

## INTRODUCTION

This study is primarily based on research carried out in Swaziland over an extended period focussing on a neglected area within the field of material culture. It is interesting to note that a number of authors have studied headrests (Becker:1991 and Klopper:1992a) but none has yet focused on the grass mat, even though the two items are traditionally linked. Furthermore, it is relevant to assess the changing grass mat as a dramatic example of the evolution of an art form. While some parallel products (such as the Swazi headrest) have appeared to remain largely unchanged for long periods of time, the Swazi grass mat in the late 1990's and the early 2000's is a highly dynamic product, with many of the mat-makers constantly experimenting with new colours and patterning with great ingenuity. This research will attempt to provide a current and detailed account of this dynamism, and may therefore offer insight into the conditions under which such rapid changes take place. The visual quality of the traditional Swazi grass mat has been transformed; grass has remained as the main raw material in the construction of the mat, but now the grass is accompanied by an artificial element: sweet wrappers, creating eye-catching new designs. The technology of making grass mats has also been revolutionised with the introduction of the *Imbongolo* frame.

My focus is therefore on change and the effects of economic development on the design and production of the traditional grass mat made by women in Swaziland. The Swazi women have used additional elements that form part of mass production, of industrialisation, of western technological advancements introduced to Swaziland in the form of the Cadbury's Sweet Factory. The sweet paper incorporated into the new composite mats is not recycled but redirected from its intended use into creating new versions of mats using old techniques. The attraction of the shimmering sweet paper and the challenge posed by its incorporation into the new mats has added a certain element of competition amongst mat-makers. This has been evident at Manzini Market where women line up holding their finest creations with the most

appealing religious messages ranging from just one word, 'God,' to 'God Loves You.'

Recently, in an attempt to attract a new market amongst the numerous traders from Johannesburg, the mat-makers have experimented with depicting South African soccer teams on the new mats; messages now range from 'I love God' to 'I love Kaizer Chiefs.' Graburn (1976) has noted that the "market itself is the most powerful source of formal and aesthetic innovation, often leading to changes in size, simplification, naturalism, grotesqueness, novelty and archaism." Even though Graburn was referring to the increasing western market for African sculptures in particular, his comments are applicable to the development of the new composite mat in Swaziland. Using mass-produced items such as the plastic sweet paper, the mats in fact are not 'mass-produced' as there are not enough 'full-time' mat-makers who pose a risk of 'flooding' the market with the new plastic mats. Instead, the place of mat production remains part of a well developed 'small-scale home industry' that 'trickle feeds' the market. Nevertheless, the mat remains a product of considerable economic importance, being one of a relatively small range of goods which brings income directly to a large and predominantly female labour force throughout Swaziland. It can be asserted that this income tends to form an important part of the family economy (Russell, 1978), though there is an absence of recent information on the handicraft industry in Swaziland.

Current mat production is aimed at an internal market as demonstrated by the recent availability of religious messages written in *SiSwati*. The potential for innovations in future mat-making remains a challenge for the mat-makers in fashioning wall hangings with new types of messages.

This research has three broad aims:

- (i) to describe the modifications that have taken place in the design and production of the new mats and attempt to chart the progression of new designs over time;
- (ii) to explain the changes in terms of the producers' response to economic constraints, and the availability of raw materials; and
- (iii) to evaluate the changes as an example of a dynamic art form in the context of the deep-rooted tradition of Swazi material culture.

Chapter one looks at the early history of the Swazi in relation to their exploitation of grass technology during the formation of the Swazi state. A number of texts have provided a historical framework for setting the Swazi state in the wider political and social situation and, in particular, highlighting its relationship with other *Nguni* groups and *Sotho* speaking people during the middle part of the eighteenth century. Texts by Bryant (1929, 1949) describing the various mat-making techniques of the Zulu are used in an attempt to locate the utilisation of grass technology by the Swazi. Numerous anthropological studies conducted by Kuper (1937, 1941, 1943, 1945, 1946, 1947a, 1947b, 1950, 1952, 1963, 1965, 1978) and Marwick (1940, 1966) provide a comprehensive account of the lifestyle of the Swazi. Whilst there are sections that deal with the pastoral role of women as mat-makers and thatchers which are relevant to this research, it is valid to say that no other studies have been conducted for at least 60 years. Bonner's (1983) extensive study of the formation of the Swazi state has provided the political understanding that, for example, "Southern Swaziland ... was much more exposed than other regions to Zulu encroachment and attacks." Matsebula (1987), who has documented the history of the people of Swaziland from the first inhabitants in the 16<sup>th</sup> century, has been used selectively. The comprehensive depth of Shaw's (1992, 1993) study on the basketwork of Southern Africa has been inspirational; her unpublished research notes on grasses made in Swaziland in 1962 have added a valuable historical insight.

