Geophysical Research Abstracts
Vol. 15, EGU2013-3047-1, 2013
EGU General Assembly 2013

"I'm into pure geomorphology, not that theoretical modelling or cultural stuff": discussing elapsed time, equifinality, simultaneous processes, and human-landscape interactions with students and many other people

Norm Catto
Memorial University of Newfoundland, Geography, St. John's, Canada (ncatto@mun.ca)

I have heard many variations of this statement over the years, both from our students and many other people (and perhaps, internally, from myself...). Contemplation of the factors behind such comments, and personal or collective responsibility for engendering them, has implications for our own understanding and interpretation of landforms and landscapes. Personal interaction reflects research tactics and strategies, and other peoples' responses can shed light on how we are going about our study of geomorphology, and on how our work is perceived.

Geomorphological education varies considerably around the world. Our subject is potentially of interest to a diverse group of people. The necessity to connect with this diversity of interests requires a multi-faceted approach, including both physically-based process analysis and positioning individual landforms and exposures in a broader context. Although this has been recognized increasingly by geomorphologists, the results have not always been as desired. Approaches to studying geomorphology have varied, and the adopted (or desired) approach has a strong influence on the philosophy, the methods used, the data recorded, and the interpretation.

In teaching, discussion, research, and grant applications, the tendency is to focus exclusively on one process, landform, or exposure at any one time. We cannot cover everything at once, regardless of which approach we adopt: of necessity, we have to start somewhere, and gradually build our pictures of landscape evolution. It is not only difficult to thoroughly dissect a landscape into individual components and discuss each absolutely separately: it is not appropriate if we want to understand landscapes from a somewhat holistic perspective. However, although lapsing into this tactic is often easy and convenient, it does have several unintended consequences. The approach chosen has a strong influence on the community, leading to the phenomenon of the student (observer, audience, consumer, professional in another discipline) who sees geomorphology as narrowly focused on the elucidation of "real", "field", "(overly) pragmatic", "reductionist", or "science-based" information, together with limited consideration of dynamic modelling or human interaction. This in turn can lead to the belief that this approach is the "best" or "only" approach to "true" geomorphology, effectively creating feedback loops and perpetuating this state of affairs.