Murals in Urban Space for Public Education on Environmental Degradation

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This article reports on a mural painting project meant to document indiscriminate waste disposal, felling of trees, burning of car tyres, and pollution of water bodies at Offinso, Ghana, as a permanent exhibition for public education on environmental degradation. Community ownership for protecting the murals was assured by involving local students and traders to execute three juxtaposed compositions depicting different sources of degradation in the community's market and a school. From initial pencil sketching of content images through to completion of the murals, the project attracted much public attention and offered a social platform for conversation on local government action on waste management and sanitation in the township. Official response was the removal of piled up refuse near the market, construction of a concrete compartment and provision of a skip to contain waste generated from trading. Unfortunately, no official requests backed public calls to replicate the project in other communities.

Key words: Public education, environment, degradation, murals, urban space, Ghana.

INTRODUCTION

Societies everywhere are closely and inextricably linked to the natural environment in which they are found. Greater demands placed on the environment by an ever increasing human population is putting a great strain and drain on the earth’s limited natural resources. Environmental degradation is a term that has been used to describe a situation in which the natural environment is damaged, it can also be used to refer to damage to the land, water or the air, a loss of biodiversity or loss of natural resources in an area [1]. Environmental degradation, which includes depletion of renewable and non-renewable resources and pollution of air, water and soils, can act on social integration indirectly through the constraints that it puts on productive activities, and also have direct social impacts [2]. Environmental degradation is therefore a serious threat to the lives of people, animals and plants, which makes it imperative for action to stop further degradation from occurring.

Causes of environmental degradation include inappropriate land use, over-cultivation, over grazing and pollution. Root causes of environmental degradation include poor government policies, foreign debt and unfair land tenure. Indiscriminate disposal and handling of waste also lead to environmental degradation in terms of air, water and soil pollution, and destruction of the ecosystem, which pose great risks to public health [3]. Environmental pollution is also more than just a health issue, it is a wider social issue in that pollution has the potential to destroy homes and communities. This raises concern over the impact of environmental pollution on public health as a result of expanding human population coupled with insufficient and inappropriate development in both developing and developed nations. This is why the International Decade of Natural Disaster Reduction (IDNDR) insists that environmental protection, as a component of sustainable development, and consistent with poverty alleviation, is imperative in the prevention and mitigation of natural disasters [4].

Managing environmental degradation involves the
application of acquired knowledge about the environment with the aim of reducing, conserving or preventing further degradation which is considered the purview of environmental science [5]. However, environmental science is inadequate for solving the problem of environmental degradation and pollution. Because living in healthy environmental conditions is acknowledged as a key indicator towards attainment of utmost human health, this article advocates documentation of environmental degradation as murals in public space to communicate the need for community action for environmental protection and improved sanitation for healthy living. The premise is that when murals are executed in areas where people live and work, they can provide a dramatic impact, whether consciously or subconsciously, on the attitudes of passersby, public murals can also add aesthetic improvement to the daily lives of residents [6]. Besides, the visual effects of murals are an enticement to attract public attention to social issues [7].

**Offinso-the Study Area**

Offinso is one of the 27 administrative districts in Ashanti Region. It is located in the north-western part of the region. The 2002 Ghana Population Census indicates its land area as 1,451km² and its population as 138,190 spread across 16 communities. Offinso is also the district capital. This is where the lead author lives and works as an art educator in the local teachers’ college. This project was designed to use mural painting in public places in the town to alert the community to human activities that contribute to air and waste pollution and also compel them to take action to prevent further destruction of their environment. Official permission was sought for the project.

**MATERIALS AND METHODS**

**Data Collection**

The study adopted the participatory action research approach of qualitative inquiry [8] to engage selected art teacher trainees and volunteer traders to paint three murals depicting sources of environmental degradation and pollution in the township as a tool for sensitizing the community towards environmental protection. Primary data were gathered through informal discussions and the use of unstructured interview guide with some residents. Focus group discussions and formal lessons on environmental aesthetics and skills training sessions were employed to organise a team of 10 Junior High School (JHS) students, 12 student teachers of the local teacher training college, and four market women to paint three murals that portray sources of environmental degradation in the community. Only students and traders who lived close to the project sites were selected to join the team so that they would protect the murals and ensure they are not vandalized. Including local residents helped to promote a sense of community ownership for the project. Plates 1–3 illustrate the sources of environmental degradation observed in the community, which also formed the basis of the project in the study area.

**Sources of Environmental Degradation in Study Area**

To encourage active participation in executing the project, both the content and titles of the murals were discussed with the team members and collectively agreed upon to ensure the murals reflected the extent of environmental degradation experienced in the township.
Plate 2. Refuse dump close to the market.

