THE ORIGINS OF THE “HAUSA DOME”

By

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Abstract:

This article is a response to the argument of Labelle Prussin that the architectural form popularly known as the “Hausa Dome” is a result of the marriage of a Fulbe conceptual environment with Hausa building technology after the jihad of Usman dan Fodio. It argues that the “Hausa Dome” actually predates the jihad, and can indeed be attributed to the Hausa architectural tradition. Furthermore, it suggests a new model for understanding the Fulbe impact upon architecture in the Western and Central Sudan as the adoption and the adaptation of a variety of architectural traditions, rather than as the imposition of a particular Fulbe style.

Key words: Hausa dome, Adamawa, traditional architecture

Résumé:

Cet article est une réponse à la thèse de Labelle Prussin selon laquelle la forme architecturale connue populièrement comme le “Dôme Haoussa” est un résultat du mariage de l’environnement conceptuel Foulbé avec la technologie de construction Haoussa après le djihad d’Ousman dan Fodio. En effet, le “Dôme Haoussa” précède le djihad, et peut être attribué à la tradition architecturale Haoussa. Il propose en outre un nouveau modèle pour la compréhension de l’impact Foulbé sur l’architecture au Soudan Occidental et Central comme l’adoption et l’adaptation d’une variété des traditions architecturales. Cette architecture n’est donc pas une imposition d’un style particulièrement Foulbé.

Mots clés: Dôme Haoussa, Adamawa, architecture traditionnelle.
Introduction

It is axiomatic that scholarship builds upon itself. Through debate and further research, ideas are refined and new conclusions reached. In studying architecture in West Africa, it is impossible to avoid the writings of the seminal scholar in the field, Labelle Prussin, who has done so much to open discussion on the topic. It is without trepidation that I will undertake to dispute the conclusions of this academic.

This article will discuss the origins of a particular roofing system popularly known as the “Hausa Dome”. The “Hausa Dome” is one of the identifying characteristics of architecture in Northern Nigeria and is usually attributed to the Hausa tradition. This form is structurally different from the stone or brick domes of Europe and the Middle East, which deal with the force of compression. Instead, it is constructed by encasing corbelled timbers in earth, thus using tensile strength more in the sense of reinforced concrete structures.

In 1976, Labelle Prussin published an article in African Arts magazine which suggested that this particular roofing form was not, in fact, a Hausa invention, but rather the result of a combination of Hausa building technology with the armature of a Fulbe frame tent. As she states:

While the building expertise in earthen construction was in the hands of the Hausa, the arches and armatures, as well as the stylistic ideals which inspired them, were introduced by the Fulani leadership in the wake of the jihad.1

She argues that the invention of the “Hausa Dome” was a result of the inversion of social roles, due to the jihad, and the subsequent sedentarization of the Fulbe. After consolidating their power in the Sokoto empire, the Fulbe symbolized their leadership role by the “Hausa Dome”.

The Argument in Favor of a Fulbe Origin for the “Hausa Dome”

Prussin argued that the “Hausa Dome” is in reality the result of the transformation of the Fulbe nomadic house into an earthen structure. That is, that after the nomadic Fulbe conquered the Hausa states in the jihad at the beginning of the nineteenth century, they settled down in the cities. At this point, their domical nomadic residences were given a more solid structure and encased in earth. “With the sedentarization of a nomadic tent, the mat walls are replaced by an earthen wall...; the tent armature is enveloped in an earthen covering, and mobile interior furnishings are gradually replaced by earth-molded ones...”2 Thus, in her view, the “Hausa Dome” could not have existed prior to the commencement of the jihad of Usman dan Fodio in the early 1800s.

At this time, the Fulbe usurped the leadership roles of the Hausa in northern Nigeria, thus reversing the social roles of these two ethnicities. The Fulbe signified their newly obtained leadership role by crowning important buildings with domes. Not only did these domes signify the Fulbe, through monumentalizing the nomadic tent, but they also drew a parallel with domical structures in the Middle East, often used to emphasize important religious edifices. Thus, the “Hausa Dome” represented both the ruling ethnic group through the monumentalization of its traditional domicile, as well as symbolizing the Islamic basis of the revolution, through emulation of architectural elements prominent in North Africa and the Middle East, which brought the Fulbe to power.

