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A Review of Courtyard House in Nigeria: Definitions, History, Evolution, Typology, and Functions

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Abstract

The courtyard is one among the familiar concepts commonly applied in the design of buildings in almost all the Nigerian cultural groups. It is truly the traditional expression of Nigerian indigenous architecture. Its definition, historical evolution, functions and typology is worth investigating. Also, its adaptation to the contemporary architectural design and practice in different building typology in the Nigerian context will be studied. Different courtyard house studies were examined through Journal papers, conference papers and the literatures. These studies revealed that the use of courtyard in buildings (in Nigeria) is from time of old, and has become adaptive to contemporary architectural design and practice. It has almost similar form with different features due to the religious and cultural diversity of the Nigerian people. The paper concluded that, the application of courtyard in the Nigerian various traditional architecture has been influence by the religious and cultural requirements of its people rather than climatic conditions and, therefore, for the purpose of cultural preservation of the Nigerian various indigenous architecture, the courtyard concept should not be discarded in the contemporary architectural style but should also be based on the climatic and passive

design strategies for the attainment of a built environment that has a sense of interrelatedness with its local conditions.

Keywords: History, Courtyard, Typology, Functions, Adaptation

Introduction

Africa is being considered as the cradle of civilization and the evolution of the courtyard house has been traced to Africa (Adeyemi, 2008). Courtyard is a universal design element which has been put into practice for hundreds of centuries of years globally, particularly in houses, and it has become an area of interest in recent times by scholars. According to (Abass, Ismail, & Solla, 2006), the concept of courtyard house could be traced back to the early days when humans started erecting houses as a means for protection from the increment elements of climate. Then it is very obvious of the fact that courtyard in building is as old as man himself. According to (Lea, 2008), the courtyard can be defined as an unroofed area that is totally or partly enclosed by fortifications or buildings, classically one forming part of a castle or large house.

Courtyards were frequently use as the main assembly area for definite purposes such as: gardening, cooking, working, playing, sleeping, or even in some cases as places to keep animals (Edwards, 2006). As an unlock space inside a cluster or urban structure, courtyard fulfils a variety of task, like; social, leisure and microclimate. The significance of such a space was by their being situated in central sites inside the urban fabric or building (Meir, 2000).

The courtyard has a variety of benefits. According to (Agboola & Zango, 2014), it acts as: playing ground for children; cooking area for women; washing area; space for craftwork; family gathering area; for festivals and feasting (for instance), child naming and funeral ceremonies; receiving guest and settling disputes. A good example of Nigerian groups that benefits as mentioned are; the Yoruba in the south-western region, Igbo in the eastern region; the Asante, Ekwere and Calabar in the South-Eastern region; the Hausa in the Northern region and other minority groups in the middle belt such as: Bajju, Ham, Kataf, Idoma, Tivi, Tarock, Angas, Berom, and so on.

Globally, courtyard typology is interwoven with the people's traditions, religion and cultural values (Reynolds, Ganesh, & Luckett, 2002). All forms of courtyards in all the regions of India and the under develop countries in the world could be traced to their life values. Thus, in the Nigerian context, the case is not different (Kubota, Toe, & Ossen, 2014). To a certain extent, its application is mostly common in the residential building typology (Sthapak & Bandyopadhyay, 2014). However, according to (Ilesanmi & Egbe, 2013), the use of courtyard in Nigeria were from the beginning, primarily constraint to residential building only, but in recent times the

concept became adaptable to other building typology such as; administrative; educational; health; institutional and even in multi-functional buildings.