Plate 3. Polluted water and footbridge.

This was done as part of the training session to ensure that all members understood the nature and health implications of environmental degradation and pollution, and the significance of the murals as a vehicle to draw the residents’ attention to the need for them to take action on sanitation in their community. The JHS students and traders were also trained to acquire basic painting skills so they would be capable of handling the brushes adeptly, using the materials judiciously, and acquiring the means to enjoy painting and seeing the composition emerge through the variety of colours provided. The perception that art promotes beautiful surroundings made it easy to persuade people to join the team.

Besides regular team evaluation of the impact of the murals at different stages, the impact of the project was ascertained through informal interviews with 80 community members including passersby who engaged the artists in conversation as the murals evolved, spectators who frequently stood by to watch the team work, opinion leaders and those who returned to see the completed murals. Information shared focused mainly on how the people understood or perceived the content of the murals.

RESULTS

The Murals

Mural 1 in Plate 4 shows degradation due to forestry activities such as indiscriminate chainsaw logging and charcoal making. It was executed by 10 JHS students assisted by eight student teachers in their school. Besides enhancing the aesthetics of the school environment, the mural could serve as an instructional resource to reinforce lessons in environmental science and a means for the participating students to show off their artistic skills and thereby get their friends, siblings and relatives to want to see it and also visit the site.

Mural 2 (Plate 5) depicts insanitary conditions in the community market. It was painted by the four women traders assisted by 10 of the college students. The objective was to draw attention to the negative impact of trading activities on environmental aesthetics and the
community’s health. Mural 3 (Plate 6) depicts environmental degradation and pollution due to indiscriminate waste disposal and poor waste management, which directly affects the beauty and health of the community.

**Design and Execution of the Murals**

Each mural was designed as a composition comprising a juxtaposition of different aspects of the environmental problem existing in the community. Acrylic paint was used to paint the murals to ensure they last for a long time. The college and JHS students, plus the four market women were grouped and allowed time to brainstorm on the compositions that would best communicate the problem of environmental degradation evident in the community. After collating and discussing the various ideas, preliminary sketches of the selected mural designs were further worked on to arrive at the final compositions that would most effectively communicate the need for environmental protection and cleanliness. To ensure accessibility to large audiences on a daily basis, the team chose to locate two murals in the community market and one in a nearby school. Plates 4-7 show stages of the painting project.

**DISCUSSION**

To ascertain how effective the murals were in communicating the intended message, nearly all bystanders who watched the murals evolve and passersby who were willing to share their thoughts on the project were engaged in conversation as individuals and groups. Views that emerged from these informal discussions with regards to specific murals as well as the overall effect on the community are explained in the following sections.

The residents whose views were surveyed to ascertain the information content of the murals interpreted Mural 1 (Plate 6) in terms of local happenings, citing “indiscriminate felling of trees by chainsaw operators in
the forest reserves, destruction of young trees by timber loggers, deforestation through unproductive land use and charcoal burning, farmlands extending into the forest reserves, and destruction of the forest by bushfires. When asked to comment further on the importance of the mural, the respondents described it as "a beautiful art that has made the school environment beautiful". Educationally, they indicated that "the painting is showing us how our forest reserve is being destroyed by timber merchants and illegal chainsaw operators", "it is like a picture book that shows how we are destroying a forest that was left to us by our forefathers", it is a learning material for the school children.

Mural 2 (Plate 8) was described in terms of "pollution of water, improper disposal of refuse, insanitary conditions in the town, cars and taxis polluting the air with exhaust smoke, poor disposal of refuse at the market place, dumping of refuse on the bridge and in the river that passes under it which makes the water stink and breathing difficult when crossing the bridge, the market women generate waste and filth, eating such food displayed in filthy conditions can make us sick". For Mural 3 (Plates 9 and 10), the respondents said it illustrates "a pupil (identified by the public school uniform) dumping refuse carelessly in open community space, a market woman washing a container in dirty water and creating muddy conditions in the market, a woman washing a gallon in a filthy area of the market, the women are wearing hats to protect themselves from the hot sun because there are no shade trees for them to sit under to sell their wares which they have displayed on the bare ground".

**Interpretation**

These responses suggest the people were alert to the condition of their community and could "read" the murals and interpret the composition in terms of the environmental status and the reality of waste, sanitation and pollution in their surroundings, particularly the vicinity
of the market which is the main source of food supply for the residents. The people’s awareness of their situation as reflected in the murals attests to the value of murals as an aesthetic tool to compel them to understand and confront their contribution to air, water and land pollution in the community, and perhaps, ginger them to take action to remedy the situation. This reinforces Chen’s [9] call for art education to challenge people to care for the places where they live to enhance environmental safety. The murals therefore constitute a means to constantly alert the residents to their responsibility to protect the environment as a legacy for posterity.