These are the essentials of Prussin’s argument concerning the origins of the “Hausa Dome”, although for brevity’s sake I have neglected many of the specifics and further social implications. A very similar argument concerning the origins of this roofing system is made in the chapter entitled “The Fulbe Diaspora” in her later publication of Hatumere in 1986.3

1 Prussin, 1976, p.15.
3 Prussin, 1986, pp.198-231.
While several scholars mentioned their misgivings concerning the hypothesis that the Fulbe were instrumental to the invention of the “Hausa Dome”, there has never been, to my knowledge, a presentation of evidence to the contrary in order to refute this hypothesis in scholarly terms. In the following pages, I will present such evidence. In many ways, it could be considered a reinterpretation of the same data. Most of the material examined can be found within Prussin’s own articles. This article will suggest that the “Hausa Dome” actually pre-existed the jihad of Usman dan Fodio and may be attributed to the Hausa architectural tradition. Furthermore, it will present the viewpoint that rather than introducing architectural innovations in northern Nigeria after the jihad, the Fulbe as patrons adopted pre-existing architectural forms and emblems of political and religious hegemony. Such a reevaluation of the origins of the “Hausa Dome”, beyond rectifying what may be perceived as a faulty attribution of architectural invention, will help clarify the role of the Fulbe and their relations with other ethnicities throughout the Sokoto Empire.

**The Argument in Favor of a Hausa Origin for the “Hausa Dome”**

First of all, one must question the hypothesis of the nomadic Fulbe residence being “sedentarized”. That is, that the “Hausa Dome” is the result of a simple replacement of mat walls by earthen walls. This argument is suspiciously similar to that of 19th century architectural theorists such as Gottfried Semper. This theorist suggested, for instance, that the origin of the architectural feature known as a wall was the hedge. From this natural product, humans invented the woven crafts or mats as barriers. These were later replaced with more enduring technologies such as stucco, stone and brick. Such an argument is fundamentally flawed in that it is a purely hypothetical evolutionary model based upon the durability of building material. This model amounts to what may be termed “architectural Darwinism”. While such evolutionary models may occasionally hold true in particular contexts, they must be supported by further evidence.

Furthermore, there is actually only a vague formal resemblance between the “Hausa Dome” and the nomadic Fulbe tent. The Hausa dome tends to be fairly shallow as opposed to the more accentuated form of the Fulbe tent. This juxtaposition is largely due to the difference in building materials. While the Fulbe tent uses multiple bent elastic branches lashed together to form a domical shape, the Hausa dome depends on much more rigid timbers being gradually corbelled out from a few select points. Thus, there is only a vague resemblance between the two either in terms of form or in terms of construction techniques.

One difficulty in determining the validity of Prussin’s argument lies in the lack of eyewitness accounts from northern Nigeria, at the time of the jihad, which give architectural descriptions. Such a situation will hopefully be remedied in the future either through the recording of oral traditions, or through the publication of historical accounts from the region containing such references. Unfortunately, I am currently not in a position to furnish such contributions to the field. Additionally, there are no standing examples of unaltered structures which date to the pre-jihad era.

However, a quote from Heinrich Barth, who travelled through the area in the mid-nineteenth century, calls Prussin’s view into question. Barth remarked of Kano that, “All over the town, clay houses and huts, with thatched conical roofs, are mixed together; but generally in the southern quarter the latter prevail. The clay houses, as far as I have seen them in Dalâ, where, of course, Arab influence predominates, are built in a most uncomfortable style...”5 Padem has pointed out, and it is confirmed by the demographics given by Barth as well, that the southern quarters of Kano were predominantly taken over by the Fulbe after the jihad.6 Thus, we are given the impression by Barth that the “clay houses” were located more often in the Hausa portions of the city, while the Fulbe areas tended to build with thatched roofs. This suggests that

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5 Barth, 1857, p.509.
the Fulbe adopted the Hausa building tradition for important structures, including eventually the "Hausa Dome", rather than stimulating an architectural revolution as Prussin has argued.

A similar quote, again by Barth, concerning Yola makes the point that the majority of that city, the capital of Adamawa, was thatch-roofed:

Barth, who visited Yola in 1854, noted that the city was "a large open place consisting with few exceptions of conical huts surrounded by spacious courtyards ... the houses of the governor and those of his brothers alone being built of clay."[7]

Prussin interprets this quote as reflecting, "the limited impact of a Muslim minority ruling over a non-Muslim majority."[8] Louis Mizon, who visited Yola in 1891, gives a breakdown of the population of the city. He reported that there were three quarters. The first, built with the central mosque at the center, was the Fulbe quarter whose population he estimated at around 15,000. The second quarter included Hausa, Kanuri, Yoruba, and other ethnicities numbering a total of around 5,000. The third was the Arab quarter, whose population he estimated at 2,000.[8] Thus, the overwhelming majority of the city's population were Muslims with the Fulbe themselves predominating numerically. In my viewpoint, Barth's quote actually suggests a more recent sedentarization of the Fulbe population, coupled with a desire of the ruling class to usurp the Hausa architectural vocabulary of rulership, rather than the overwhelming presence of a non-Muslim population.

