling rates were similar for boys and girls.

The Baganda, like the Yoruba, were located at the center of the Uganda Protectorate,

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6Unfortunately the DHS samples of men are much smaller than those for women, and I am unable to
attain a meaningful estimate of schooling for men when the data are split by decade. Therefore, the analyses
for the 1940s are for women only.

7It is worth reiterating the magnitude of the effect of Muslim identity on educational attainment relative
to variables or interventions that have been examined elsewhere. Ethnicity and geographic region are cer-
tainly important variables in educational attainment in Africa, but the effect of co-ethnicity or recent policy
interventions to increase schooling is markedly smaller than the “effect” of religious affiliation found among
at least some ethnic groups, including the Yoruba.
and as such, were at the political and economic heart of the colonial territory (see Figure 8). Comprising 17% of the population according to the most recent census (2002), the Baganda are the most populous ethnic group in Uganda. Although the Baganda have not held the executive since the first years of independence, they are one of the best educated and wealthiest groups in the country.

Fortunately, the earliest Uganda DHS (1988) did ask about ethnicity, so I am able to estimate somewhat more precise estimates of schooling among Christian and Muslim Baganda than the Yoruba at the end of the colonial period. The education levels and educational differential between Baganda Christians and Muslims were similar to those of the Yoruba at the end of the colonial period. Baganda Muslims had 1.41 fewer years of schooling on average than Baganda Christians.

Using the 2011 survey, I conduct the same regression analysis as for the Yoruba. In the absence of controls, there is no statistically significant difference in educational attainment between Baganda Christians and Muslims for either men or women, suggesting that the initial gap has closed dramatically since the colonial period. Interestingly, however, with the addition of controls, a small gap of .39 years becomes marginally significant for Baganda women and a somewhat larger gap of 1.18 years for Baganda men. It appears that among the Baganda, being Muslim is correlated with living in an urban area, and Muslims have slightly fewer years of education than Christians in urban areas. Among Baganda children between the ages of 5 and 18, 96.3% of Christian children and 95% of Muslim children were
in school at the time of the survey, which is a statistically insignificant difference. Again, overall levels of schooling are similar for Yoruba and Baganda, but the gap in schooling between Christians and Muslims is lower for Baganda than Yoruba. Tables 2-5 provide descriptive statistics and the regression analyses discussed above, while Figures 9 and 10 show Yoruba and Baganda educational attainment with respect to other ethnic groups in Nigeria and Uganda, respectively.

Table 2: Avg. years of school for girls born in the 1940s

<table>
<thead>
<tr>
<th></th>
<th>Christian</th>
<th>Muslim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwest Nigeria</td>
<td>4.41</td>
<td>2.27</td>
</tr>
<tr>
<td>Baganda</td>
<td>4.10</td>
<td>2.69</td>
</tr>
</tbody>
</table>

Table 3: Percentage of children (6-17 years) currently attending school

<table>
<thead>
<tr>
<th></th>
<th>Christian</th>
<th>Muslim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoruba</td>
<td>96.96</td>
<td>88.52</td>
</tr>
<tr>
<td>Baganda</td>
<td>96.33</td>
<td>95.04</td>
</tr>
</tbody>
</table>

Table 4: Years of School, Yoruba and Baganda Women

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Yoruba</td>
<td>Yoruba</td>
<td>Baganda</td>
<td>Baganda</td>
</tr>
<tr>
<td>Muslim</td>
<td>-2.421***</td>
<td>-2.060***</td>
<td>-0.307</td>
<td>-0.392*</td>
</tr>
<tr>
<td></td>
<td>(0.308)</td>
<td>(0.180)</td>
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N 4802 4802 1469 1469

Standard errors in parentheses
Standard errors clustered by survey cluster

* p < 0.10, ** p < 0.05, *** p < 0.01
Figure 9: Average years of school by ethnicity (women), Nigeria

Figure 10: Average years of school by ethnicity (women), Uganda
Table 5: Years of School, Yoruba and Baganda Men

<table>
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<tr>
<th></th>
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Standard errors in parentheses
Standard errors clustered by survey cluster

* p < 0.10, ** p < 0.05, *** p < 0.01

Both the Yoruba and Baganda have been in privileged positions relative to other ethnic
groups in Nigeria and Uganda, respectively. While rates of schooling were similar among the
Baganda and Yoruba at the end of the colonial period, as was the gap in education between
Christians and Muslims, the Baganda have been relatively more successful in closing this gap
than have the Yoruba. The following sub-sections provide abbreviated analytic narratives
of Muslim organization, particularly with regard to Muslim education, in Buganda and
Yorubaland respectively.

