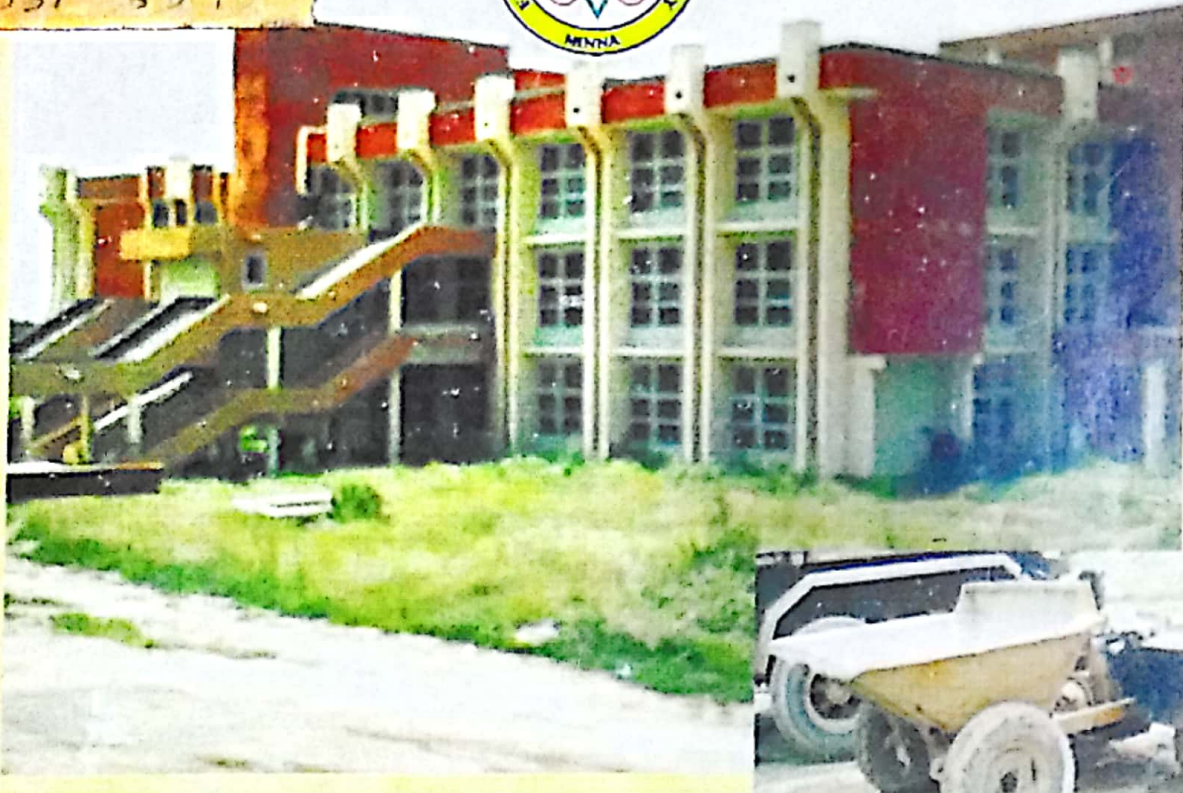


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FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA



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VISUAL POLLUTION CONTROL: A PANACEA FOR AESTHETICS PROBLEMS OF THE BUILT ENVIRONMENT

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Abstract

The increased desire for people to achieve a more harmonious and visually attractive relationship with their environment is stimulating professionals associated with the built environment to explore new patterns and ways to rebuild the built environment. This issue has also pressured the environmentalist to deal with the impact of pollution on the built environment, by advocating the skills of architects to be involved in the process. The built environment consists of elements that ought to make it attractive. However, it has been so defaced and visually polluted. Visual pollution here refers to those elements of the landscape or "townscape" that the community finds unattractive as they constitute an eyesore in the environment. They include deteriorated and dilapidated buildings, overgrown weeds, indiscriminate dumping of refuse, unkempt roundabout sculptures, broken streetlights and traffic stoplights, damaged telephone and utility poles, graffiti, uncontrolled posting of bills and posters etc. Though much attention has been devoted to controlling other factors causing environmental pollution, visual pollution control has not been given much consideration. This paper examines the aspect and the impact of visual pollution on the built environment, it suggests among others' control efforts that can be taken to enhance quality built environment.