Indeed, the courtyard is a familiar concept that has being put into use in the design of buildings in almost all the cultural groups in Nigeria, notably are; the Yoruba, Hausa and the Igbo (CHOKOR*, 2005). For instance, the Yoruba traditional building layout has shown that the residence of the Obas (Chiefs), their area for settling disputes and the individual homestead of a typical Yoruba person celebrates the courtyard concept (Osasona & Hyland, 2006). The source of its value is a product of its sense of privacy and security to the immediate family (Sthapak & Bandyopadhyay, 2014). But there exists a disparity with the Igbos. The Igbo traditional architectural pattern took the concept of grouping of buildings and the individual homestead was situated around a space, thus, creating a courtyard (Adeyemi, 2008). On the other hand, the Hausa (constituting the majority group) in the northern part of Nigeria also, have their own homestead layout influenced by religion and culture. The house layout plan of the other minority groups as mentioned is not different in terms of its conceptual ideologies.

This study will lay a hand on the courtyard definitions, its history, typology and functions in the Nigerian context. An evaluation of the different courtyards typology in Nigerian major cultural group and their adaptations to the contemporary architecture will be reviewed. The main purpose of this study is to elucidate the courtyard house in the Nigerian perspective in terms of its morphological ideologies and adaptations. This will assist in illuminating if or not, this concept is accepted as resourceful in architectural design and practice within the shorelines of Nigeria.

The methodology of this study is based on the use of existing literatures as a research tool. Information was obtained from Journals, conference papers and books. This information includes: a plethora of definitions of courtyard as shown in (Table 1), functions of courtyard, their historical evolution, and adaptation to contemporary architectural design and practice in the Nigerian context. The novelty component of the methodology is the evaluation of different courtyard buildings which is accomplished based on sourced Nigerian literatures. Putting in order current studies assist other scholars in discovering suitable suggestions in diverse perspectives of the courtyard house. The product of this study is summarised in the conclusion of this paper and is beneficial to architects as design information and also to scholars for future studies.

Definitions of Courtyard by Scholars

Courtyard is a universal design element which has been put in practice for hundreds of centuries of years in the world globally, particularly in houses. And it has become an area of interest in recent times by scholars. They have study courtyard from different perspective and each of them had defined it in his own view. And some of these definitions are contain in table 1.

The definitions can go on and on. But a critical evaluation of these definitions has in one way or the other captured the following words, or (having the same meaning); “open”, “space”, “enclosed” and “wall”. Therefore, courtyard can be defined by synthesizing the above assertions as, *a space enclosed with open walls*.

Courtyard Functions

Courtyards were frequently used as the main meeting area for specific functions such as: gardening, cooking, working, playing, sleeping, or even in some cases as places to keep animals (Nissan, 2016). The courtyard suitability for diverse functions may not be far from its favourable location in the house layout.

Table 1. Definition of Courtyard by Scholars

S/N	SCHOLARS	DEFINITION
1	(Abass et al., 2006)	Defined courtyard as a covered outside space but are most often than not open to the elements at their apex.
2	(Mai & Shamsuddin, 2008)	Defined courtyard as an unroofed area that is totally or partly enclosed by fortifications or buildings, classically one forming part of a castle or large house.
3	(Zakaria & Kubota)	a courtyard is an open room into the heavens, square or rectangular in sketch and bordered by a group of buildings or most important rooms
4	(Taleghani, Tenpierik, & van den Dobbelsteen, 2012)	Refers to courtyards as, unique spaces that are external yet almost internal, open to sky, usually in contact with the ground, but bordered by rooms.
5	(Yaşa & Ok, 2014); (Yaşa & Ok, 2014)	All defined courtyard to be an open space surrounded by vertical components or buildings.
6	(Bada, 2006)	Courtyard is repeatedly considered as an enclosed area surrounded by a structure or wall and open to the sky
7	(Wazeri, 2014)	Asserted that a courtyard is a covered outdoor or semi-outdoor space surrounded by buildings and open to the heavens.
8	(Berkovic, Yezioro, & Bitan, 2012)	Defined courtyard as part of the house characterised by its internal open space around which all the habitable space(s) are clustered.
9	(Chen, 2012)	Said that the courtyard is a empty space around which a number of performance (somehow all connected with a domestic function) are arranged.
10	(Pieris, 2012)	As an exposed three-dimensional space enclosed by structure(s) and high wall(s) (above eye up level views at the floor level).
11	The British Dictionary	Defined courtyard as “an open area of ground surrounded by walls or buildings”.

