Exposition and Synthesis in Benin Bronze Casting:

Emphasis on the Olotan Casters of Benin

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Abstract. The introduction of Western education to Nigeria has brought in its wake great strides toward development. This article investigates the critical role education has played in the recent evolution of a traditional art, that of casting bronze figures. Historical accounts are integrated with interview data collected from the bronze casters in Benin City. The first section discusses sustainable development in Nigeria, involving an infrastructure that supports both accessible education and local social values. Education is identified as being critical to sustainable development. The second section discusses the evolution of the art of bronze casting among Olotan casters in Benin City. Changes in bronze casting in Nigeria date back to the dawn of the 20th century. Characteristics connected to evolution of the practice of bronze casting in Benin City include visioning, relaxation of age-old practices and acceptance of western influences.

Keywords: Education, Benin, Bronze Casting, Development, and Globalization.

Introduction

The eight Millennium Development Goals (MDGs)(UNDP, 2000) announced in the Millennium Declaration (UN General Assembly, 2000) include, among others: 1) promote gender equality and empower women; 2) eradicate extreme poverty and hunger; and 3) develop a global partnership for development. Findings show that sub-Saharan Africa is on target to meet some of the MDGs, which is at variance with projections that predict negative change (United Nations Department of Economic and Social Affairs, 2007; UNDP, 2004).

The antecedents of globalization can be dated to the 15th and 16th centuries, when European maritime nations expanded their economic, social and political frontiers into other parts of the world (Okoduwa, 2006). This is reflected in ancient Benin history, in the different phases of early brass works, with an eye to the availability of materials in the casters’ economic encounter with the world. The precursors of the ancient practice of bronze casting emphasized male domination of the trade by members of the guild. With the advent of formal education came changes in bronze casting, as exemplified by the first female Edo caster; Princess Elizabeth Olowu nee Akenzua. As a post graduate student of the University of Benin in 1980, she did her thesis on contemporary bronze casting.
The Effect of Globalization

With globalization come even more changes in the borrowing and transfer of technology (Oyenuga, 2009). This is particularly the case with the bronze casters of Benin as their offspring are exposed to Western education. The outcome of their exposure to Western education is described by Kelnner (2004): “Global economic, political and cultural forces are rapidly penetrating the earth in the creation of a new world market, new transitional political organization and a new global culture.”

The Western world witnessed the arrival of gold and bronze around 1700 BC; bronze works were discovered in Nigeria at a later date and at different times before the beginning of the 20th century (Adepegba, 1995). These include Igbo Ukwu, Ife, Benin, and Nupe bronzes. Radio carbon tests date Igbo Ukwu bronzes to the 9th century AD, while Ife bronzes were said to have flourished between the 12th and the early 15th centuries. The court art of Benin, which included a large number of brass works, is said to have flourished from around 1400 AD to 1897. Yet, unlike the Ife bronze tradition, bronze casting is still being practiced in Benin, mainly by Igun and Olotan casters.

Brass casting in Ancient Benin

The ancient Kingdom of Benin was known for its organized structure. Ezra (1992) mentioned several art guilds among the 68 specialized guilds affiliated with the palace. De la Croix et al (1991) buttresses the claim that bronze and ivory carvings were royal prerogatives carried out by guilds of highly trained professionals. The ancient tradition of Benin was disrupted during the British punitive expedition in 1897, when Oba Ovonramwen was exiled to Calabar. According to Ogundipe (1995), when the Obaship was restored in 1914 under Governor Frederick Lugard’s administration of Indirect Rule, the restoration of the obaship triggered a revival of the arts. Efemena (2009) claims that Oba Eweka II, who was on the throne of the Benin Kingdom between 1914 and 1933, established the Benin Arts and Crafts School in 1927. The schools encouraged students of the Omada carvers, brass casters and the ivory carvers guilds to create objects for a wider patronage without guild restrictions.

