

Material analysis of a Late Iron Age ceramic assemblage from KwaZulu-Natal to evaluate a hypothesis drawn from ethnographic records on the social origins of different coloured vessels

**MPCHS92**

**Research proposal for the MA Degree in Archaeology**

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## Part One

### 1. Describe your research question or research objective. That is, what will the focus of your investigation be? [750 words max.]

Decorated ceramics are ubiquitous on Iron Age sites in southern Africa, which has allowed archaeologists to use them in exploring relations across space and through time. In southern Africa this work has involved stylistic typologies (e.g. Huffman 1980; Denbow 1982: 85; Thorp 2009: 208), sometimes combined with archaeometric or technological analyses (Jacobson et al. 1991; Wilmsen et al. 2009). Both these techniques have helped tremendously in understanding life in the past.

I propose using ceramic technological analyses to examine different coloured pots of an assemblage derived from a Late Iron Age farming community at Mgoduyanuka in KwaZulu-Natal. Mgoduyanuka (meaning ‘the hole that smells’) is a site situated on a hilltop overlooking the Thukela River on the farm Kiaora in the Bergville district, KwaZulu-Natal (Maggs 1982: 84). It was excavated in 1982 by Tim Maggs. The site probably dates to between AD 1700 and the early to mid-1800s.

The excavations at Mgoduyanuka were conducted mainly on the northern side of the hill, at Midden 1 (M1) and in Settlement Unit 1 (SU 1) (see Maggs 1982). Midden 1 yielded 4736 sherds. From these sherds, 48 pots and 8 bowls were reconstructed. SU 1 yielded only 1 pot (Maggs 1982). For the purpose of this project only sherds from M1 will be analysed. From M1, there is a relatively high incidence of ochre burnished sherds, accounting for 27.7% of the total assemblage, and a low incidence of black burnished (3.5%) and plain burnished sherds (1.6%). The remaining 67.2% comprises unburnished plain pots.

This project aims to examine the ceramic fabrics of different coloured pots retrieved from the site. There are three main colours in Zulu cosmology: black (*mnyama/ umnyama*), red (*bomvu*) and white (*mhlophe*). The colour red (*bomvu*) has various symbolic meanings in the Zulu belief system. In medicine red is the “in between” colour (Ngubane 1977: chapter 7). It is associated with heat, transformation and fertility (Ngubane 1977: chapter 5; Armstrong et

al. 2008). In certain contexts (e.g. novice diviners), red pigment on a woman refers to her paternal ancestors (Berglund 1976: 160).

Given the relationship in sub-Saharan Africa between pots and people (e.g. David et al. 1988), Whitelaw (2014) suggests that the ochre burnished sherds at Mgoduyanuka were brought in by young wives moving in with their husbands. The red represents their fertility, given to them by their fathers. As Ngubane (1977:66) explains, the bride and the mother-in-law are two people who have “travelled a long journey”. Usually when the bride arrives at her new home, she brings with her beer known as *umbondo* (Krige 1965: 132). Beer is stored and carried in a container such as a pot.

The Karanga in Zimbabwe hold similar ideas. There the pot taken to in-laws is not just any pot; it must be a new pot (see Aschwanden 1982:190). The new pot represents the bride’s virginity (Aschwanden 1982). As David et al. (1988) put it: “Pots are beings and not things”. A pot tells a story about the woman, including her behaviour and her fertility. Further, a pot also stands for the bride’s family: how well was the bride groomed? (E.g. Aschwanden 1982: 190-192).

By contrast, applying black to the pots is a sign of respect for the ancestors as they prefer cool and dark places (Perill 2012). Black is the preferred colour for serving and drinking pots because it makes the ancestors comfortable at beer feasts (Armstrong 1998; Perill 2012). The same notion possibly applied to the archaeological context of Mgoduyanuka. If so, then the black burnished sherds might come from pots that were manufactured in the homestead. Similarly, plain sherds might have come from brewing and other cooking vessels produced at the site.

The aim of this project is, firstly, to identify the clay fabric of the Mgoduyanuka ceramics to determine whether the different coloured pots are made from one source of clay or from two or more sources. In so doing I endeavour to explore whether the ceramics reflect marriage alliances in the Late Iron Age.