12	The Oxford Dictionary of Architecture	defined courtyard as “an open area surrounded by walls or buildings within the precincts of a farm, prison, castle, large house etc.
13	The Oxford Advance Learners Dictionary	as “an open space that is partly or completely surrounded by buildings and is usually part of a castle, a large house”
14	The dictionary.com	Defined the courtyard as “a court open to the sky, especially one enclosed on all four sides”.

According to (Soflaei, Shokouhian, & Shemirani, 2016), the importance of such a space was by their being located in central sites within the urban fabric or building. Surrounded by arcades and colonnades, paved, landscaped with water bodies, various plants, shade and light, they all played an important role in our social and working life. In terms of its contribution to good health, (Rust, 2010) has revealed that the courtyard can be used as a place for facilitating the healing process due to its natural healing potentials. Courtyard takes part in a major way in contributing to the climatic setting, physical and mental potency of its end users. In recent times, scholars have cited the benefits of courtyard in order to elucidate its relevance in a building. These benefits include: architectural benefits; social benefits, climatic benefits; cultural benefits; economic benefits; and the religious benefits.

Social Benefits

The source of the proceeds of the courtyard is a function of its central shape, which provides a feeling of privacy and inclusion to the structure and end users (Sthapak & Bandyopadhyay, 2014). They opined that the courtyard behaves as: a subset of the kitchen; a room for communication among all affiliate of the family; optical seclusion; sound asleep space all through the hours of darkness. The Courtyard has the ability to contribute to healing procedures (Rust, 2010). Therefore, the designer could use courtyard character as a mark of building plan, shadow, water, vegetation. All of these descriptions could offer positive impact in the direction of the senses of the human body.

Climatic Benefits

Courtyards have been usually considered to act as a medium for modifying microclimate, owing to their capacity to moderate high temperatures, direct gentle wind and regulate the amount of humidity (Taleghani et al., 2012). Also, the courtyard acts as a means through which wind flows into the building providing comfort living condition to the residents. With the correct location in the house and appropriate geometry, it can in addition facilitate in condensing the high temperature gain, and this will perform powerfully when shading and other design variant are not compromised. Ultimately, courtyard performs similar to a cool air tank, particularly in hot-arid

climatic region (Abass et al., 2006). Courtyards in the Middle East were used in order to achieve the best inside thermal comfort, day or night, within the local limits of material. Most activities were relocated throughout the year as appropriate to accommodate the changes in temperature and the location of the sun. In some Islamic cultures, private courtyards provide the only outdoor space for women to relax unobserved within a sheltered courtyard with trees, a pool, and outdoor furniture (Mai & Shamsuddin, 2008).

Cultural Benefits

The bedrock of the original Architecture in Nigeria could be traced back to the traditional house concept (Adeyemi, 2008). The numerous house layout pattern in Nigeria reflects the cultural values of the extended family structure, supporting a Family structure much more than the contemporary concept of house design (the modern bungalow) can ever achieve. In spite of the onslaught of modern life, the family compound (the courtyard) is a cultural identity. It is limited to the family usage for actions and beneficial to female (Blazer et al., 1985). For instance, a guest to the Yoruba residence is immediately acknowledged into the family activities and becomes a welcome recipient of the family kindness (Adeyemi, 2008).

Religious Benefits

The courtyard is equally figuratively and religiously important to all the religion practice by the people of Nigeria. This (covered outside space but are most often open to the elements at their apex) has been well thought-out as the central focus of attention in the house (Blazer et al., 1985). The courtyard may represent a lot of things: the innermost focus of attention in the house; a beam source of light, breeze, sand and water; a confidential, secure and life satisfying sanctuary.