Keywords: aesthetics, built environment, control, pollution, visual

Introduction

The built environment is that part of the natural environment that has been altered by humans with the introduction of man-made structures. It is everything humanly created, modified, or constructed, arranged, or maintained that is developed to fulfill human purposes (i.e. to satisfy human needs, wants and values). It is developed to protect us from the overall environment, to mediate or change this environment for our comfort and well-being, with results that affect the environmental context. It refers to the totality of all that humans have changed or rearranged within the natural environment (Bartuska and Young 1994). The built environment also includes all physical features such as buildings and their associated surroundings, streets and hard surfaces, roadsides and verges. The first impression of an environment either of a city neighborhood, rural town or pristine wilderness is generally visual. Hence, what we see is the visual environment. Natural and artificial components that reflect design, architecture, art and natural processes combine to create a mosaic of images we rarely think about, yet experience" constantly. Change due to the seasons or vegetation growth and human intervention such as development or agriculture is a constant feature of the environment. In essence, the visual environment is an integral thread in the fabric of our communities. Unfortunately, the unique and individual character of most Nigeria's cities, towns and countryside which is a product of history, culture and geography is being eroded and constantly defaced by elements that constitute visual pollution. Numerous economic and social factors are not left behind in contributing to the decline in environmental appearance.

While we are aware of the need to preserve and enhance the natural environment, the degree to which we have been slow to recognize the benefits of a healthy visual environment, the degree to which our environmental physical appearance is varied and monotonous, complex and simple,

harmonious and disordered, ugly or attractive has a major impact on how we feel about our environment and the people in it. This in turn, has consequences for other issues and problems facing our environment. If we don't care about litter, graffiti, visual pollution, billboards, techno-blight, environmental character or green space, in other words the physical fabric of our environment - then what does this say about our attitudes toward our environment? It is not a coincidence that some of the most visually blighted localities in this country is also among the most dysfunctional of our environment. However, a major factor in the decline of the visual quality of our built environment is widespread visual illiteracy

Aesthetics of Place: An Importance of Visual Literacy

Human-beings do not just 'exist' within a physical environment - they interact with it and derive important meaning from it (Altman 1993), Altman noted that the physical environment is more than an influencing factor in people's behaviour "it is also a medium, milieu or context in which personal relationships are embedded, and without which they cannot be viable". Spaces, places and buildings are more than just props in people's lives; they are imbued with meaning and resonance, as they symbolize people's personal histories, interpersonal relationships, and shared events in people's extended relationships, families, communities and wider culture. Indeed, Boyer (1994) described cities as repositories of 'collective memory'. Environmental meanings are not only constructed by individuals, but also by the broader culture and social structure in which people live (Saegert and Winkel, 1990).

The built forms with which people interact are richly embedded with symbolism, and evoke various sentiments, emotions and meanings (often ambiguously), and can provoke certain actions (Cohen, 1974, Dovey, 1999). However, appreciation of the link between the quality of people's relationship with place and their individual and collective well-being has been somewhat limited in western culture (Read, 1997). Curtis and Kees Jones (1998) define sense of place as "the meaning, intention, felt value and significance that individuals or groups give to particular places". Sense of place refers to the feeling of attachment or belonging to a physical environment, such as a place or neighbourhood, and the sense of personal and collective identity that comes from this sense of belonging (Jacobs, 1995; Rivlin, 1987). Jacobs argued that place attachment is a deep human trait. People do not simply look out over a landscape and say 'this belongs to me'. They say, 'I belong to this'. Concern for familiar topography, for the places one knows, is not about the loss of a commodity but about the loss of identity. People belong in the world: it gives them a home. Places can act "to define the individuals to themselves and to the world", especially when people fulfill a particular role in that place, such as a nurse in a local hospital, or a child taking on the role of student at a local school (Rivlin, 1982). Rivlin noted the connection between place attachment, the development of local connections and roots linked to a person's personal history, and feelings of comfort and security. Place attachment reflects the expectations people hold as to where and how they plan to live (heir lives in the future (Altman, 1993). When cherished places, spaces, and settings are destroyed and polluted or irrevocably changed beyond our control, we feel a sense of loss and grief (Read, 1996), similar to that felt at the loss of a personal relationship which was expected to last indefinitely (Altman, 1993). 'the psychological impact of loss of place Rivlin (1982) noted the connection between place attachment and the development of local connections and roots linked to a person's personal history, and feelings of comfort and security.

