



1.1 Introduction

"Architects can no longer afford to be intimidated by the puritanically moral language of Modern architecture. I like elements that are hybrid rather than 'pure'... I am for

richness of meaning rather than clarity of meaning: for the implicit function as well as the explicit function..." (Venturi, 1966:22-3).

1.2 Background and context

The concept of *Meaning in Architecture* has been one of great scrutiny. Prior to the Modern movement, *meaning* was simply a matter of style, language and tradition. This was soon replaced by the Modern perception that *meaning* arose spontaneously during the design process – *meaning* became a method, rather than an interpretation of the language of Architecture. Today we realise that in order to attach and perceive *meaning* one requires a more general understanding of the world and the language of forms through which meaning is expressed (Norberg-Schulz, 2000:113).

As a result, Post-modern architecture became partly occupied with the dilemma of *meaning* (Norberg-Schulz, 2000:113). This study aligns itself with and

draws from the concepts of Post-modern architecture by postulating that *meaning* can be attached through subtle and constructed references to archetypal forms.

The study will not draw from *history* or *popular culture* directly, but will aim to transcend Post-modern concepts by focusing on the contemporary condition and archetypal forms as a *result* of history and popular culture; and more so, by looking at quantifiable data of the current contemporary condition as a means of moving from more subjective to more objective methods of creating Architectural form.

1.3 Objective

The objective is to design a centre for the South African Mathematics Foundation (SAMF) in the city of Tshwane. The study will question the process of creating Architecture, primarily through the use of an experimental mathematical approach that is in line with the architectural programme.

1.4 Approach

Mathematics and statistics will be utilised throughout the design process and will include explorations in three-dimensional fractal-geometry as a method of generating form and arranging space.

It is widely recognised that fractals are all around us, whether in the form of clouds, trees, or the shapes of mountains and coastlines. This means that perhaps their value to us is more than mathematical whim. They have been used in explaining the spatiality of these phenomena and thus, eliminating the possibility of randomness and chaos in explaining the patterns' existence (Anton & Rorres, 1994:699; Stewart, 1995:3).

The author believes that by utilising fractals and the existing spatial organisation of the city, a design can be created that not only flows from the site and the city,

but from the patterns and habitual spatial manifestations of the very species that will inhabit it, thereby attaching a deeper *meaning* to Architecture.