Architectural Benefit

Courtyards usually operate as a heart in buildings, linking the diverse space(s) and activities. The importance of courtyard in a building is the central location covered by various scenery and tree rudiments, which takes part in a significant role in our day-to-day working existence (I. A. MEIR, 2000). Besides, it accomplishes optical and auditory defence to the structure and also to build environment. The concept of the courtyard or 'impluvia' as a predominant layout of the built-form of traditional family compounds in Nigeria reflects the socio-cultural status of family life. This built-form enhances intensive social interaction among family members, as it is planned to simultaneously assert individual privacy while fostering group cohesion (Adelekan, 2012).

History Evaluation of Courtyard Form

According to (Abass et al., 2006), the concept of courtyard house could be traced back to the early days when humans began erecting houses as a means for protection from the increment elements of climate. By and large, it has been revealed that the courtyard concept originated from the hot arid region of northern Africa (in Egypt), and humid arid climate of the Middle East. Subsequently, the use of courtyard became predominant as a result of activities carried out outside the residence begins to take place within the homestead such as; a gathering area for occupants of a house, and in some other culture it is used as a space for settling dispute (Abass et al., 2006). However, (Edwards, 2006), argued that historically the courtyard does not belong to particular time in history and its sketched arrangement is traced back to many centuries of years, even to the Neolithic settlement. In his manuscript on “The Past, Present and Future of the Courtyard”, the idea of courtyard in buildings is recognised as one of the most ancient approach to housing. Interesting to note is where the first documented courtyard house was located. According to (Jamaludin, Hussein, Ariffin, & Keumala, 2014), the courtyard was found in the northern African region of Egypt, precisely in the ancient settlement of Kahun in the municipal of Ur previous to 2000 B.C. The features of a house with courtyard is not independent of the surrounding and traditions of a cluster of the specific province, for instance; courtyard possibly will be use like an inner private grounds or possibly will be applicable as the focal point in the residence. All the way through centuries of years, divers courtyard housing planning arrangement are being accrued to as, the oldest tradition of the Egyptians and the Middle East (Bekleyen & Dalkiliç, 2011). After a short while, this kind of edifice was in the western tradition, for instance, in Greece and Rome (Aning & Atuobi, 2009).

The history of courtyard house in Nigeria, however, is married to the cultural and religious background. Unlike the Iranian, the courtyard house emanated from their respective values for existence, that is, their culture, religion, social and even economical (Rikko & Gwatau, 2011). Thus, the use courtyard in residence is of old, and has been adopted in the post-modern architecture (Ruqayya, 2011). Therefore, for a comprehensive review of the courtyard house in Nigeria, the study will focus on the three major ethnic and few other minority groups.

The Northern Nigeria Perspective

In northern Nigeria, Hausa is the most dominant cultural group and the city of Kano is considered as the centre for Hausa trade and culture (Agboola & Zango). And, according to (Mai & Shamsuddin, 2008), their original house form is a prototype of the Sudanese, and this style propagated the entire north and up to the northern part of Africa. It is the concept of buildings erected round a space call “the courtyard”. It is indeed an idea that makes provision for out-door space for cultural and religious activities, see Fig.1 and Fig.2. The “Zaure” is a multifunctional space. According to (Bontempo, Asquith, & Vellinga, 2008) it is use for functions and only the most closely

