

ARCHITECTURE AND SECURITY: ISSUES ON THE DESIGN OF PERIMETER FENCES IN RESIDENTIAL BUILDINGS IN AKWAKUMA COMMUNITY, OWERRI NORTH L.G.A., IMO STATE.

¹NWABUNA NWOKEDI P., ²ODOM CHRISTOPHER U. and ³WODIKE OBINNA O

^{1&2}Department of Architectural Technology, Akanu-Ibiam Federal Polytechnic, Unwana Afikpo, Ebonyi State

³Department of Architectural Technology Rivers State College of Arts and Science Rumuola, Port Harcourt, Rivers State Nigeria

E-mail: patrickdeclan99@gmail.com; Obicks3d@gmail.com

ABSTRACT

There is a sense of security in almost all aspects of human life. Human beings desire security; plants and animals desire security; even in animate objects such as commercial banks and institutional buildings need some form of security. Life is so precious that it needs to be provided with the requisite security; but life goes along with the acquisition of different kinds of property, hence the talk about the security of lives and property. Security is important in our individual lives if we must perform optimally in our chosen life endeavours; because security gives the individual peace of mind, it gives a nation an uninterrupted sense of progress and stability, it gives a commercial entity that sense of steady growth that enables it to be performing optimally and giving favourable returns on investment. The provision of security through fence design can be of diverse forms and in the case of security through fence design, the argument has been made in this paper as the most appropriate means for the provision of fence design. The approach adopted was the use of questionnaires and oral interview to collect data from randomly selected tenants and landlords from five streets in the Akwakuma neighborhood. The data collected were analyzed and inferences drawn. The paper therefore argues that in the architectural design of fences, it is a better security option to design fences with through views than those without through-views (all blind walls). It concludes that through proper awareness of the residents and architectural design of fences; neighbourhood, lives and property can be better secured.

Keywords: Blind walls, design, perimeter fence, security, through views.

INTRODUCTION

A proper understanding of the word security is a necessity for an appreciation of issues relating to fence design and why it should be a concern to professionals in the construction industry, the client and security operatives. The Oxford English Dictionary defines security as "the condition of being protected from or not exposed to danger. It is freedom from care, anxiety or apprehension; a feeling of safety or freedom from or absence of danger. Security is the degree of resistance to, or protection from harm. It applies to any vulnerable and valuable asset, such as person, dwelling, community, nation, organization. (en.Wikipedia.org/wiki/security). As noted by the institute for security and open methodologies (SECOM) security provides a form of protection where a separation is created between the assets and the threat. These separations are generically called "controls", and sometimes include changes to the asset or the threat. Security is something which secures or makes

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safe, a protection, a guard, defense. In relation to objects being stable, the Oxford English Dictionary defines security as the quality of being securely fixed or attached, having to do with stability and fixity. In relation to the fulfillment of an obligation, security is defined as a property deposited or made over, or bonds, recognizances, or the like entered into, by or on behalf of a person in order to secure his fulfillment of an obligation, and forfeitable in the event of non-fulfillment. Security encompasses the whole domain of human life, including food security, job security, business security, life security, social security, political security and military security. Therefore, security cannot be overwhelmingly defined in a general sense, but only in relation to specific cases (Prince Esuong, 2010, quoting Nigerian forum 1998: 282). A working definition of security informs us that security in strategic studies measures the absence of threat to life, liberty and property or core values of citizens of a system. Improper behavior is said to constitute a crime when the acts of one man infringe the rights of another and cause him serious inconvenience, injury or death. Examples of such acts are murder, theft and arson. Since crimes of this kind cannot be tolerated by any society, laws are framed to proscribe them, and offenders are punished appropriately (Elechi Amadi, 1982). Security can be perceived or real. For example the effectiveness of security measures is perceptible but the actual security provided by those measures are real or objective. The presence of security protections may even be taken for security itself. Insecurity, a social condition of uncertainty or unsafe is the opposite of security. Security itself means different things to different people. It is also described as protection against, or safety from, a future risk of severe deprivation, injury or death and requires rules, order and impartial adjudication and application (E.N Nwagbara 2007, quoting sha, 2005:61)

