

Guest editorial

An earth modified by global change – but how much do we know about the evolution of our planet?

This issue contains contributions from a Prince Charles Mountains workshop and the Selwyn Symposium, held at The University of Melbourne in October 1996. The A.R. Selwyn Lecture, presented by Pat Quilty, raised key questions about the new relationships between scientists and administrators and the way that science is justified and funded. Non-scientists are taking a far greater role in deciding the directions of science and the questions that will be addressed. He highlighted the follies in the current fashion of using the last million years of geological history to understand global change and how this misses the point that much more dramatic changes have occurred in earth history including those recorded in some of Antarctica's older rocks.

The question all scientists need to ask is – how do we convince our administrators/bureaucrats to question the criteria they use to evaluate the scientific merit of our respective disciplines? The administrators views appear to be influenced by several factors including the immediate need identified by government policies, contributions to international agreements, the existence of logistics and infrastructure such as bases and equipment, and government-funded Antarctic Research Centres. However, it has become obvious that scientific questions in their own right are in many cases being overshadowed by the way grant-giving agencies rate projects with respect to government goals, which often have a non-scientific basis.

These are times of growing apprehension for pure scientific researchers, as government-appointed administrators evaluate their science efforts by these other objectives. Antarctic scientists appear to have less freedom than many others to pursue long-term projects based on scientific merit as they now have to meet government strategic priorities to obtain funding. There is no way in the contemporary world that government bureaucrats should be able to dictate scientific excellence and determine leadership. All Antarctic scientists maintain a complex web of interactions with the broader scientific community, whilst the pace of research and international collaboration dictate that scientists are in constant touch with colleagues worldwide. Thus, it is not possible, except in extraordinary circumstances, to undertake Antarctic research in isolation and still be at the forefront of new knowledge.

The global interaction within the geosciences community has seen a marked shift from a dominance of programs that considered the framework of the Antarctic, the cratonic structure, its sedimentary basins and dynamics, to programmes dominated by issues relating to understanding global climate change. However, this earlier work is now raising important questions in the scientific community about the origins of the late Precambrian supercontinental Rodinia, its thermal evolution and subsequent dispersal. This early evolution of the Antarctic continent is driving a worldwide resurgence of interest in the origins of Proterozoic orogenic belts. Unfortunately the compelling reasons to undertake such fundamental scientific research into the origin and evolution of our planet are no longer compatible with some government priorities. It begs the question – “What are our administrators doing about promoting a proper balance in our scientific community by reconciling processes of global change with our quest to understand the origins and evolution of the planet?”

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