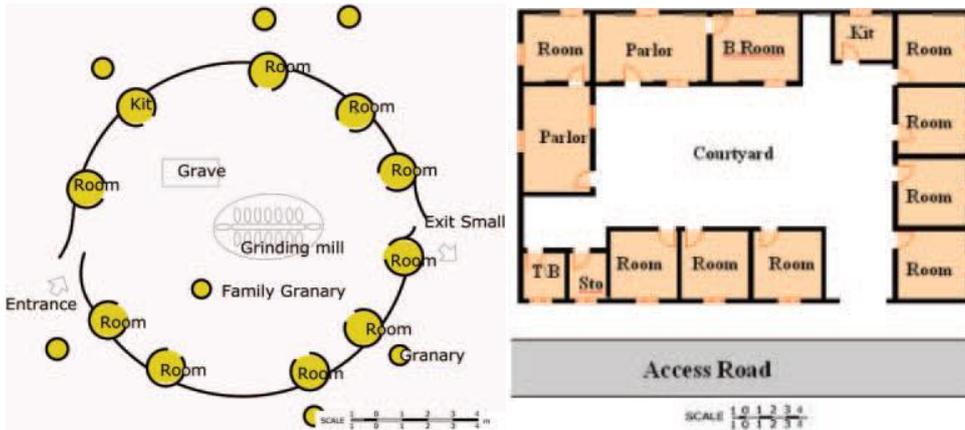


Figure 5 & 6. Typical Gbagyi compound. Source: modified from Balogun (2001, p. 103)

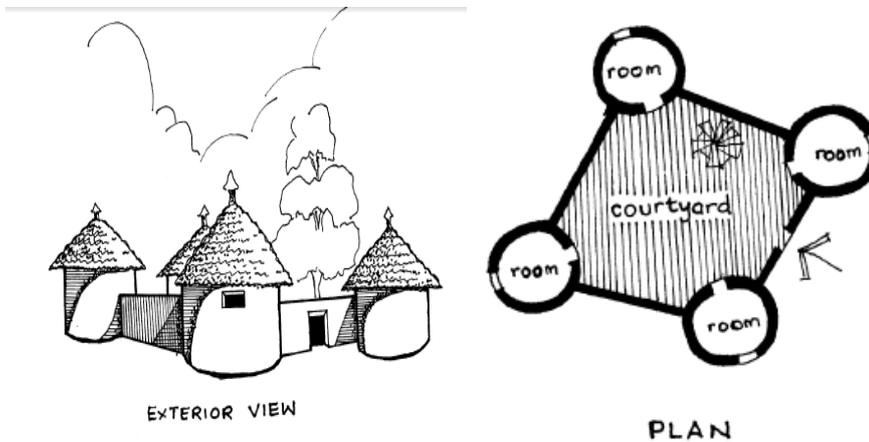


Fig 7 & 8 Typical Tiv compound. Source: (Uche 1998)

South/West Nigeria Perspective

In the courtyard house of the Yoruba culture, buildings are planned not merely to provide space(s) for functions such as; sleeping, cooking, storage, and so on; but are so inclined as to encourage family unity. The house plan concept of the Yoruba permits rooms to be planned around the family resting place (graveyard) in the middle of the courtyard. A guest to the Yoruba residence is immediately acknowledged into the courtyard (unlike in the Hausa residence), and turn out to be a legitimate recipient of

the family kindness. The concept has unfathomable socio-cultural sense and the garlands that go with the edifice are evenly steeped in the culture trend, see fig.9 & 10

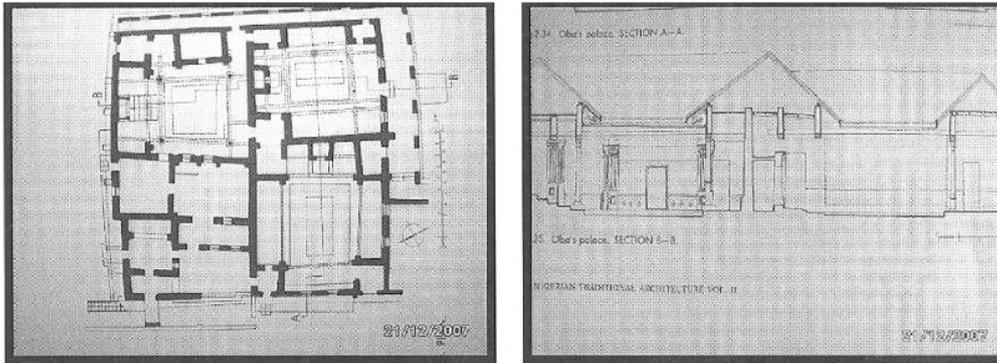
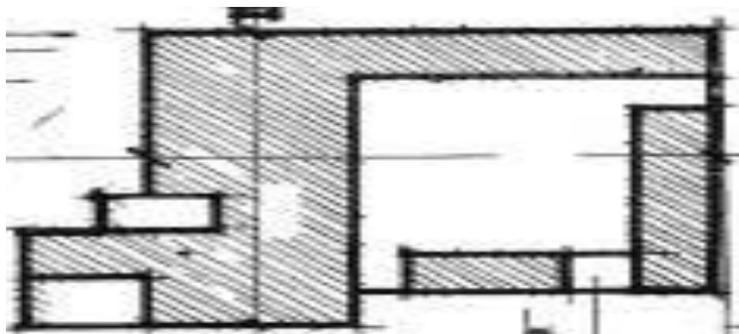