Developers are usually emotionally unattached to the places they seek to redevelop. Yet they often allow people to create memorials to their memories once the sites have been

redeveloped. "Let us not underestimate the effect which the loss of dead and dying places has on our own self-identity, mental well-being and sense of belonging" (Read 1996) Our relationship with the places we know and interact with, is thus not abstract, but is close and intricate. As the places in which we live and interact change, so do we undergo personal change (Hiss, 1990). Losing one's home or neighbourhood to an urban planning decree can be even worse than losing it to a natural disaster. Survivors of natural disaster receive public sympathy and disaster relief. Yet by comparison, people forced to evict their houses for the expansion of a freeway or major development may receive little sympathy or financial compensation (Read, 1997). Hiss argued that to avoid this psychological malaise, we must agree to change only insofar as it (i) encourages people's growth and potential; (ii) protects and enhances the environment, and (iii) contributes to economic prosperity.

Need for interventions to foster sense of place

The provision of human services - such as shops, banks, post offices and health care can impact on a person's sense of place. For example, in rural areas, a post office might enhance sense of place "by representing a point of contact with the worlds both beyond and within" (Kearns, 1991). Safe, attractive public spaces and venues need to be built to encourage community mingling and socializing. He stated that the path to community participation begins with seeing, and knowing, liking, trusting, and finally, acting. Hiss (1990) argued that a key resource in replenishing treasured places is people's ability to know their environment (long overlooked and devalued) and their capacity to explore their interaction with it through their own senses. "If people learn to recognize the cultural landscape as an expression of their lives, they may come to see its protection as a means of self-preservation" (Afshar, 1998,).

People choose environments in which they will survive and thrive, in which they will be able to employ their abilities and survival skills and thus meet their needs. Of course, these needs may not function at the conscious level, they may also be affected by individual characteristics and experiences, and socio-cultural factors (Kaplan & Kaplan 1982). People are constantly striving to make sense of their world, and have an innate curiosity to discover new information, they like to share their knowledge, and find it validating to be listened to as they share it. Moreover, "people hate being confused, disoriented, incompetent, and helpless" (Kaplan & Kaplan, 1989). The Kaplans noted that human cognition probably evolved before language, and thus the perception and recognition of visual and spatial information has played a central role in human evolution, and remains central to human thought. Humans have a strong drive to 'make sense' of (interpret) the environment and to be involved with it. We prefer environments that afford us safety, food and shelter. We are also motivated to locale environments where our curiosity will be stimulated, whilst at the same time affording a degree of certainty. We seek situations in which our cognitive maps will be extended but not overloaded. Environmental preference is closely tied to the effective selection and processing of information.

Environments will be preferred that allow people to make sense of them and facilitate involvement and interaction. Environments that 'make sense' afford a degree of coherence; the individual parts combine to form a harmonious whole. Distinct elements of the environment combine to imply continuity, such as clumps of trees or groups of windows. Those environments that involve people contain sufficient complexity and 'mystery' to invite further exploration. Legibility - such as a depth of field - gives the participant the confidence that they will be able to comprehend their environment as they pass through it (Kaplan & Kaplan, 1982a, b). People initially tend to evaluate buildings for their overall affective impact, rather than for specific detail (Rapoport, 1982). It follows that people's preferences for specific urban areas or styles of housing reflect the meaning that these