Islam in Buganda

Islam, brought by Arab traders, arrived in Buganda some thirty years before the arrival
of the first Christian missionaries, in the mid-1840s. Kabaka Suna II, the king of Buganda at
the time, did not convert to Islam, but his successor, Mukabya Mutesa I made Islam the state
religion, and during this time built mosques, began the practice of circumcision, observed

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*Note: These two sub-sections will eventually be combined and expanded into a stand-alone chapter in
the dissertation.
Ramadan, began slaughtering animals according to Islamic law, and required his chiefs and members of his court to read the Quran in Arabic (Kasozi 1986). Although Buganda appeared well on its way to becoming an Islamic state, the arrival of Henry Milton Stanley and, subsequently, Christian missionaries, in the 1870s and 1880s brought the expansion of Islam to a dramatic halt.

Literally courted by Muslims, Catholics and Protestants, Kabaka Mutesa I brought representatives of these three denominations before him, apparently judging the utility of each to his own power and that of the kingdom, particularly vis-a-vis threatening neighbors to the west (the Bunyoro kingdom) and the north. Kasozi writes: “So amused about the competition of the three groups was Mutesa that one day he compared himself to a beautiful young girl being courted by three men who must wear themselves away before she made a choice.” Kasozi (1986) (37). Although Mutesa I never converted to Christianity, Christian missionaries, particularly Protestants, gained a strong foothold during his rule. Religious wars between Protestants, Catholics, and Muslims raged between 1890 and 1900, with Protestantism ultimately strongest, largely due to British support. Still, by the early 1900s, Baganda had converted in large numbers to all three denominations. During a geographic partition in 1892, largely a result of the religious wars, land was given to each denomination, although the majority of it was reserved for the Christians. Nevertheless, Muslims were given three counties (Holway 1971). In the 1900 Buganda Agreement, Buganda kingdom land was also distributed among the three faiths, with Muslims receiving the smallest tract of land.

The Buganda royal family, like its subjects, was split between these three religions. Prince Nuhu Mbogo, who was a son of Suna II, a possible heir to the throne and a Muslim, was given the choice of converting to Christianity and becoming king, or remaining Muslim and giving up the throne. He chose to maintain his faith, forgoing coronation, and went on to serve as an advocate for Muslim interests, encouraging and protecting Islamic law and practices (including dress and animal slaughter), and attempting to promote more Muslims
to the position of chief within the Buganda and protectorate political system. Gee (1958) writes, “Mbogo was authoritative, with much dignity and courtesy, and used his personal position to weld together the Muslims into a single party.” Kasozi adds, “Although there were grumblings against him in his last years, he managed to keep the Muslim community as one united body under his leadership.” (Kasozi 1986) (84)

By the 1920s, western education, which almost exclusively taught by Christian missionaries, was gaining importance in Buganda, and the acquisition of western education was important to the Buganda royal family as it was a prerequisite for government and administrative positions, and for maintaining their status as political elites. A crisis therefore emerged regarding the education of Prince Mbogo’s sons, including and especially his heir and son, Badru Kakungulu Wasajja, also a prince. Muslim family members did not want Kakungulu sent to Christian schools, which were attended by other members of the royal family and Baganda upper class, for fear that he would be converted to Christianity. Eventually Kakungulu’s guardian, together with the Buganda kingdom’s equivalent of parliament, called the lukiiko, founded the first secular Muslim primary school, where the first class was taught in 1922. Mbogo’s children were educated there, together with boys from prominent Muslim families in Buganda. Kakungulu completed his education in Christian schools, since there were no Muslim schools above the primary level at the time, with the explicit understanding that these schools were strictly disallowed from converting the prince to Christianity. As he grew older, Kakungulu would play a central role in expanding the Muslim secular education system, probably in large part due to his own early experiences.