DEFINITION OF TERMS

The Oxford English dictionary, volume ix, 1970: defined security as freedom from care, anxiety or apprehension; a feeling of safety or freedom from or absence of danger. It may involve the use of security and protection devices in homes, schools, offices, stores, warehouses and hospitals to guard persons and property against fire, break-in and other hazards. Security is often discussed as concerning life and property. That property may include building structures which S.P Arora and S.P. Bindra (2013), defined as any structure for whatsoever purpose and of whatsoever materials constructed and every part thereof whether used as human habitation or not and includes foundation, plinth, walls, floors, chimneys, buildings services, verandah, balcony, cornice etc. Types of buildings include residential buildings, such as detached and semi-detached houses, flats and duplexes, Terrace houses and row houses; educational buildings such as schools, colleges, universities, training institutes; institutional buildings are those used for purposes such as medical, health, convalescence, psychiatry. Others include commercial, industrial, assembly, hazardous and storage buildings. Architecture is a design process which results in functionally efficient, economically viable and aesthetically pleasing buildings. (G. muthu shoba mohan, 2006). It is concerned with every building task. From public toilets to individual homes, all construction has become objects of architectural design. Architectural design means the design of any space; E.g. a kitchen, a hospital, a workshop, etc. It's the process by which an object which is to be physically constructed later is first visualized as an idea (G. muthu shoba mohan, 2006)

The paper defines blind walls as the form of perimeter fencing where no space is allowed for human views to be made into the internal closure of a surrounding of a building; see fig.1. Through –views are the form of perimeter fencing design where human views are allowed into the internal enclosure of surroundings of a building see fig.2



Fig.1 Along Immaculate Heart Avenue, Akwakuma



Fig.2 OCDA fence at Portharcourt Road Owerri

STATEMENT OF THE PROBLEM

Insecurity is one of the evils that have ravaged developing countries. It is a social condition of uncertainty or being unsafe. Human insecurity results from a myriad of conditions ranging from ignorance to irresponsibility and downright mismanagement. Insecurity is a crisis of modern Nigeria. The burden of rural-urban migration, civil disturbance, armed robbery, vandalism, terrorism, militancy and socio-political crisis which are off-shoot of idleness have not only affected revenue generation of the government, but also affected the level of security of the average Nigerian vis-à-vis his life and property. The above scenario has made the question of security more imperative. It is against this background that this study seeks to examine the effect of fence designs on the level of security on individual buildings.

OBJECTIVES OF THE STUDY

The objectives of this study include:

- To examine the effects of fence designs on the level of security of lives and property in the Akwakuma community.
- To examine the reason for the choice of one fence design over the other.
- To determine the most appropriate fence design vis-à-vis security of lives and property.

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RESEARCH METHODOLOGY

The research method utilized in this study is the descriptive survey design with questionnaire and oral interview as the instrument of data collection. The questionnaire were distributed to houses owners (landlord) living in their private houses and tenants living in rented apartments randomly drawn from five streets in the Akwakuma neighbourhood namely: Eze Onuegwunwoke Street, Igbozurike Street, Heinz Crescent, Onyewuenyi Street, Onyeaguocha street all in Owerri north L.G.A of Imo state. Out of a total population of eighty (80) tenants and twenty-five landlords randomly selected for the study, only sixty (60) and eighteen (18) responded and returned their questionnaire respectively. Data collected were analyzed using simple percentage and frequency method. All the respondents considered are married with children.

RESULT

Table 1: Represents responses from Tenants.