environments hold for them. Therefore, cities, parks and houses not only arouse specific feelings in individuals, but provide clues about the attitudes of the people who designed them, and also about those who inhabit or use them. Rapoport argued that an understanding of the latent function of designs, in affording a sense of meaning through a person's interaction with it, is central to a meaningful conception of the environment. Furthermore, meaning was seen as culturally variable. Rapoport (1982) felt that insufficient attention had been paid to the meaning that users derive from their interaction with the built environment. He stated that designers and planners often clash with users over intended meaning and purpose. Designers tend to focus on the perceptual (manifest) features of built forms, whereas users or inhabitants tend to view the same structure in associational terms (i.e. connected to a particular memory, associated with a specific task or function). He stated that for users, a feeling of self-control and personalization of the environment is a crucial element in their satisfaction. Users need to decorate or personalize their habitat (house or neighbourhood), which ultimately become more important than the architectural features. Architects have tended to oppose or ignore this human need, focusing on style (or utility), rather than the affective significance of the environment. Designers (and by extension, developers and urban planners) have frequently resisted giving control of expression, or meaning, to inhabitants. Built Form and Sense of Community in addition to practical infrastructure needs, communities will have deeper needs which must be met, in order to be fully sustainable, such as 'community spirit', or sense of community (Berkowitz 1996).

General Background about Environmental Pollution

Pollution is contamination of the natural environment with harmful substances often as a consequence of human activities. There are a number of different types of pollution that have a large cumulative impact on our local environment. Traditional forms of pollution have included air pollution, water pollution and land contamination. However, modern forms include:

- (a) Thermal pollution, which is the discharge of heated water and is an aspect of water pollution
- (b) Noise pollution, which encompasses roadway noise, aircraft noise, industrial noise and barking dogs
- (c) Light pollution, which includes light trespass and over illumination, lighting such as floodlighting on sports fields, can be a source of noise pollution.
- (d) Visual pollution, which includes the presence of overhead power lines, billboards scarred landforms and the open storage of junk.

Pollutants are known to be a factor in many illness and diseases including cancer, immune diseases, allergies and asthma. While the general public has become more aware of the potential harm posed by the more traditional forms of pollution, awareness of the consequences of the more modern additions is less well known.

Visual Pollution and Urban Blight: An Overview

Historically, the term "pollution" has referred primarily to the fouling of air, water and land by wastes or from the by-products of human activities. In recent years it has come to signify a wider range of disruptions to environmental quality. Visual pollution generally refers to those elements of the landscape or "townscape" that the community finds unattractive, including buildings, business signs, stoplights and street signs, telephone utility, poles and weeds and litter (Dun, 2006). Visual blight/pollution issues also include such things as proliferation of billboards, dumps, junkyards and the like, which are important components of visual pollution. Simply stated, "blight" is something that

impairs or destroys appearance and results in a deteriorated condition. In recent times, urban blight has come to include a wide range of visual pollutants that degrade the ambience of our communities, including such things as trash and litter on roadsides, unkempt properties, above-ground power and communications transmission lines, communication towers, intrusive and objectionable advertising signage, bills and posters and other forms of visual impairments. Without doubt, bill posting and signage that is excessive in amount and inappropriate in placement is the most ubiquitous of these "pollutants".

Signs and Billboards

Unnecessary signs and billboards, almost always placed as some kind of advertising, have been called "visual pollution". Nothing can destroy the distinctive character our communities and countryside more quickly or thoroughly than uncontrolled signs and billboards. Signs in the public rights-of-way have been around for as long as there have been public rights-of-way, but the numbers have spiraled out of control in recent years. Between fields of "popsicle-stick" signs for homebuilders and politicians, painting, hand-painted and other signs plastered on every available walls, fence and utility pole, everyone in our environment has something to hate about the proliferation of signs. Communities can regain control of their visual environment, preserve their distinctive character and protect natural beauty and the environment by enacting and enforcing ordinances that control signage and billboards and posting of bills. Reducing sign and billboard blight helps communities reclaim local beauty and character. Excellent alternatives to large intrusive signs and billboards, such as way finding signs, logo signs and tourist-oriented directional signs, can help people locate local businesses and are minimal in their visual impact.

