

African Research Review

An International Multi-Disciplinary Journal, Ethiopia

Vol. 3 (2), January, 2009

ISSN 1994-9057 (Print)

ISSN 2070-0083 (Online)

Strategies for Cultural Adaptation towards Solutions in Childhood Care Facility Design

(Pp.31-44)

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Abstract

Cultural Inheritance is an indispensable enduring facet of self- identity for both children and adults alike. It is the tradition, custom and way of life that guides and limits life practices. It is a common saying by cultural researchers that cultural understanding is normally established between ages five through to nine. Accommodation of cultural heritage in childhood care facility requires sensitive spatial organization and engagement of the physical environment to support culturally based activities and rituals. This paper outlined the importance of creating cultural reflective childhood care environments. It described the experiences of a design firm in creating schematic design for the model employer supported child care facility including cultural research process needed to create such and the application of cultural principles in a bid to finding solution against challenges encountered in childhood care facility design.

Introduction

Children and adults are affected by the environment in which they spend their day. Careful design of a child care facility can improve the safety,

effectiveness, and quality of programming in new facilities or remodeled existing buildings and outdoor areas.

The Role of Culture in Designing Child Care Facilities—Creating Culturally Reflective Environments” (May/June 2001), by Vicki L. Stoecklin, notes that even at the schematic design phase, it is important to create children’s environments which reflect the culture, values, and traditions of the country or area where they are being located.

“Design Collaborations—Successes and Failures in Developing a Child Care Center Design” (November/December 2000), by Felice L. Silverman and Diane Driscoll, explores distinctively how thoughtful design of a child care facility enhances its safety, effectiveness, and high-quality programming, and helps reduce annual maintenance to high use areas.

Children’s environmental research demonstrates that children need a homelike and comfortable physical environment, yet very few child care centers are designed to imitate homelike features. Rather, the trend in child care facility design has been to create large, institutional buildings that have little in common with the design of the child’s home and home culture. Many child care facilities being constructed do little to reflect the architectural styles and features of the surrounding communities and most look the same whether they are located in Kano, Florida, Addis Ababa or Dubai. Bearing the past attempts at the exposition of “culture and its relation to design of childhood care facility” in mind, let us first look critically at the concept of design.

Design as a Skill

Design is a highly complex and sophisticated skill. It is not a mystical ability given only those with esoteric power but a skill which for many, must be learnt and practiced rather like the playing of sport or musical instrument.

A few people may pick up a golf club and swing it naturally or make a beautiful sound on a flute. Skill must be acquired initially by attention to detail. The expert golfer is not strategizing about the golf swing but about the golf course, the weather and the opponents. To perform well the flutist must forget techniques of embouchure and breathe control and fingering system and concentrate on interpreting the music as the composer wished-for.

While we are used to the idea that physical skill like riding a bicycle, swimming and playing a musical instrument must be learned and practiced, we are less ready to recognize that strategy might need similar attention as was suggested by the famous British Philosopher Ryle (1949).” Strategy is very much a matter of Drill and Skill”. Later the psychologist Bartlett (1958) echoed this sentiment.” Strategy should be treated as a complex and high level kind of skill”

More recently there have been many writers who have exhorted their readers to practice this skill of strategy. One of the most notable, Edward de Bono (1968) summarizes the message of such writers “On the whole, it must be more important to be skillful in strategy that to be stuffed with facts” therefore we need to develop a better understanding of the nature of design and the characteristics of design problems and their solution.

Road Map of the Design Process: Path way towards good Architecture.

Many writers have tried to chart a route through the design process from beginning to end. The common idea behind all these ‘maps’ of the design process is that it consist of a sequence of distinct and identifiable activities which occur in some predictable and identifiable logical order. This seems at first sight to be quite a sensible way of analyzing design. Logically it seems that the designer must do a number of things in other to steps forward from the first stage of a problem to the final stage of the solution.

Let us proceed to examine some of these maps in order to see how useful they are. The first map to examine is that laid out for use by architects in the RIBA Architectural practice and management Hand book (1995). The hand book tells us that the design process may be divided into four phases

Phase 1 Assimilation

The accumulation and ordering of general information and information specially related to the problem at hand.

Phase 2 General Study

The investigation of the nature of the problem; this is the investigation of possible solution or means of solution.

Phase 3 Development

This is the development and refinement of one or more of the tentative solution isolated during phase 2

Phase 4 Communication

This is the communication of one or more solution to people inside or outside the design team.