After the death of this father, Prince Kakungulu assumed the role of leader of Muslims in Buganda, although his leadership was contested by some in the Muslim community. Nevertheless, Kakungulu played a critical role in establishing an alternative school system for Muslims seeking secular education. In 1944, nearly twenty years before Uganda’s independence, Kakungulu established the Uganda Muslim Education Association (UMEA),
together with his former school-mate Ramadhan Gava. The British colonial government encouraged the formation of this organization, but the extent to which it emerged organically, as opposed to driven by external actors, is unclear. UMEA was supported financially by the Ismaili Muslim leader, the Aga Khan, as well as by the British government and local Muslim communities. Between 1945 and 1963, UMEA had established 180 primary schools, 8 junior secondary schools, one senior secondary school, and one teacher training college. The majority of these schools were located in the central region, but there were also some opened in the west, east, and north. Though there is no data available to support his claim, Kasozi states that the vast majority of Muslims educated during that time received their education at UMEA schools.

At Independence, Prince Kakugulu was recognized by many Muslims as the leader of the Muslim community not just in Buganda, but throughout Uganda. Baganda Muslims, especially those close to or members of the royal family, have been particularly influential in promoting Muslim interests, including and especially Muslim education. The heir of Prince Kakungulu, Prince Khassim Nakibinge, remains a prominent, albeit informal, leader of Muslims across Uganda, who continue to view his family as protectors and advocates of Muslims in Uganda. Since Independence, an organization called the Uganda Muslim Supreme Council (UMSC) was established, which is a hierarchical structure with democratically elected leadership. It provides a network of Muslim religious leaders from the local mosque all the way up to the national head, the Mufti. The descendants of Prince Mbogo are not a part of this formal structure, but they continue to play a highly influential informal role in organizing the Muslim community and advocating for Muslim interests.

Stepping back, what can we learn from the case of Muslim organization and education in Buganda? What were the factors that were critical to Muslim organization, and for such emphasis to be placed on formal education? First, competition between Christians

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9I am currently attempting to find the locations and founding dates of these schools.
and Muslims in Buganda was important in generating demand among Muslims for formal education. In particular, competition within Buganda was important for generating demand for formal education because Muslims could see the success and opportunities available to their Christian co-ethnics as a result of formal education, co-ethnics who were essentially no different from themselves. They may have even come from the same clan or family. Second, the presence of Muslims among ethnic groups “favored” by the British likely led to more resources put toward education in these areas in general, as well as ensuring the presence of missionaries. Third, the presence of Muslims among the traditional elite, especially where there was competition with Christians, likely led to an emphasis on formal education. In order to remain among the elite in the colonial and post-Independence system, Muslims would have to adopt the skills of their Christian peers, which required formal education. Finally, the centralization of the Buganda kingdom made it possible for Baganda Muslims to identify a single leader, a Muslim member of the royal family, to represent their interests in the kingdom and with the colonial government. In this way, the centralization of Buganda served to create a focal point for Muslim coordination – and the leadership was able to use its authority within the ethnic group and colonial state to create a top-down institution promoting Muslim education across Buganda.

Islam in Yorubaland

Islam came to Yorubaland about a century earlier than to Buganda, sometime during the 1700s, and Muslim populations had bordered Yorubaland to the north since the eleventh century (Comstock 1979; Laitin 1986). Civil wars within Yorubaland displaced many people, and scattered the Muslim population (Nasiru 1977). Laitin (1986) explains how these wars, and concurrent displacement, in fact facilitated the spread of Islam in Yorubaland:

They [displaced Yorubas] saw the business opportunities, the dignity, and the claims to supernatural powers of Islamic preachers. Initially, little was asked of them to join this
attractive community, and, since they lived outside their ancestral homes, they faced little pressure to resist...Political authority, anxious to accommodate to the interests of the returned refugees who had become rich, could not easily deny these converts the right to engage in Islamic prayer. (40)

Unlike Buganda, which has a single ruler, Yorubaland was traditionally organized as a series of city-states, each with a traditional ruler and each governed under slightly different structures. Today, traditional rulers maintain their cultural authority and each kingdom has set of royal families within which the position of king rotates.