Such a point of view may be further bolstered by an examination of the process of Fulbe sedentarization in other parts of the Sokoto empire. An extensive quote from the history of Garoua recounted by Modibbo Bassoro is of use in considering the type of sedentary architecture preferred by the Fulbe in this region of the empire:

8 Ibid, p.216
9 Mizon, 1895, p.52-53.

It is true that this is a historical description, and not an account contemporary with the events related. However, it makes certain points clear. First, it was largely the Kanuri and Hausa populations who built earthen structures. Both were sedentary populations with long architectural traditions. Second, the Fulbe population preferred to build in less durable materials long after their sedentarization, with the sole exception being the palace of the ruler. This exception suggests the adoption of non-Fulbe architectural forms, whether of Kanuri, Hausa, or local origin, as the symbol of political and religious hegemony. As opposed to Prussin's argument of an architectural innovation by the Fulbe leadership of the jihad, it would appear that they adopted the symbols of power used by the overthrown predecessors.

Prussin's contrast of the roofing systems of the palaces of Yola and Garoua serves to impress the importance of the Fulbe use of local architectural idioms. In comparing the two she states that Barth's description of the palace of Yola, "contrasts sharply with the spectacular, expansive thatched roof and circular form of the lamido's audience chamber of Garoua,... It's architectural style is more in keeping with the vernacular non-Islamic Fulbe tradition."[9]

However, her earlier argument was that the domical clay roofs of...
the Hausa region were the heritage of the Fulbe nomadic culture. It seems that her argument contradicts itself at this point. In my opinion, the pointed pinnacle of roofs in the Bénoué region and south through the Adamawa plateau, has little relation to the rounded structures used by nomadic Fulbe. Rather, they are an adoption of local roofing traditions which are more suited to coping with the heavier rainfall in the region. In other words, just as the “Hausa Dome” is a roofing system adopted from the Hausa architectural tradition, so too the Fulbe conquerors of Adamawa adopted the roofing systems of the indigenous peoples of that region. This is supported by the fact that throughout Adamawa, the construction and restoration of the palaces of the Fulbe rulers has historically been the responsibility of populations conquered during the jihad. At Garoua, the annual maintenance of the palace was historically the responsibility of the Falli.\(^{12}\)

Susan Denyer gives further support for the suggestion that the domed roof is a product of Hausa technology which pre-existed the jihad. She points out that roof-style equates well with climatic conditions in Nigeria:

> In the north of Hausaland around Daura flat roofs are dominant, in the central area around Zaria roofs are mostly domed, while in the far south around Abuja roofs are domed and thatched. (The annual rainfall in Zaria [sic] is 1150 mm which is slightly more than double that of Daura.)\(^{13}\)

Therefore, rather than being a translation from the structures of the nomadic Fulbe into an earthen technology, the form of the roof may be understood as a response to climate. Such also seems to be the case in Adamawa, where all but the most northern regions use thatched roofing. Furthermore, a comparison of the emphatically pointed thatched roofs of the palace of Ngaoundéré with the woven nets placed over thatching in Rey Boubá implies differing architectural traditions. The variation throughout the Sokoto empire in the forms of the roofs suggests that these forms were suited to their climates and drew upon a diversity of architectural traditions, rather than that the Fulbe imported a single style wherever they settled.

One must also consider the varying roles of Hausa and Fulbe in northern Nigeria with regards to architecture. The mason’s guilds throughout Hausaland are composed of Hausa, not Fulbe. As Prussin puts it, “The specialized skills were concentrated in a tightly knit, discrete, kin-based Hausa ‘guild’.”\(^{14}\) The Fulbe were only involved in architecture as patrons. While Prussin admits this situation, she suggests that the architectural innovation was a result of the Fulbe patronage and demand for symbols of their hegemony. That is, they requested that the Hausa masons modify their building techniques so as to crown every important edifice in Northern Nigeria with an earthen replica of the nomadic Fulbe domicile. It is less likely that structural innovations were the result of the desires of newly-sedentized patrons, as opposed to the ingenuity of those who actually possessed the architectural skills and knowledge.\(^{15}\)