S/N	ITEMS/OPTIONS	YES		NO	
		Number	%	Number	%
1	Do you enjoy being an ordinary tenant?	0	0	60	100
2	Do you have a house elsewhere?	45	75	15	25
3	Where is it — in the village?	40	88.9	5	11.1
4	Does it have no perimeter fence at all?	15	37.5	25	62.5
5	Does it have a perimeter fence with blind walls all through?	20	80	5	20
6	Does it have a perimeter fence with designs to allow through viewing?	5	20	20	80
7	Do you prefer a perimeter fence with blind walls all through?	20	80	5	20
8	Do you prefer a perimeter fence with designs to allow through viewing?	5	20	20	80

Table 2: Represents responses from House Owners (Landlords)

S/N	ITEMS/OPTIONS	YES		NO	
		Number	%	Number	%
1	Do you enjoy being a Landlord?	18	100	0	0
2	Do you have a house elsewhere?	14	77.8	4	22.2
3	Does it have a perimeter fence?	18	100	0	0
4	Does it have a perimeter fence with blind walls and entrance gate?	16	88.9	2	11.1
5	Does it have a perimeter fence with designs to allow through viewing?	2	11.1	16	88.9
6	The fence design was done by an Architect?	6	33.3	12	66.7
7	Your house in Akwakuma has a fence with Blind walls?	15	83.3	3	16.7

Table 3: Reasons for Choosing a Particular Type of Fence Design, Responses from Landlords.

S/N	ITEMS/OPTIONS	Provides Better Security		It is Cheap		It is the Convention		Just my Taste	
		Number	%	Number	%	Number	%	Number	%
1	Perimeter fence with blind walls all through.	14	77.8	12	66.7	16	88.9	13	72.2
2	Perimeter fence with design to allow through viewing	4	22.2	6	33.2	2	11.1	5	27.8

Data in table 1 shows the responses of those living in houses other than their own (tenants) to the various questions captured in the questionnaire. Naturally, nobody likes being a tenant as shown by the result of the question in option 1. Although they are tenants in urban area, back in the village they are landlords like as indicated in the positive result in option 3. Both options 5 and 7 indicate that contrary to opinions of some authorities on the matter, perimeter fences made of blind wall, find more appeal to people than the alternative. Strikingly, an appreciable number do not care a hoot about any form of fencing around their building. This is attested to by the 62.5% in option 4 that do not have any perimeter fence. This is attributable to rural set-up where some home steads are without perimeter fencing because of social-cultural factors operative in such areas. Data in table 2 shows the responses of those living in their houses, i.e. landlords. The result from options 4 and 7 indicate that majority of the landlords live in houses with perimeter fences which are built of blind walls both in Akwakuma and elsewhere where they have houses; probably in their villages. 16.7% of the landlords under consideration live in houses in which the fences have designs to allow through viewing.

The table also reveals that in spite of the services that an architect can offer in terms of proper fence design at least within the ambits of local planning law, majority of landlords (66.7%) did not think that an architect should handle the design of their fences. All the landlords considered in the study agreed that their houses should have one form of perimeter fence or the other. Table 3 shows the reasons the landlords have for choosing one form of fence design over the other. 77.8% of the respondents agreed that perimeter fences with blind walls all through provide better security while 22.2% agreed otherwise. While 88.9% agreed that it is the convention to have fences with blind walls all through, 11.1% agreed otherwise. In the urban areas and even in the rural settings, the convention argument seems to hold sway. Am going to do it the way others have done it. However a sense of strong security seem to have given more backing to the idea because people think that they are more secured when they are screened off from the prying eyes of immediate neighbors and the public. In consideration of the low percentages recorded by fences with designs to allow through viewing; 22.2%, 33.3%, 11.1% and 27.8%, the respondents are sending a very clear message that they have not, either from superior argument or awareness creation come to the realization that after all, fences

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with designs that allow through viewed may offer better alternative in terms of protection of lives and property. These findings reveal that the respondents in the area of study believe that their personal safety and that of their property is better guaranteed by type of fence design that gives total enclosure of the building, its occupants and its property.