Christianity arrived in Yorubaland in the mid-1800s, with the first English-speaking missionary arriving in 1842. They key missionary bodies were the Anglican Church Missionary Society (CMS), the Wesleyan Methodist Missionary Society, the Southern Baptist Convention, and the Roman Catholic mission. The provision of education by missionaries was a key strategy in gaining converts, and very successful one. Abernethy (1969) reports that by 1921, 130,000 children were enrolled in missionary-run primary and secondary schools. By this time Christianity had made particularly great strides in Lagos and Colony and Ijebu, with more than one-fifth of the population either Protestant or Catholic (Talbot 1926). In Ondo and Warri, one tenth of the population had converted to Christianity by the early 1920s.

The role of missionary schools in conversion was not lost on the Muslim population, which by the 1920s constituted 40% of Lagos and Colony, 30% of Ijebu, 20% of Abeokuta, and 12% of Oyo (Talbot 1926). Some of those who had sent their children to missionary schools found that their children had converted to Christianity by the time they graduated, or were forced to become baptized and change their names to Christian names (Nasiru 1977). In Lagos, after Muslims began removing their children from schools, the colonial government began consultations with Muslim leaders in the area to address their concerns with the provision of education in the colony. The first government (non-missionary) school was a Muslim school opened in Lagos in 1896. Subsequently, Muslims began to form organizations to advocate for
Muslim interests, particularly in the area of education. The Ansar-Ud-Deen Society (AUD) was among the first Muslim organizations established in Yorubaland which, among other activities, began constructing schools for Muslim students.

In contrast with Buganda, where a branch of the royal family, Prince Mbogo and his descendants, played a key role in organizing Baganda Muslims, there was no such overarching Muslim leader in Yorubaland. Rather, many different organizations emerged under different leadership, frequently with the same broad goals – to promote Islam and the welfare of the Muslim community. The establishment of schools providing both “western” and Islamic education was often a key activity of these organizations. Some of the key Muslim organizations that emerged in Yorubaland during the colonial period included Ansar-Ud-Deen (established in 1923), Nawair-Ud-Deen (1939), Ansar-ul-Islam (1943), the Islamic Missionary Society (between 1920 and 1930), Isabatuddin Society (1958), the Muslim Students Society of Nigeria (1954). The Ahmadiyya Movement was also active in setting up schools, although they failed to win many converts. Other organizations, such as Islah ul-Deed (1954) explicitly opposed western education and instead provided Islamic education only and shunned students and families who had sought western education elsewhere. Since Independence, Muslim organizations in Yorubaland have only proliferated further. Some of these organizations operate in specific geographic areas, and others have grown into national organizations.

Muslim organization in the Yorubaland is characterized by the proliferation of organizations and fragmentation of the Muslim community. Over the years, a number of organizations have attempted to become “umbrella” organization for the many different Muslim organizations of the southwest. Most of these attempts have failed to bring these various groups and their leaders together. The most recent attempt in establishing an umbrella organization was the creation of the Muslim Ummah of Southwest Nigeria (MUSWEN) in 2008. MUSWEN is headed by a well-known and respected Muslim scholar, a former professor and Chief Imam
at the University of Ibadan, Dawud Noibi. MUSWEN was established on the premise that bringing the various southwestern Muslim organizations together would be more effective in achieving mutual goals than operating separately:

Lack of unity with a veritable and credible leadership for Muslims in the region [southwest] was mainly responsible for the delay in bringing about the desired change. Unlike other parts of the country, the South West has a large number of Muslim organizations each working in its own sphere. However, the enormity of the challenges makes it expedient that the Muslim organizations and institutions work together meaningfully MUSWEN is meant to play in the South West a role similar to that which the Jamaatu Nasr al-Islam is playing in the northern part of the country.\textsuperscript{10}

Although MUSWEN states that, of all of their projects, the highest priority is given to education, it is not clear whether they have made a noticeable difference in the education since their establishment. Meanwhile several leaders of MUSWEN member organizations stated that MUSWEN did not have the resources to effectively bring together the organizations under it\textsuperscript{11}. Several leaders of Muslim organizations in the southwest also noted that organizations did not want to cede their autonomy to another organization. These comments suggest that, while Muslim organizations in the southwest do not necessarily work at odds with one another, they often do not coordinate their activities either.