The advent of new and modern telecommunications system in to the country in recent years has encouraged the rapid development and growth of new telecommunications technology such as wireless telephones and digital television. However, antenna towers, often of considerable height, have been built near people's homes and in rural as well as scenic areas. Towering above trees, neighbourhoods and protruding into the skyline, such towers often have a very unappealing visual impact. Reconciling the requirements of communications engineering and community aesthetics is a difficult and growing problem for one that must be directly addressed if both needs are to be properly served. The visual blight associated with above ground utility lines besets both our residential and commercial areas. These lines and poles are particularly objectionable in our local shopping areas where they obstruct the vision of drivers and greatly impair the visual attractiveness of the locale.

Impact of Visual Pollution on the Built Environment

The amount of pollution that has entered our environment has been greatly increased by human activity and can have a negative impact on human quality of life and the health of the environment. Noise pollution, for example, can cause serious damage to human hearing over time and cause sleep disturbance and stress. Water pollution can seriously degrade our waterways which cause a loss of biodiversity, health of the waterway and also cause visual pollution. Deteriorating physical features of urban environments such as dilapidated buildings and environments, vandalism, graffiti and litter can harm health. Studies have highlighted how such environments can impact on both mental and physical health through reduction in physical activity, increased anxiety among residents and increased social disorder (CABE SPACE, 2005). It is an established fact that a community with a visually attractive built environment can not suffer from economic decline and loss of business investment while on the other hand a community that suffers from visual

blight will be hard pressed to attract beneficial and significant economic development investment. Hence, a community's appeal for economic development can be adversely affected by visual pollution. Visual pollution thus adversely affects businesses, tourism, public safety, economic development and overall quality of life in our built environment.

Addressing the Problem

In our everyday lives, we interact with our environment at every scale and at all levels. We inhabit towns, cities or landscape, experiencing these as inhabitant or onlooker, sometimes frequently, sometimes rarely. At every point, environmental quality affects our lives for better or for worse, the fact that a sound and secure environment raises the quality of life is reason enough to promote the best possible environment and to prevent it from being visually polluted, the following should therefore be given consideration:

- 1) **Establish design and environmental standards:** The primary objective of urban environmental policy should be the creation and recreation of towns that provide an attractive environment for their inhabitants. Poor environmental quality can be depressing and destroys local pride. Such a situation can also deter investment that would otherwise have helped to promote employment and prosperity. Good design is therefore vital to ensure that attractive, safe and comfortable environments are created and maintained.
- 2) **Greening the environment:** Trees and vegetation help to produce an attractive and pleasant place in which to live or work. Plants can help to cleanse the air by reducing the effects of particulate and gaseous pollutants. Leaves can absorb a high proportion of the dust particles present in air. In summer, a street without trees may have up to ten times the amount of dust suspended in the air as a similar street with trees, trees can add dignity and visual beauty to streets and spaces and transform the character of otherwise unattractive townscapes.
- 3) **There should also be timely renovation of both public and private buildings, as well as maintenance of public utility.** Likewise, creating sign regulations developed with community input will encourage business owners to erect less intrusive signs that reflect an area's spirit, contributing to civic pride and helping to revitalize commercial districts. Regulations should encourage signs that quickly communicate their message, complement their surroundings and enhance the visual character of the community. Attractive on-premise signs can help encourage residents and business owners to work together to improve and revitalize local appearance.

Conclusion

It is not at all out of place to aspire to have a built environment that is attractive because it can be uplifting and raise our self esteem. Hence, an attractive, healthy, safe and sustainable built environment which functions efficiently and enriches the experience of living for everyone in the built environment is desired. However, surroundings that are unattractive and visually polluted are dispiriting. By applying architectural aesthetics and planning principles as well as integrating landscape elements in the scenario of the built environment, we can create environments and places that are attractive, sustainable and uplifting.

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