Secondly, I aim to establish if one can notice ‘technological identities’, i.e. to look at the possible variety of potters involved in creating a single archaeological assemblage. I believe that the analysis of the ceramic fabrics can aid in exploring and understanding such issues.

Lastly, I intend to consider the shift away from “red” pot production to a black pot style between AD 1600 and 1900 in KwaZulu-Natal.

**2. How does your question build on existing research in archaeology or related disciplines? Give specific examples of this scholarship and its findings [750 words max.]**

This project takes as its starting point the Late Iron Age sequence of KwaZulu-Natal. The sequence begins in the mid-11<sup>th</sup> century and includes four phases. The first phase, *Blackburn* (AD 1050–1300), is believed to mark the introduction of Nguni speakers into KwaZulu-Natal (Davies 1971; Huffman & Herbert 1994; Huffman 2004). It gives rise to *Moor Park* (AD 1300–1700), which is followed by *Nqabeni* (AD 1700–c.1870). Huffman (2004) classified Mgoduyanuka under the *Nqabeni* facies. The fourth phase is what Whitelaw (n.d.) calls *Ondini* (AD 1870 to the present day).

Secondly, this project builds on studies about tracing identities, movements of people and interactions of various ethnic groups in southern Africa, by looking at ceramic technologies, in particular clay fabrics. These include:

Marothodi Late Iron Age site, Rustenburg; South Africa

Rosenstein (2008) conducted petrographic studies of early and late Moloko phase ceramics, the latter deriving from Marothodi. She revealed that early Moloko phase ceramics (now classified into the *Olifantspoort* and *Madikwe* facies) were produced from unrefined clay and had no added mineral or temper in the clay samples. Late Moloko phase ceramics by contrast had temper inclusion using the minerals from local rocks.

Botswana

Wilmsen et al. (2009) used thin section petrography to analyse ceramics from Botswana and South Africa. In the process they identified pottery made in Chobe near the Zambezi at sites located about 600 kilometres away at places such as Bosutswe, indicating extensive interaction during the Iron Age.

### Limpopo

This study, using chemical analysis (using PIXE) and typology, showed and supported suggestions of interrelations between Khami and Moloko communities living respectively north and south of the Soutpansberg. The analysis showed that some pots moved from south to north, probably with women in marriage alliances, but that ideas (represented by ceramic decoration) moved from north to south (Jacobson et al 1991: 23). The study supported the oral and ethnographic accounts that women moved from south to north in marriage (Jacobson et al. 1991).

Thirdly this project builds on a complex discussion about marriage, procreation, colour symbolism and pots in Nguni societies. The colour red in the “spiritual world/ancestral world” is also associated with women; blood is red and women menstruate (Berglund 1976: 160-161; 167-170). Armstrong et al. (2008) postulated that pottery decoration is aimed mainly at potential or actual partners in marriage. This project offers a test of this hypothesis.

### **3. What evidence will you need to collect in order to answer your research question? How will you go about collecting and analysing this evidence? [750 words max.]**

The material (i.e. the sherds) from Mgoduyanuka is stored at KwaZulu-Natal Museum, Human Sciences Department. There are 4736 sherds in total. The first component of this project will be achieved through ceramic analysis using a portable XRF and the results it yields. A sample that covers a range of coloured and plain sherds from the study site will be analysed using portable XRF, which should be ideally backed by conventional XRF analyses. XRF analysis covers the range of total elements that make up the ceramic fabric. I anticipate that trace elements will be particularly useful, given the sedimentary nature of the dominant geological body. I also wish to conduct XRD (X-Ray Diffraction) analysis. The XRD analysis covers the fabric mineralogy.

The XRD and conventional XRF are destructive techniques. The good thing about using conventional XRF and XRD is that the same powdered sample can be used for both, as long as the XRD analysis is done first. Portable XRF is non-destructive, which allows for the sampling of large numbers of sherds in situations where destruction is not appropriate.