ORIGIN OF SECURITY

Security is an external requirement in human existence. It starts from cradle of birth to the end at death and from the primitive era to the present modern world. The need for security is always with man with its attendant variety in priority and purpose over time. The occupation of caves and requirement of organized life as a protection against wild animal's attack and weather hazards became necessary in historical and social development of man (prince Esuong, 2010). Cavemen originally used rocks, fruit, branches or other natural resources to ward off predators and keep themselves out of harm's way (perspecsys.com/history). Eventually, the cave people fine tuned these rudimentary tools and created spears, bows and arrows and sling shot contraptions to hunt for food and increase their odds of survival. Man has domesticated such animals as dogs to use them as tools for security. Most studies suggest the domestication of dogs goes back as far as 30,000 B.C. Orphaned wolf pups were rescued by humans and reared alongside babies. Over time, these domesticated wolves evolved into dog species we know today. Dogs were used for hunting and herding and their loyal personalities let them become faithful guard dogs. The moat is a large trench or ditch surrounding a castle; it developed around 3150 B.C and was first created to protect the fortress during dangerous times. They were the first line of defense in keeping people secure, dating from ancient Egypt to modern times. The industrial revolution (1760-1840) made the world become more industrial and militaristic and resulted in an increasing number of individuals and businesses to begin employing the services of security guard for personal protection. The role the security guard evolved over the years to take into account personal safety and the safety of one's surroundings. The industrial revolution led to an increase of awareness in security guard services as more people owned property

DISCUSSION

At the Annual General Meeting (A.G.M) of the Nigerian Institute of Architect (NIA), Imo State Chapter held on 6th November, 2013 at the concord hotel, Owerri; Barr. Okechukwu Okorocho, special Assistant to Governor Rochas Okorocho, on security stated that designers must always tackle security through the Prism of "Crime Prevention through Environmental Design (CPTED). Summarily, it is the reduction of opportunity for crime to occur. The design under reference includes perimeter fence design and there is a mortley of fence designs within the pilot area. The research found that there is no approved perimeter fence designs within the pilot area, hence the admixture of designs from the simple to the most complex and unappealing. House owners erect perimeter fences according to what they set out to achieve as indicated by the result of their responses as to the reason for their choosing a particular fence design. Sixteen respondents (88.9%) agreed that the design which they employed is the convention everywhere. The person next property did so, therefore I have to follow suit. A visit to the Owerri capital Development Authority

revealed that there is no specified fence design to help control haphazard erection of fence types within the area under consideration. What is important is for one to pay his or her fence permit to the Authority.

However, in other areas of the capital territory such as Douglas and Wetheral areas, the Authority insists that fences must be on low wall heights to allow through-views. This is true of most commercial buildings and even residential units. According to Alaga (2011), security is a public good that is necessary for ensuring individual and collective safety, stability and development. It is the primary function and responsibility of the state to deliver this public good, "security" to its people and communities in an appropriate and accountable manner as to prevent conflict and foster development. There has always been a missing link in this important responsibility of government hence the resort to private security arrangements. No wonder people are erecting high walls to screen themselves off from the prying eyes of the public; but whether it is the best option remains to be argued about.



Fig. 3



Fig. 4

Figure 3 is a perimeter fence along Hon. Nick Ukawuiké street. It has high walls but through the gate one can see through into the compound, hence any security threat inside the surroundings of the building can even be seen by passer-by. This is in sharp contrast to figure '4' where it is impossible for one to even see through into the compound or premises. When there is a security threat or a crime going on, even the neighbourhood watch (Vigilante) cannot effectively monitor the goings on. A vigilante is a member of a volunteer committee organized to suppress and punish crime summarily (as when the process of law are viewed as inadequate). www.Merriam-webster.com/dictionary/vigilante. visited 20/05/2015 11.40pm.

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Fig. 5



Fig. 6a

Figure 5 is a combination of blind high walls and Razor-wire fence where it is thought that the security measure is standard, however any other thing can be taking place behind the long walls. Even in this age of Hi-tech cameras, it is difficult to take pictures of any crime going on behind the high blind walls. Figure 6 is a row of residential buildings at the Beaula Beach Estate Owerri. It is being promoted by a developer, TANGENT LIMITED, a firm of Architects, Engineers and Developers, under the directorship of Arc. Frank Ajero. Notice the low height of the perimeter fences. Here, crime prevention rather than fighting is the philosophy. Figs. 7,8,9, are other options from the author's album.



