

PREFACE

This volume had its origins in an international symposium organised by the Cold Regions Research Centre, and held at Wilfrid Laurier University in November, 1999. The chapters are modified from a selection of the papers at the meeting, and reflect reviews and revisions in light of discussions then.

The original idea for the meeting was to address certain questions that the organisers were encountering in their own work, and that we felt had received limited attention in the recent literature. The two broad issues we wanted to address were: the complex associations of actual landforms and processes in cold regions, and how the almost universal legacies of past, different cold environments of the late Quaternary affect these landscapes in the present.

The former involves the problem of identifying landform and sediment complexes, and the interrelations of relevant processes. We sought to identify this in terms of landform and sediment assemblages appropriate to regional and field-oriented concerns.

The second main concern involves the ways in which present day processes and landform development reflect patterns of adjustment away from past conditions and towards later and contemporary conditions. However, we were only indirectly considering reconstructions of former conditions and the landforms they had produced, or chronologies of changing environments from then to now. These are obviously important but we chose to emphasize the adjustments within and among present-day landforms and processes. We adopted the term 'transitions' to convey how so many landscapes are at certain stages of change that are not adjusted either to past, intervening, or present conditions. Even more important, from a landscape perspective, is the extent to which they are constrained by specific geomorphic response characteristics. We must consider that any given landscape is at a unique stage in distinctive temporal and spatial processes and an incomplete reorganisation of energy and sediment fluxes.

In recent years, the focus has been on processes peculiar to cold regions and related sub-specialties, especially glacial, periglacial, nival, or biogenic processes, ice-infested waters, or attendant microclimatic, hydrological, cryogenic or sedimentation processes. These concerns have improved our understanding enormously. The authors have worked mainly within such specialisations. Nevertheless, there is a certain sense of diminishing returns for landscape investigations, and various new concerns suggest the need to return to more holistic or eclectic, comparative and regional frameworks. These would address the actual complexity of given cold landscapes rather than seeking to classify and separate them in terms of unique processes. The growing demands to understand the impact of climate change, for example, require an ability to disentangle its consequences from the many processes of change in cold environments, including transitions as defined above. These, too, mainly involve the interrelations of a range of processes and associations of landforms.

Initially, of course, progress is as likely to come from redirecting work on specific problems in existing work on, say, glacial or coastal processes. And we had to identify researchers already pursuing relevant themes or promising developments. In some cases, such as the paraglacial with respect to the transitions theme, or sediment assemblages, existing work is directly concerned with the themes of the volume. In several chapters significant departures arose from research findings that highlighted the limitations of existing notions.

Landscapes of Transition

Landform Assemblages and Transformations in Cold
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