

ICA Conference: Barcelona, 3 - 9 September 1995

## **CARTOGRAPHY CROSSING BORDERS**

Section 3 : Limitations and Extensions Introduced by Digital Systems in the Cartographic Design  
Abstract:

### **Mapping Battle Sites in 3-Dimensions : The Pros and Cons**

Natal is the site of many battles fought between the Zulu army and British troops during the Anglo-Zulu War (1879). Considerable interest is shown by the Anglo-saxon world in this aspect of our local history and many books and maps have been published on this seemingly inexhaustible topic.

This period of our local history also forms part of our History school syllabus. Many pupils, especially those attending the so-called black schools of the apartheid era, have not had any formal geographic or cartographic training. Yet, if they study history, they are expected to understand maps depicting troop movements during battles.

This paper explains a methodology developed in an attempt to simplify battle-site maps and make interpretation easier for History pupils in local schools. The main purpose of each map was to show the movement of troops, yet the representation of relief can be vital in indicating the reasons for their disposition. Contours can complicate a map considerably and confuse the message being conveyed to a relatively unsophisticated audience.

The generation of 3-dimensional models of battle sites was undertaken. Each Digital Terrain Model was rendered and the details of the battle draped on the rendered surface. The whole map was then ported to a Desk-Top Publishing package for final presentation. A printed output at high resolution (2400-3600dpi) was obtained on film as required by the printing industry for book publication.

Authors address for correspondence:

Telephone: +27 331 260 5346

Fax: +27 331 260 5344

Mrs M Y G H Margeot  
Cartographic Unit,  
University of Natal,  
Private Bag X01  
Scottsville  
3209  
Republic of South Africa