Traditional Bronze Casting in Benin

A study of ancient Benin brass works shows variations in the style and weight of works based on the availability of materials. Over time, the traditional process of bronze casting evolved into a slow and elaborate process. The first step involved making a core from red earth in the rough shape of the intended design, but with no details. Nails were inserted projecting outward at the high points of the core, which was left to dry out in the sun. Beeswax was spread and rolled out in the sunlight until it became plastic. Then the rolled wax was progressively used to cover the core. Details were added later. After the details were added to the wax, an outer layer of red earth was put in place to finish the mould. Next, a funnel shape was positioned at the base of the work. This served as an outlet for molten wax, as well as a peephole for the bronze casters to check the melting process in order to know when the molten bronze was to be poured.

The mould was then subjected to intense heat until it was red hot and the wax between the cores melted—hence the term *lost wax process* (although some molten wax was retrieved). After the firing, a space had been created between the inner and the outer cores. During this process, bronze was melted in a crucible, which was carried by means of tongs and then poured
into the space between the cores through the outlet through which the melted wax escaped. The outlet was closely watched by the caster to ensure that enough molten bronze had been poured in. When the runner was full, the cast bronze was left to cool.

**Finishing After Casting**

The outer and inner mould around the cold bronze was later removed and the work was thoroughly cleaned. Over time, with westernization, rasps and files were employed in the finishing process. The finishing became easier with the introduction of the sanding machine.

**Changing Social Values**

In Africa, adherence to tradition pervades all aspects of culture on the continent. However, globalization is subtly bringing about new ways of doing things, motivated by convenience and greater economic gains. Oyenuga (2009) explains that the systems of technology and the material goods that enable members of a given society to adjust to their environment are not mere artefacts; they are products of culturally inclined minds, consumed with proffering solutions to the problems in their environment. This position is buttressed by Okoduwa (2009), who claims the most relevant thrust of civilization is perhaps at its economic front, which is determined by the culture of a people.

**Findings**

This study revealed that, in a bid to reduce the cost of production so as to secure better economic gains, the Olotan casters have adopted new materials and methods of casting bronze.

![Fig. 1. Victor Omodamwen (left) explaining the new methods of Benin Bronze casting to the researcher.](image-url)
An interview with Victor Omodamwen, the present family head of the Olotan casters in Benin (Fig. 1), revealed that the bronze casting process has absorbed Western influences:

1.) The bronze casters no longer use red earth as the core for the wax work to be cast in bronze. Rather, they now use a mixture of sand and plaster of Paris (POP) both for the inner and outer cores.

2.) The bronze casters are able to make multiple positive casts, using silicon for taking negatives as in Fig. 2. By so doing, the casters are able to replicate works as in the photograph. This saves time and increases the number of bronze works that can be made in a single motif within a short time. This has helped in improving their financial base.

Modernity in the Firing Process

The firing infrastructure has also been modified. The casters now use a blower, which runs on diesel. It blows air into a feeder for combustion until the bronze in the crucible melts. The pit for the firing process is coated with a mixture of red earth and charcoal as in Fig. 3.

Fig. 2. Plaster of Paris Negative Mould with Silicon Used as Positive Mould.
Fig. 3. Mixture for the kiln

Fig. 4. Fuel Tank
Victor described the advantages in the new processes employed by the bronze casters, which includes the following:

1) Fine quality complete cast work is achieved with every firing, unlike the previous method of using red earth for the core. Previously, some sections might not be cast due to blockages caused by cracking of the moulds during firing, which in turn caused failed casts to be melted down. Later, to mend such sections, wax was modelled in the shape of the failed part, cast, and the section welded to the work. However, with the new method, the casts come out whole.

2) Casters are able to make multiple casts of a positive through the use of silicon. In addition, the casts are now much lighter. This has increased the financial base.

**Conclusion**

With exposure to education provided by the Nigerian government, the Benin bronze casters have relaxed their traditional social values. In the past, bronze casting was a male preserve but presently, influenced by Western education, women are allowed to practice bronze casting in Edo land. Also, through education, the casters have become amenable to changes regarding the use of modern materials and methods. These have improved the quality of both their work and their economic base.
References


Omodamwen, Victor (2012, September). Interview with Victor Omodamwen, the head of Olotan bronze casters in Benin.