Actually, it is quite difficult for the designer to know what information together in phase 1 (note cultural role) until there has been some investigation of the problem in phase 2. With the introduction of systematic design methods into design education it became fashionable to require students to prepare reports accompanying their design. Frequently such reports contain a great deal of information, slavishly gathered at the beginning of the project. As a customary reader of such description, I have become used to testing this information to see how it has had an impact on the design. In fact scholars are often unable to point to any material effect on their solution for quite large sections of their gathered data.

Two academics, Tom Markus (1969) and Tom Maver (1970) produced rather more elaborate maps of the architectural design process. They argued that a complete picture of design method requires both a decision sequence and a design process or morphology. They suggested that we need to go through the decision sequence of analysis, synthesis, appraisal and decision which I completely agree with and tends to explore as I look at childhood care facility designs and the role of culture.

How Culture Plays a Strategic Part: The Role of Culture in Design

As recounted by Jan Gleason and Sally Knodell (2003) of their little trip to the island of Puerto Rico. 'The saddest example we saw of the inappropriate architectural style was a child care facility we saw recently in Puerto Rico opened by an American child care firm.' The building style was very incongruent with the island version of Spanish architecture and looked more like an American institution, maybe a hospital or even a prison. The interior was virtually absent of the beautiful bright colors and flowers of Puerto Rican interiors and looked very plain compared to local color and interior design preferences. The playground equipment was in bright island colors; however, it was placed in full sun with no adjacent plant materials, which

was particularly disturbing since the site included large shade trees and additional plantings. Almost every child in Puerto Rico has the advantage of playing outside nearly everyday in lush green settings since it is a tropical island. How could the childcare center fail to recognize this important aspect of tropical island culture? But the most upsetting part was the notice that all the parent materials in the center were in English rather than Spanish, the most widely spoken language in Puerto Rican homes. Language is a very important cultural marker for both parents and children. If you have ever tried to read an important document in another language, you can identify with what I'm saying. Signage in buildings should reflect the language of the population which the facility serves. In many cases, signage may need to be done in both languages in order to be culturally appropriate. In this facility, which was designed in the United States, signs were in English only.

Cultural Context

Culture can be an elusive topic since we become so accustomed to it that it's like a second skin. However, remove yourself from your familiar surroundings and you will begin to understand the profound effect that culture has on our behavior. Culture is not something taught yet almost every experience has a cultural component that is absorbed.

Table 1 includes cultural elements that provide a framework for daily practices. Notice that the last twelve can have a direct influence on design: gestures, language, role of nature, history/heritage, child rearing practices, family structure, territorial space, colors, textures, shapes, spatial and architectural styles.

Cultural Research for Childhood Care Facility Design

Research into different cultures could take several distinct paths, which could usually be modified and replicate, in studying distinct cultures overseas and different regions of Africa and the globe. Even different regions of Ethiopia have different cultures. The most effective research methods for designs of such childhood care facility (tested and proven) include:

1. reading and studying about the culture
2. talking, interviewing and working with early childhood staff, children and - - parents of the culture
3. participating in the daily life of another culture and
4. Learning a little about the language of the culture.

Read about and Study the Culture

The public library, bookstores and the internet all offer a variety of easily accessible sources of information about different cultural groups and regions of the Africa and the rest of the world. We start our cultural research on the internet and usually find books and articles as needed on a variety of issues including gender roles, education, parenting and social structure. Books with pictures are also helpful in understanding spatial relationships, colors, textures, and architectural preferences. When reading the material it is helpful to keep in mind that what you read about a particular culture is a generalization and that although all persons of the same cultural history may share tendencies. Individual behavior is influenced by other factions including age, socio-economic status and in some cases gender.

Interviewing Staff, Parents, and Children

Working with and interviewing staff, parents and children of other cultures is always very rewarding. However, this type of research also has its challenges. It is always difficult to locate trained interpreters who are bi-cultural so you will need to sift through your information carefully since some concepts can truly get "lost in the translation". Nonetheless, this type of research can yield an immense amount of information about cultural preferences. I have learned over the years to also use a female interrupter in studying about childcare and parenting practices since I am interviewing mostly women. In most countries and regions of Africa we use parents to help guide our cultural research.