Is the fractionalization of the Muslim community in the southwest a hindrance to their efficacy, or to the promotion of Muslim education specifically? Does it prevent the Yoruba Muslim community from becoming a relevant political actor? Why did fractionalization of the Muslim community occur to a greater extent in Yorubaland than in Buganda? It appears as though the fragmentation of the Yoruba as an ethnic group was mirrored in the Yoruba Muslim community. Muslim organizations tended to emerge in response to the challenges Muslims faced within a given location, often in the cities that comprised the Yoruba city-state system. Rather than an overarching, top-down approach to addressing issues affecting the Muslim community, as occurred in Buganda, in Yorubaland, social and political mobilization

\textsuperscript{10}From the brochure, “About the Muslim Ummah of South West Nigeria”, published by MUSWEN.
\textsuperscript{11}Interviews with Muslim organization leaders in February and March, 2013
occurred from the ground up. Granted, Muslims from prominent families often played a role in establishing these various organizations, but there was no obvious focal point, or focal person, whom Yoruba Muslims could look to as the leader of their community. Instead, just as in Yorubaland itself, Muslims looked to local leaders to organize the community in a given area.

Like the Baganda, the Yoruba were located at the heart of the colonial state, and Yoruba Muslims came into close contact and competition with Christian missionaries over hearts and minds. It is clear that many Muslims sought formal education, as is evidenced by the many organizations that developed with the express purpose of providing alternative schools offering both formal and Islamic education. It appears, however, that in the absence of an obvious single leader of the Muslim community (of which there was no analogous figure among the Yoruba as a group), Muslim political organization was fragmented, without much coordination across organizations or space.

I am still in the process of collecting data about the exact location of schools established by Muslim organizations, or by government, in Buganda and Yorubaland. While it is difficult to determine whether the degree of fragmentation of Muslim political organization had an effect on educational outcomes, the pattern of school establishment across space may shed light on whether having a single leader and organization resulted in more efficient provision of schools for the Muslim community.

Another possible explanation for the varying success of Baganda and Yoruba Muslims in overcoming disadvantage in formal education which emerged is the relationship between Muslim religious leaders (Imams, mallams, and other scholars) and the Muslim intellectual elite. In Yorubaland, Islam had been established for a longer time than in Buganda, and this gave rise to a class of Muslim scholars and teachers whose life and livelihood relied in part on their work in running Qur’anic schools. The arrival of Christian missionaries and western education arguably posed a greater threat to Islamic teachers in Yorubaland than in
Buganda, where Islam had only a thirty-year head start on Christianity. This threat may have resulted in greater opposition to western education by at least some segment of the Muslim population in Yorubaland than in Buganda. Indeed, in Yorubaland a fatwah against the attendance of mission schools was issued in the early 1900s after it became apparent Muslim children in those schools were being converted to Christianity.

5 Empirics

I am in the process of constructing a dataset that would allow me to test the hypotheses generated through the theory under development. The first hypothesis is that Muslims in centralized ethnic groups are better able to coordinate across space. This hypothesis requires data on both degree of centralization and organizational strength. Unfortunately, data on both of these variables is wanting. The most commonly used measure of ethnic group centralization comes from the variable Jurisdictional Hierarchy in Murdock (1967). This variable consists of two components represented by two digits, “of which the first indicates the number of levels up to and including the local community and the second those transcending the local community.” (160). Gennaioli and Rainer (2005) and Bandyopadhyay and Green (2012) use the second digit only to measure hierarchy within the ethnic group. One challenge in using this dataset is that there are not always clear matches between ethnic groups across other datasets. A second challenge, for the purposes of this paper, is that it is not clear that the variable captures centralization per se – the variable is really a measure of the complexity of a group, the number of levels of hierarchy, not a measure of the degree to which there are one or more centers of power. For example, on this measure, both the Yoruba and Baganda score a three, even though I have argued in this paper that the Baganda were relatively more centralized than the Yoruba in a way that mattered for the outcomes