Another important point to examine is the actual question of the sedentarization of the Fulbe. Prussin’s argument assumes that the Fulbe leadership in the jihad were nomadic. However, a significant number of the Fulbe in northern Nigeria, and particularly the leaders of the jihad, had been sedentary for some time beforehand. Not only were the leaders sedentary, but they actively encouraged sedentarization of other Fulbe.\(^{16}\) Indeed, Prussin herself admits that the jihad of Usman dan Fodio was “led by urbanized

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12 Bassorino and Mohammedou, 1980, pp.33, 104.
15 A more plausible means of architectural innovation on the part of the patron would be in terms of architectural plans. While modifying the roofing structure would require adapting the building technology, modifying the plan would only require a rearrangement of individual elements.
16 Azarya, 1993, pp.46-50.
Fulbe. It would certainly be odd for the Fulbe ruling elite therefore to represent themselves as a nomadic group as they had long been sedentary.

The larger question raised here is that of what constitutes Fulbe identity. By her argument, Prussin intimates that nomadism is one of the prime markers of Fulbe identity, and was upheld as a symbol of the ruling aristocracy of the Sokoto empire through the enshrinement of the nomadic residence. However, it has been argued that the nomadic lifestyle is not actually such an important marker of Fulbe identity. Victor Azarya suggests that:

Perhaps we have an illustration here of what has lately been strongly advocated by scholars of pastoralism, namely that the nomadic way of life, unlike pastoralism, is only a response to economic opportunities and is not necessarily related to a "cultural complex". A nomad, given the opportunity to settle without relinquishing his livestock would readily do so and rarely would see in that a cultural betrayal.

Thus, a distinction must be drawn between pastoralism and nomadism. The former appears to be a more important marker of identity for the Fulbe than the latter.

Furthermore, it would have been an odd juxtaposition to actively encourage sedentarization while simultaneously extolling the virtues of nomadism. This is particularly so considering the disdain commonly expressed by urban Fulbe towards those who were nomadic. The latter were frequently regarded as less devout Muslims, or even pagans. However, the transition from nomadism to sedentarism should not be equated with the transition from pagan to Muslim. Indeed, Emily Schultz has pointed out that most Fulbe, whether sedentary or nomadic, are Muslim and that Islam is an important element of the Fulbe identity. She concludes that, "the attribution of paganism to nonconforming Fulbe groups [i.e., those who chose not to sedentarize] by Muslim Fulbe rulers demonstrates more about the dynamics of ethnogenesis than it does about religious commitment." That is, the labeling of nomadic Fulbe as pagan by sedentary Fulbe was a result of the latter's efforts to distinguish themselves from the former along the lines of the key element which justified their political hegemony, i.e., religion. Instead of nomadism being upheld as an ideal and a symbol of the ruling class, it would seem that urban Fulbe actively attempted to disassociate themselves from such a lifestyle. Rather than using the nomadic residence as a symbol of identity, the Fulbe aristocracy adopted Hausa architecture and symbols of rulership in an effort both to differentiate themselves from the nomadic Fulbe, as well as to represent their authority to their subjects in a familiar idiom.

Another implication of Prussin's argument is that the jihad had a largely ethnic basis. In other words, Fulbe opposed Hausa. Upon their triumph, the victors symbolized the new relation between Fulbe ethnicity and hegemony through architecture. H. M. Maishanu, on the other hand, has argued that the view of the jihad in northern Nigeria as a "Fulani jihad" is an erroneous legacy of early studies on the subject. He points out that while there was a large proportion of Fulbe in leadership positions, the conflict was not based on ethnicity. There were members of the Hausa and Fulbe ethnicities, in addition to others such as Tuareg and Kanuri, on both sides of the conflict. Thus, in some regions, the leadership as well as the mass support was Hausa. It would have been inappropriate for the leadership of the jihad to have either attempted to impress a Fulbe identity on the leadership and the population in general, or to attempt to identify leadership solely with the Fulbe ethnicity.

17 Prussin, 1986, p.198. The exception to the rule is Adamawa, where sedentarization occurred almost entirely after the jihad.
21 One must, once again, distinguish between northern Nigeria and Adamawa on this point. A greater percentage of the jihadists in Adamawa, as opposed to the rest of the Sokoto empire, were of Fulbe ethnicity. Therefore, a much closer association between Fulbe ethnicity, Islam, and political power developed in this region.
While it is true that the Fulbe as a whole gained in social, financial, and political status due to the jihad, they were not the sole actors in the struggle.