Parents, usually mothers, are interviewed in small focus groups about their preferences for children's activities using a series of colored pictures showing children doing a wide variety of educational and playful things like dress-up, water play, sand play, etc. Sometimes I facilitate the groups myself with an interpreter and at other times I observe another facilitator doing it. Focus groups with parents occur in a group of six to eight in a relaxed setting, usually in someone's home. Sometimes they are done in an exciting child care setting.

Parental focus groups usually uncover some unique preferences for their children. For example, when shown pictures of sand play, Moroccan mothers worried about cleanliness and stated that they would only allow their children in the sand if it had been sanitized and had a sign that it was clean. Women in

Qatar did not have any such concerns. Both countries are basically Muslim and come from a long history of life in the desert sand, yet had very distinct values about sand play. We have also found that here in Africa, some African parents have concerns over sand since it takes many hours to wash and then braid their children's hair when it becomes sandy. In addition, the hair dressing set for braiding thick hair makes sand removal very difficult. One of my most rewarding experiences interviewing parents was in inner city Abuja where I found a group of parents enthusiastic about an outdoor play backyard.

Vicki L. Stoecklin (2001) noted that a different design first choice that mothers articulated in Qatar is that they did not want their children to play pretend restaurant since in their country restaurant work signified a less than desired social status. Mothers in Qatar also expressed deep concerns about dress-up play in general since this country still dons the traditional garments that have been used for centuries quite unlike other regions outside the Persian Gulf. All of these parental preferences have influence on the types of equipment placed in a facility and hence have influence on design and room layout. Mothers also expressed the value of safety, supervision and cleanliness. All of these parental preferences can influence the design both inside and outside and need to be understood at the schematic design phase.

Interviews with staff to identify local cultures includes visits to early childhood education centers, centers serving the disabled, public and private education facilities. Time at the site is not only set aside for interviews but to watch the facilities in operation and view classrooms. I remember fondly my visit to a girl's private elementary school in Kano Northern Nigeria, where the entire school came to the courtyard to perform and welcome me like a visiting dignitary. I was presented with an arrangement of paper flowers, which still preside on the shelves above my desk. My greeting was not only done in Hausa but in English, which I am sure the children had practiced for a long time. Interviews are sometimes done with groups of early childhood teachers in a format similar to that of parents. Individual interviews were done with principals, headmasters, the ministry of Education Staff, and daycare center directors. I have often times been surprised by the similarities in teacher preferences among several countries I have visited especially in light of the tremendous variation in what we would call a developmentally appropriate environment. It's almost as if teachers intuitively know about

developmentally appropriate practice but lack the training, money, and resources in how to implement it in their own environments or in teacher-child interaction. Looking at the overall education and childhood care system in some locations helps me to understand local beliefs and inclinations.

I, totally agree with The National Children's Facilities Network (NCFN) Child Care Capital Investment Fund that Children's focus groups could be done when moving from the schematic design phase to the final construction document process. On some projects, Children's focus groups could be done during the schematic phase depending on the complexity of the project. Children's focus groups are conducted in a similar fashion to those of adults; however, sometimes children are usually divided by age and gender. Dividing the children into gender groups is more crucial in those cultures where gender roles are more fixed by social norms. Children's focus groups might include games, identification of favorite colors and some drawings of what they would like in their environment.

Participating in the Daily Life of another Culture

Participating in the daily life of another culture is best experienced when you take the time to "get off the packed down path". Like visiting local museums, parks, leisure sites, historical centers, shops and local restaurants. Not only are these sites rich in cultural significance but they are a great place to observe parent and child interaction, social norms, expectations, and physical design preferences.

Take a cue at this wonderful experience. Vicki L. Stoecklin (2001) - My best trip "off the beaten path" was actually in a small fishing village north of Doha, Qatar. We were invited to celebrate the wedding of a sister to the client for whom we worked. Although I tried to obtain some information about wedding traditions from the Quatrain embassy, nothing could have prepared me for the uniqueness of the event I experienced. I was dropped off by the males in our party at a maksar, a very large tent with a covered opening. In Qatar, wedding celebrations are held separately for men and women since socialization between the sexes is prohibited. As I was ushered into the tent I was intoxicated by the scent of burning incense and overwhelmed by the site of close to one hundred and fifty totally veiled women sitting on sofas on over a hundred Persian rugs. I felt like time had been moved back by centuries as I watched sword dancing and listened to music played on camel skin drums. It was an experience I will never forget. The evening taught me

volumes about how this culture has managed to hang onto traditional practices despite the influence of the western world. It helped to set the framework for understanding their design preferences.