Chapter two focuses on raw materials and the technology of mat-making. Extensive use has been made of the information gathered through interviews with 14 Swazi mat-makers, including one in the *KaNgwane* area. A substantial part of the chapter traces the geographical location and identification of different grasses and the acquisition of raw materials. There are customary laws that govern grass cutting in Swaziland and the taboos association with not observing these are believed to result in grave consequences; the mat-maker's perceived fears have been highlighted. The old method of grass mat-making totally by hand is explained, leading to a detailed description of the widespread use and operation of the *Imbongolo* mat-making frame. An attempt has been made to locate the origin of the *Imbongolo*. References have been made to Bryant's (1949) descriptions purely for comparative value to the employment of a Zulu technique whereby the warp thread remains invisible. Frescura's (1981) study of grass-related technology and the record of the architecture, forms and construction methods of grass huts in the southern African region provides an understanding of grass mats, as these objects were functionally linked because a traditional shelter consisting of grass mats slung over a framework of poles, and the techniques used were the same. Biermann's (1971) acknowledgement of the role of women as builders of shelter and as "maintaining the ageless tradition of weaving and plaiting the grass covering" has confirmed the role of women at that time. For the purpose of this study, the sedges used for mat-making in Swaziland will be referred to by the popular term 'grass' that has been ingrained in the terminology of this research; its correct biological category is implicitly understood and acknowledged in this chapter.

Chapter three takes as a starting point how mat-making skill is acquired and the notion that this acquisition is only attributable to family members is disputed. The knowledge of mat-making skill is acquired through different channels; this is established from information gathered through interviews and conversations with mat-makers at Manzini Market over an extended period.

Chapter four identifies and describes the four main types of grass mats: the *Sitsebe*, the sleeping mat, the sitting mat and the new composite mat. The technical differences in the production of the four mats are explained and certain common features such as the raw materials used are highlighted.

For Chapters five, six and seven, the grass mats collected have been subdivided into three groups: the General Group, (209 mats) the Msithini Group (53 mats) and the Mngometulu Group (20 mats). The General Group encompasses an assortment of mats collected mainly at Manzini Market and in other parts of Swaziland. The Msithini Group and the Mngometulu Group concentrates on mats solely produced by two mat-makers. 282 mats in total have been entered into spreadsheets for each of the groups. (Appendices - A1, B35, and C44)

Chapter five traces the development of the grass mat from grass to plastic. The parameters of the analysis were largely determined by the availability of samples collected over an extended period from 1995 to 2004, samples distinguished by an apparent change in visual quality. A substantial part of this chapter focuses on the analysis of the patterns of the embellished surface of the mat: visual representation in the form of chevrons, zigzags, the development of the rhombus motif, lines, and plaiting created to establish an individual commentary. The standards of excellence maintained in relation to design and production, the smooth finish, efficient control and respect for the nature of the material and the mat-makers' commercial motivations are all highlighted.

In Chapter six, the emphasis of the study shifts into a mathematical analysis of the Msithini Group. This particular collection of grass mats exhibits a variety of patterns that are analysed according to their symmetrical properties using the 'Seven International Notations for One-Dimensional Patterns'; the analysis incorporates the use of diagrams based on patterns from the Msithini Group. The theories of Gerdes (1988, 1990, 1991, 1993, 1994, 1995, 1996, 1997, 1998, and 1999), Washburn and

Crowe (1988) and other Ethnomathematicians have been extensively applied to substantiate the analysis of symmetry in patterns on the Msithini Group.

Finally, completing this study, Chapter seven focuses on the Mngometulu Group of mats and takes into consideration how one experienced mat-maker has used the integration of sweet paper in her production of grass mats.