Fig.9 & 10 Plan and section of Obas palace. Source: Adeyemi (2008)

The South/East Nigeria Perspective

Architecture of the Igbo is portrayed to have imitated the heterogeneity of the Igbo traditions. It has a place for worship of the precursor, refers to as the “Mbani”, with abundant ornamentation in brilliant paints and monumental images. The residential design was to some extent different, built mostly with thatch covering on the top and having a massive value of distinctions in the shape. The blueprint on the imprinted doors are made of wooden posts, with the courtyard in the middle making the Igbo Architecture vast indeed (Ahianba, 2009)

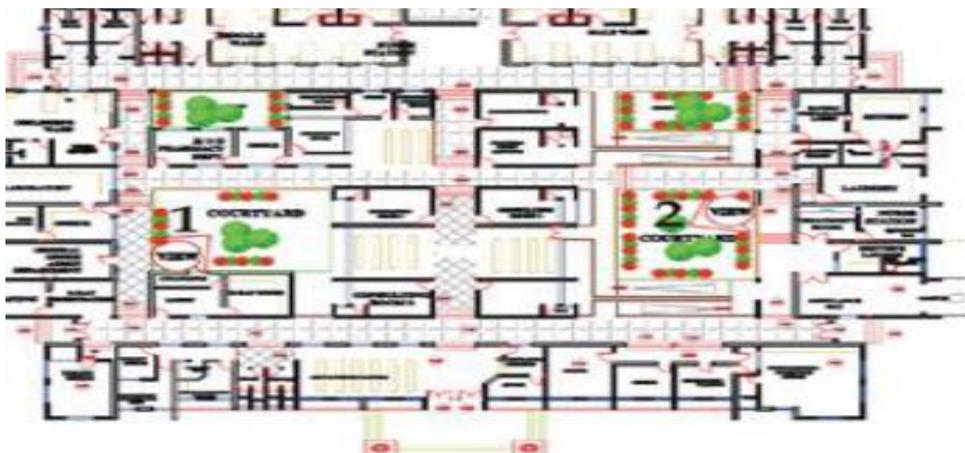


Courtyard Adaptation to Contemporary Buildings in Nigeria

The courtyard has been used in household building in Nigeria and is familiar to all the cultural groups. But this concept seems to have been adapted in other building typology. According to Adekokunbo and Misan (2013), the courtyard concept was from the beginning applicable in residential buildings only, but in recent times the idea became adaptable to other buildings such as: administrative buildings; educational buildings; health buildings; commercial buildings; institutional buildings; and even, multipurpose buildings as shown in fig. 12, 13 & 14.



A typical commercial building with courtyards. Source: Ilesanmi (2013)





A typical administrative and office building with courtyards. Source: Ilesanmi (2013)

Its application in buildings is common due to its passive benefits (Bontempo et al., 2008). The use of courtyard cut across all building typology.

Conclusion

This paper illustrated a study that adds in the direction of the definition, historical evolution, functions and typology of courtyard in Nigerian. In addition, it demonstrated the courtyard adaptation to the contemporary architectural design and practice in different building typology, and that the concept of courtyard in building was influence by the cultural, and religious values rather, than climatic. The paper concluded that climate should be among the requirements for its application in contemporary architectural design of buildings.

The study has offered a setting to carry further studies and examinations on the courtyards house in Nigeria.

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