Applying Cultural Adaptations in a Schematic Childhood Care Design

Below is the experience of Vicki L. Stoecklin (2001) in the oil rich states Qatar to be precise. I found this striking in many in many fronts because I had exactly the same in ancient city of Kano Northern Nigeria. For the purpose of this critique, let us examine the Gulf State as a study case.

Qatar is a small peninsula protruding from Arabia's eastern coast into the Persian Gulf and is known as one of the Gulf States. Other members of the Gulf States are Saudi Arabia, Bahrain, the United Arab Emirates and Kuwait. Until oil and gas were discovered in these areas in the last century, these areas were virtually undeveloped and unknown. The Arabia Gulf area is mostly desert and its history is rich with not only desert nomads but sea faring people such as fisherman and pearl divers. Life used to be rough in a climate where summer temperatures soared to 120° F, but with the discovery of oil and gas, has come a new level of economic prosperity and comfort. Although economic prosperity has brought profound change, the people of the Persian Gulf states have a strong pride and commitment to preserve their heritage against some intrusions of Western culture.

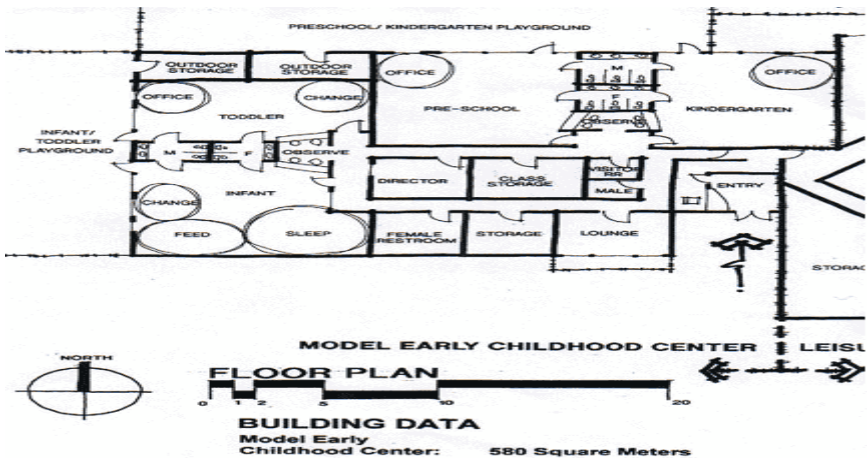
One way in which the culture of the Gulf is preserved is through the wearing of traditional clothing and coverings. In Qatar and other Gulf States, except for Saudi Arabia, traditional clothing and veils are optional pieces of garments. Women in Qatar choose to wear their traditional coverings for a variety of reasons including traditional values, religion customs, and modesty. In fact, each region of the Gulf has a variation in women's traditional clothing, which signifies to others her place of origin. In the Gulf region, traditional Muslim women will always cover the head and body but the face may be left uncovered, covered by a partial mask, partially veiled with the eyes exposed or totally covered by a thin black veil. More traditional women in Kano cover all parts of the body including the hands and feet in black material. These coverings are always on in the presence of non-related males. Underneath these black outer garments women choose brightly patterned and colored Hausa robes in addition to western clothing of all

colors. Most clothing with the exception of wedding attire is still fairly modest even when only being revealed to other women.

Men's clothing in Qatar consists of a traditional floor length white robe or thobe with a white or red checkered head cloth tied in place with the twisted black rope called an algal. Given this society's preference for traditional clothing, you can see why mothers are not supportive of the Western concept of dress-up play. The head covering of males in the Gulf region also varies slightly from country to country.

Qatar like Kano is a strict Muslim state where the muezzin's (crier) call to prayer five times a day forms a rhythmic pattern to life. Women rarely pray at the mosque but do most of the prayers at home. The women I interviewed in Kano City expressed an interest in a women's prayer room so the combined play and model childcare facility will include a women's prayer room. The prayer room will need to face Mecca, the holy site for Muslim orientation. The prayer room will include an absolute washing area, as Muslims wash parts of the face, arms, hands and feet prior to praying.

Fig 1 Concept design for the early childhood care facility in Qatar



Source: White Hutchinson Leisure & Learning Group (1999)

Note: Concept design for the early childhood care facility in Qatar; will be modified after more research.