Fig.6b

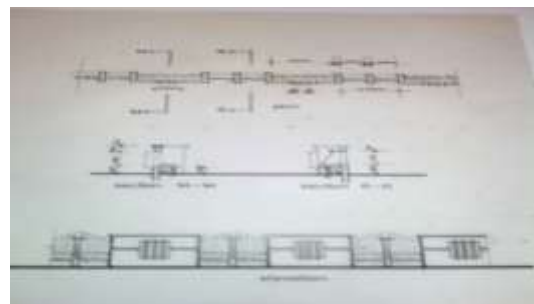


Fig. 7

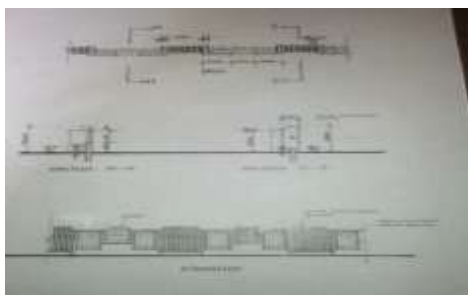


Fig.8

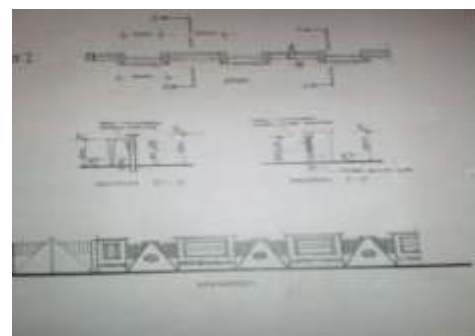


Fig.9

CONCLUSION

Security in general terms provides for and guarantees peace and harmony of human society whether primitive or modern. Everybody has the tendency to be conscious of the security of his/her life and property. People use perimeter fence as a form of protection and the design of such fences depends on the person's perceived level of protection it can offer. Some believe that high walls without any views into the premises offers better security. The paper argues that buildings which have perimeter fences with low walls where even passer-by can see through into the premises is a better option for crime prevention. In this case, everybody is his neighbour's security man.

RECOMMENDATIONS

In the light of the above work and findings, the paper makes the following recommendations'

- The controlling Authority such as the Owerri capital development Authority (OCDA) should carry out an awareness campaign to sensitize the populace on the best form of perimeter fence to employ to help in crime prevention.
- The form of perimeter fencing can also add to the aesthetic outlook of any residential neighborhood hence attention should be given to the most appropriate fence design. This paper strongly recommends the perimeter fence with low walls to allow views.
- Efforts should be geared by all and Sunday towards crime prevention and not necessarily crime fighting. Hence measures should be employed to encourage crime prevention, such as the use of low wall perimeter fencing in buildings.

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Biographical Note Nwabuna Nwokedi Patrick hails from Edenta Awoidemili in Orsu Local Government Area of Imo State. He studied Architecture at the Imo State University Uturu (now Abia State University) which he obtained both the B.Sc and M.Sc degrees from the same Institution. He lectures presently in the department of Architectural Technology of the Akanu Ibiam Federal Polytechnic, Unwana Afikpo, Ebonyi State.

Biographical Note: Odom Christopher Uzodimma hails from Ekwerazu, Ahizu Mbaise Local Government Area of Imo State. He studied Architecture at the University of Nigeria, Enugu Campus. He is presently a lecturer at the Department of Architectural Technology Akanu – Ibiam Federal Polytechnic, Unwana, Afikpo, Ebonyi State.

Biographical Note: Wodike Obinna Orlu hails from Omuanwa town, Ikwere Local Government Area of Rivers State. He attended the Rives State University of Science and Technology and obtained a Bachelor of Technology (B.tech) degree in architecture. Currently he is a lecturer in the Department of Architectural Technology of the Rivers State College of Arts and Science.