Finally, the question of building technology must be taken in the larger context of Fulbe appropriation of Hausa culture. Indeed, it is seen as one of the peculiarities of the jihad of Usman dan Fodio, as opposed to those in other parts of West Africa, that the victors adopted the customs of the defeated, rather than imposing their own culture as the dominant norm. Victor Azarya has provided a model to explain this phenomenon:

It seems that in those areas of the Sokoto empire where the Fulbe took over existing state structures, such as in Hausaland, but also in Ilorin and Nupe, they tended to adopt the local language and culture. Where they built a new state structure out of a variety of loosely organized smaller units, as in Adamawa, Gombe and Muri, their own culture and language spread to the local population. 22

According to this model, the existence of a strong pre-jihad state structure fostered the “Hausaization” of the Fulbe in northern Nigeria. This process includes that of architectural appropriation.

In Adamawa, on the other hand, a “Fulbeization” process occurred due to the necessity of building new structures to unify such a large area, as well as the stronger relation between Fulbe ethnicity and rulership. However, Azarya’s model may be nuanced by the examination of the nature of the Fulbe culture being spread in this region. Eldridge Mohammadou has provided evidence for the strong impact of Kanuri culture on the Fulbe in Adamawa due to their long-term cohabitation, both in Bornu as well as in Adamawa itself. 23  I would add to this a strong Hausa impact as well for similar reasons. Additionally, elements of these cultures, and in particular emblems of political significance, might have been consciously adopted due to the distinction accorded them by the

longevity and strength of Kanuri and Hausa rule in the region. Furthermore, variations in Fulbe culture may be found throughout the region due to the incorporation of elements of the cultures conquered during the jihad. Thus, the Fulbe culture which was spread throughout Adamawa after the jihad was in actuality an amalgamation of Fulbe, Hausa, Kanuri, and various local cultures. Once again, “culture” must be understood to include architecture. It is only such a cultural amalgamation which can explain the variations which occur within a greater unity of architectural style across Adamawa.

Conclusion

In summary, all indications point to a pre-jihad Hausa origin for the roofing system known as the “Hausa Dome”. Rather than creating a new architectural form, the post-jihad leadership in northern Nigeria adopted the Hausa tradition of monumental architecture for important state institutions such as palaces and mosques. Instead of being innovators in the realm of architecture, the Fulbe should be seen as incredibly adaptable in the quick adoption and understanding of the symbols of power in the region. As with many aspects of the jihad, the architectural tradition of northern Nigeria was co-opted for the new regime, while in Adamawa new traditions were introduced and combined with traditions already present in this area. The Fulbe throughout northern Nigeria and northern Cameroon provided the patronage for monumental architecture through their control of state resources, but the architecture itself largely reflects the traditions of other peoples in these regions.

22 Azarya, 1993, pp.54-55.
References


Simplified Armature of a Fulbe Frame Tent
Based on Prussin, 1976: p.14, fig.11.

Section of an Arch of a “Hausa Dome”
Based on Moughtin, 1972: p.149, fig.6.

NOTES SÛR LES PRATIQUES CULTURELLES
ET LES REPRESENTATIONS SOCIALES
CHEZ LES MASSA DU CAMEROUN 1:

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Résumé :

La pratique inscrit les individus dans un univers qui
façonne leur comportement et partant leur mode de fonctionne-
ment découlant de l’organisation de l’environnement où ils évo-
luent. La pratique culturelle, parce que mobilisant les individus
dans la quotidienneté par la mise en jeu des faits que sont le gur-
una et le labana investit toute la représentation du groupe concerné
qu’est le groupe massa. A travers cette représentation l’individu
massa revit et recreée un espace qui lui échappe de plus en plus
mais parce qu’il a cette faculté de le revivre, il a le sentiment de
posséder encore des faits de la représentation sociale.

Mots clés : pratique culturelle, représentation, Massa, Guruma,
Labana.

Abstract :

The cultural system of a people tends to ascribe unto some
individuals certain social status that mould their behaviour and
perception as well as the social structure in which they have been
brought up.

1 - De très nombreux ouvrages et articles ont été consacrés à cette notion de représentation
sociale. Le lecteur pourra valablement se documenter en consultant la bibliogra-
phie dans les travaux de S. Moscovici, C. Flament, C. Abric, D. Jodelet, etc. Ceci
n’est qu’une indication.