Schools and Homes in Qatar are designed in the traditional Middle Eastern style with a walled entry from the outside; this is typically the same with the ancient Hausa homesteads in the Kano City. Entry to homes and schools are protected for a variety of reasons, some practical and some historical. Historically the walled entrance became a barrier to outside tribes, strangers and protected the women from being abducted or carried off. In more modern times the walled and gated entrance is used to control male access to buildings where women may be present. For modesty reasons, the women choose to stay covered (veiled) in the presence of non-related males. A protected and windowless entrance means that unwelcome men will not show up and surprise working women. Behind a secluded, safe atmosphere women can feel safe to uncloak and unveil. Since education is traditionally separated by gender after preschool, you mostly find women working in girl's schools and child care centers in Kano. Notice on the conceptual design, that the entry is gated and requires a zigzag entry, which guarantees that no one can be seen from the outside. The design also reflects other areas in the building where modesty might be an issue. Diaper changing stations will need to be partially screened from the observation windows and additional bathrooms have been added in all classrooms so that the genders can be separated. Parents of this culture have very strong beliefs and values about the separation of gender in using toileting facilities. In fact, the restroom facilities will have to be uniquely designed to facilitate sanitation techniques after restroom use. These unique washing requirements will also be carried out in the final design of the infant/toddler diapering areas. These issues are all very sensitive areas to explore. Restroom and diaper changing stations are an important element of any early childhood facility.

Doors are a symbol of hospitality in some cultures.

The design of doors, important symbols of Hausa hospitality, the shape of windows domes, parapets, and decoration contribute to the character and charm of Islamic architecture. Islam has played a major role in influencing design since the foremost example of Islamic architecture is the mosque. In fact, this architectural style is also reflected in many places in Europe that were once occupied by the Moors. These features and architectural details

will be incorporated into the final design process in order to preserve the richness and heritage of Islamic design, which has evolved over centuries.

Air Conditioning by Wind Tower

Wind towers were a unique architectural feature of this part of the world before air conditioning and may be incorporated into the final design. They are often times still seen on new homes even though they have lost their original function. These graceful towers are divided into four shafts which draw air into the house down one side and force it out of the other, causing a cooling draft in the room below. The fact that they are still being incorporated into new architectural styles even though their function has been lost due to air conditioning, attests to this culture's interest in preserving traditional Islamic designs.

Conclusion

Few years have passed since the Kano city design was completed and put into good use. This researcher is now in Tigray Region Ethiopia, and continues to study and read about the culture there by including visiting the historical and heritage marvels of this land. Like Kano and or Qatar, Tigray has a very rich culture without much influence by western civilization. The sprawling city has little that reflects the beauty of its environment, instead semi- high apartments, gigantic industries and condominiums attempting to reach high towards the sky looking more like boxes and mass with unfriendly and repellant postures.

Also the researcher had spent countless hours interviewing and observing local Tigrinya families and visiting primary schools and child care centers. As usual I have made many Tigrinya friends who are trying to help me understand their ways. I am sometimes overcome with emotions by the ways in which the local people, particularly the men, have accepted me into their clandestine and often misunderstood world... I am grateful for their openness and hospitality in answering my probing questions. I only hope that I can make a contribution to their society if there is an opportunity by providing examples of early childhood facility design that is culturally competent and supports and enhances their traditions, values, and norms.

Acknowledgements

The contribution of the following organizations to the success of this paper cannot be overemphasized

- Community Investment Collaborative for Kids (CICK) Local Initiatives Support Corporation (LISC) 501 7th Avenue New York
- The National Children's Facilities Network (NCFN) Child Care Capital Investment Fund, 18 Tremont Street, Suite 1020 Boston, MA 02108
- Spaces for Children, 1250 Addison Street, Suite 113 Berkeley
- White Hutchinson Leisure & Learning Group Children's Development, Learning & Play Facilities Kansas City, MO firm

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Table 1
cultural elements

- | | |
|--------------------------|---------------------------|
| • Norms | • Family Structure |
| • Values | • Gestures |
| • Rules of Etiquette | • Language |
| • Social Patterns | • Role of Nature |
| • Gender Roles | • History/Heritage |
| • Socio-economic/Classes | • Child Rearing Practices |
| • Prejudices | • Family Structure |
| • Attitude to Weather | • Territorial Space |
| • Religion | • Colors |
| • Customs | • Textures |
| • Timing/Rhythm | • Shapes |
| • Political System | • Spatial |
| • Economy | • Architectural Styles |