Costs in my budget for the XRF and XRD analyses are based on the fees for consultants at the Geology Laboratory on the Westville campus of the University of KwaZulu-Natal. These costs can possibly be lowered because my co-supervisor, Dr Gavin Whitelaw, is an honorary lecturer at the university. There is, however, a good chance that I can arrange for the analyses to be done at the University of Pretoria Ceramics Laboratory. Both the University of Pretoria and the University of the Witwatersrand possibly offer opportunities for the portable XRF analysis.

The second component of this research will be based on clay procurement and analysis, examining the chemical composition of clays in the two areas. Additionally, the analysis of *daga* (hut plaster) would help in identifying a local (homestead-level) ceramic signature. The assumption here is that hut plaster is not involved in exchange relationships and must reflect clays in the immediate environment.

Unfortunately the original excavations did not recover any *daga* (see Maggs 1982). However, I intend visiting the sites to search for surface exposures of *daga* plaster. This will require a collection permit.

Thirdly, understanding the geology and the soil composition of the area will help. Geologically, the Mgoduyanuka area is relatively simple, characterised predominantly by sandstones and shales (Beaufort Group, a subdivision of the Karoo Supergroup) and a dolerite dyke (Council of Geoscience 1:250,000 geological map sheet, 1998). Should the XRF and XRD results indicate that some ceramics from the site were not locally made, an assumption could be made that the pots were introduced to the site, possibly through marriage.

Interviews on colour beliefs systems and the human life cycle of the Zulu will be conducted.

**4. What is your training? How are you prepared to do this research? Such preparation might include language competence, technical and fieldwork skills, previous research you have done in this area, and any other relevant experience. What work have you already done on this project? Are you collaborating with any other project members? Describe their roles and the nature of the collaboration. [750 words max.]**

This research project is similar to my UCT honours project. The project focused on clay fabrics and the chemical composition of ceramics from Marothodi, a terminal Late Iron Age site near Rustenburg, North West Province, South Africa. Marothodi was built and occupied by Batlokwa who made comb-stamped pottery of the *Uitkomst* style. My research objective was to determine whether the Batlokwa also made *Buispoort* ceramic vessels. I did not do field work because the material had already been collected by Mark Anderson in 2002 for his PhD project (Anderson 2005), and had been examined both by Anderson (2005) and Rosenstein (2008).

The analysis of the material was two-fold, visual macroscopic analysis and microscopic analysis. For microscopic analysis I had to do petrographic studies. These involved cutting, mounting and polishing using epoxy resin. Furthermore, Scanning Electron Microscopy (SEM) was used. For macroscopic analysis, thin sections were made from some of the sherds I was analysing. All procedures took place at the University of Cape Town, in different departments. The SEM analysis was done in the Crystal and Soil Laboratory, Department of Engineering. The thin sections were prepared in the Geological Science Department. The cutting, polishing and the mounting took place in the Materials Laboratory of the Department of Archaeology. No ethnographic research was conducted.

From the experience gained while doing the honours project, I believe that I have the skills to conduct laboratory work, especially dealing with technical work such as XRF.

Field work will be done; however no excavations will be undertaken, because the excavated ceramic sample is sufficient and is stored at the KwaZulu-Natal Museum (formerly known as Natal Museum) (see Maggs 1982).

The only field work planned will be aimed at searching for hut plaster at the sites. I will, therefore, be re-visiting the sites after obtaining a collection permit from AMAFA (Heritage KwaZulu-Natal). Also, interviews will be conducted with traditional potters, possibly in areas such as Eshowe, Msinga and Nkandla. I am proficient in spoken Zulu, but will be assisted by my colleague Mr Phumulani Madonda, who will act as my interpreter as he is a first-language Zulu speaker.

**5. What is the significance of your study? What new insights or contributions will it bring not only to your specific area of study but to the discipline of archaeology as a whole? [500 words]**

This is a fairly straightforward project, which takes hypotheses generated from ethnographic accounts and subjects them to evaluation using archaeometric techniques. The project follows a standard scientific methodology. It is a contained and achievable project. It should also contribute, in some way, to our understanding of the relationship between archaeological material culture and past social phenomena. Most notably it will add to our knowledge and understanding of the social and cultural significance of ceramic decoration and style in early African farming societies.

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