Interpreting the murals as “mirrors” that reflect the real issues makes it obvious that the murals had provided a perfect arena for passersby to confront environmental degradation on their doorsteps and probably be constantly reminded of personal contributions to the menace. The willingness of the people to share ideas and narrate their own stories of how the natural environment became degraded to the current condition was evidence that the people appreciated the murals even as they were being painted. This clearly indicated that the project had come at the right time to caution them to reconsider their attitudes toward the natural environment.

Seeing their own neighbourhood reflected in art works that they described as “beautiful, they make the environment look nice” showed the murals had added aesthetic improvement to the daily lives of residents [6]. The visual effects of the murals were also an enticement to attract public attention to social issues [7] as the content enabled the people to assess their own surroundings and make judgments on their living conditions. Locating the murals in the market, which is situated almost in the middle of the town and also in the school, both of which are open spaces where many people converge daily, was the most appropriate decision as the sites provided unhindered access to a large number of people at a time. Thus the murals made it
It is commonly recognized that arts education has a positive influence on children and adolescents’ overall development, and contributes to their personal well-being [11]. The mural project created a means of making these powerful, artistic and insightful students’ art work visible to the public, thus giving them the chance to express their excitement and aesthetic experiences to the public. In the view of Block and Manuel [12], a large public project of this nature executed by art students about the environment can help transform youth self-image and identity. The students’ shared vision and potential of having their images and ideas take over a public space created opportunity for them to take responsibility for meaningful roles in their society, the process can make these art students confident and learn how to be responsible. This public art on the environment offered a social platform to foster dialogue, promote critical thinking and help to build connections, not only among the students, but also among individuals in the community so everybody does their part to ensure proper protection of the environment. Involving the students in the project gave a voice to their creativity, and validate their work, identities and experiences. It also allowed others outside of the school community to engage the students’ learning and reflections, as was evident while the project evolved.

According to Smith [13], involvement in the arts is associated with gains in math, reading, cognitive ability, critical thinking, and verbal skills. Arts learning can also improve motivation, concentration, confidence, and teamwork. The Rand Corporation [13] argues that intrinsic pleasures and stimulation of the art experience do more than sweeten an individual’s life, it can connect people more deeply to the world and open them to new...
ways of seeing, thereby creating the foundation to forge social bonds and community cohesion. In this regard, the students who participated in the mural project could enjoy more respect and prestige as good citizens who seek the goodwill of their compatriots.

To Kang Song [14], environmental art embodies a significant educational role in society because it is often publicly located and designed for widespread viewing. In particular, ecological art that is created in response to environmental degradation provides students with a platform of provocative ideas to consider [14]. In this way, environmental education through art moves beyond learning how to express oneself on a canvas to learning how to reflect upon and engage with social issues that concern a larger community [14]. Engaging the college art students in environmental art, as was the case with this mural project, brought a communal interaction that helped the community to identify and resolve issues collaboratively and also grow in their connectedness and stewardship. Environmental education through ecological art was fun and engaging for both students and researchers. The evolving process provided opportunity for the students to develop their create potentials, critical thinking, and the idea of being citizens of the world.

Appreciation of the murals was not done strictly according to the sequential guidelines specified by the Ghana Teaching Syllabus for Visual Arts (2008). Nonetheless, the informal conversational procedure the researchers adopted to engage both team members and residents as the murals were being executed right from the initial pencil sketches of content images through to their completion enabled the residents and team members to vividly describe the content and possible outcomes of the murals. It was obvious the students enjoyed the question and answer sessions that accompanied conversations with residents who stopped by to appreciate the murals as they evolved and also when they were completed.

Conclusions

The timeliness and value of the project in sensitizing the Offinso community to environmental degradation was made evident through the stories told and the nostalgia of past strict compliance and social commitment to environmental protection, which suggests that decentralization of governance seems to have impacted negatively on community responsibility for environmental conservation. The willingness of all participating members of the project team to alert the community to reflect on their surroundings attests to the need for strengthening Ghana’s school art curricula and establishing specialist Art Education programmes in the Colleges of Education to train teachers to sustain the Creative Arts curriculum in the Basic Schools. It is also critical that the Ministry of Education and Ghana Education Service initiate programmes to train Senior High School Visual Arts graduates who are neither in employment nor in higher education to serve as Learning Support Assistants for art teaching in Primary and Junior High Schools.

REFERENCES

Authors Profile

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