\[1\] Nielsen (2012) makes a similar argument with regard to radicalization of Muslim clerics – he argues that clerics’ educational networks determine their career opportunities and therefore the ideologies they promote.
of interest. Data on organizational strength is absent altogether. While I am in the process of putting together a dataset on Muslim organizations, in the meantime I use the ultimate outcomes of interest - Muslim educational attainment and the Christian-Muslim differential - as the dependent variable.

Despite the challenges with the centralization variable, I have matched DHS data on educational outcomes with the Murdock data for the purposes of doing a preliminary analysis. I do not yet have a measure of proximity to the colonial center, so I am not able to evaluate the interaction between proximity and centralization. Because I predict the effect of centrality to differ based on a group’s proximity to the center, I do not expect to find a clear bivariate relationship between centralization and educational outcomes. Moreover, as noted, this measure may not even capture well centrality as I have conceived it.

Using DHS from fifteen African countries, I created a dataset of all ethnic groups with at least 30 Muslims and 30 Christians surveyed and constructed three variables: 1) size of Muslim population (percentage of the ethnic group), 2) Christian-Muslim educational differential (mean difference in years of schooling for Christians and Muslims in the ethnic group), and 3) mean level of Muslim educational attainment (mean years of schooling for Muslims in the ethnic group). This left me with 81 ethnic groups in the following countries: Burkina Faso, Benin, Cameroon, Ethiopia, Ghana, Guinea, Kenya, Mali, Malawi, Nigeria, Sierra Leone, Senegal, Chad, Togo, and Uganda.

Of these 81 ethnic groups, I was able to match 33 to Murdock’s ethnic groups. Figures 11 and 12 show the relationship between centralization as coded by Murdock (juris2) and two variables, mean years of schooling for Muslim members of the group and average difference in years of school between Christians and Muslims in the group (eddiff).

As noted, in the absence of data on group location there is little to be done with this

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13This is an arbitrary cut-off point, but one for which there don’t appear major differences on either side of the cut-off.
Figure 11: Muslim Educational Attainment and Centralization by Ethnic Group

Figure 12: Educational Differential and Centralization by Ethnic Group
data to test the hypotheses proposed. However, it is interesting to note that the variation in Muslim educational attainment is much greater for highly centralized groups on this measure (scoring a 3) than those less centralized. This may support, as suggested, the prediction of centralization associated with both very high and very low levels of educational attainment, depending on the location of the group.

The second hypothesis to be evaluated is that the closer Muslim populations were to the political and economic center of the state, the more likely they would organize to seek the goods of modernity, including formal education. One mechanism linking location to educational outcomes is that of competition, which has been suggested both in the literature on the effect of Christian missionaries and in the production of Muslim science ([Gallego and Woodberry 2010], [Nunn 2011], [Chaney 2008]). Since I do not yet have data on group location, I have created another variable which serves as a proxy for competition with Christian missionaries – the percentage of an ethnic group that is Muslim. Although an imperfect measure of competition, I assume there are lower levels of competition in predominantly Muslim ethnic groups, and higher levels of competition when Christians comprise a greater percentage of the group.

Using the DHS data on 81 ethnic groups as noted above, I find a strong relationship between the size of the Muslim population and both educational outcomes of interest: the Christian-Muslim differential and mean educational attainment of the Muslim population. The relationship is particularly strong among former British colonies (perhaps because they tend to have higher levels of schooling in general) and holds up to country fixed effects.

Figures 13-16 show the relationship between perc_Muslim and educational outcomes, and Tables 6 and 7 present results from the regression analysis. In the full sample, there is a significant and positive correlation between perc_Muslim and the Christian-Muslim differential across ethnic groups, and a significant and positive negative correlation between perc_Muslim and Muslim educational attainment. The effect of perc_Muslim is also substantively large.
Moving across the range from 0 to 100% is associated constitutes moving from .41 years to 2.41 years in the Christian-Muslim differential, and from 4 years to 2 years for average Muslim schooling. The magnitude is twice as large when the sample is limited to former British colonies.

Figure 13: Christian-Muslim Educational Differential Across Ethnic Groups (all countries)

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Standard errors in parentheses
† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

37
Figure 14: Christian-Muslim Educational Differential Across Ethnic Groups (British colonies)

Figure 15: Mean years of school among Muslims, across ethnic groups (all countries)
Figure 16: Mean years of school among Muslims, across ethnic groups (British colonies)

Table 7: Percent Muslim and Education Outcomes by Colonizer

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Country FE     | YES    | YES    | YES    | YES    |            |            |
| N              | 33     | 33     | 33     | 33     | 38     | 38     | 38     | 38     |
| $R^2$          | 0.38   | 0.51   | 0.44   | 0.63   | 0.16   | 0.17   | 0.07   | 0.17   |
| adj. $R^2$     | 0.36   | 0.40   | 0.42   | 0.54   | 0.13   | −0.03  | 0.05   | −0.02  |
| Resid. sd      | 1.43   | 1.39   | 1.55   | 1.38   | 1.53   | 1.66   | 0.99   | 1.02   |

Standard errors in parentheses
B refers to former British colonies, F to former French colonies.
† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

These results suggest that the size of the Muslim population within an ethnic group appears to predict Muslim educational outcomes, with an apparently linear relationship\footnote{These results contrast with a similar analysis at the country-level, not presented here, where the per-}
One interpretation of these results is that percentage Muslim, as suggested above, is a proxy for the degree of competition with Christian missionaries that Muslim populations faced. Muslim minority populations may have faced greater competition with Christian missionaries in winning souls and minds, and thus demanded and organized for formal education. The results of Michalopoulos, Naghavi and Prarolo (2012) also suggest that percentage Muslim is correlated with pastoralism and centralization. In the dataset I have constructed I do not find a relationship between percentage Muslim and centralization, a discrepancy which I intend to investigate further.

5.1 Next Steps

I am in the process of creating a dataset that incorporates group location within the colonial state, and possibly including an alternative measure of centralization. Once establishing the relationship between centralization, proximity to the colonial center, and educational outcomes, I will need to create a measure of organizational capacity, or at the very least investigate additional cases outside of Buganda and Yorubaland to examine the applicability of the theory proposed. One possible mechanism by which unified, rather than fragmented, Muslim organization could affect educational outcomes is through the greater efficiency of centrally planned schools and educational programs. When there is a single organization, that organization may be better able to allocate resources efficiently over time and space than when many organizations are operating. Obtaining data on resource allocation, particularly in the form of investments in schools by Muslim organizations, will be useful in exploring this mechanism.

\textsuperscript{...}enterage of the population that is Muslim does not appear to predict well Muslim levels of schooling or the Christian-Muslim differential at the country level.
6 Conclusion

Muslims in sub-Saharan Africa have lower educational attainment, on average, than their Christian counterparts, but this disadvantage in formal educational attainment varies across space and time. This paper proposes a theory explaining the emergence, preferences, and efficacy of Muslim organization and how this organization affected educational outcomes. A key intuition of this paper is that the relative lack of hierarchical structure in Islam meant that the organization of Muslim communities varied across space, and was influenced by local context. I have further suggested that ethnic group structure and the location of Muslim communities within the colonial state were key variables influencing the organization of Muslim society in sub-Saharan Africa. The structure of ethnic groups influenced the structure of Muslim society by facilitating or hindering coordination, while the position of Muslim communities within the colonial state affected demand for formal education through competition with Christian missionaries and access to jobs requiring formal education. Evidence from the cases of Buganda and Yorubaland serve to develop this theory, while data collection for the large-N analysis is still ongoing. This paper has implications for our understanding of Islam and well-being, the long-term effects of colonialism, religious civil society organizations in Africa, and the determinants of educational outcomes.
References


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