This issue of the Southern African Journal of Environmental Education coincides with the start of the 26th United Nations Conference on Climate Change. COP26 in Glasgow is, like its predecessors, a Conference of Parties who will deliberate how to lower global greenhouse emissions and build adaptive capacity so as to reduce the risk and impacts of climate change.

How can this be done? In numerous public demonstrations over the preceding years, youth and wider society have alluded to a solution by calling for "systems change, not climate change".

What are the features of the (systems) change necessitated by the climate crisis and other environmental challenges? And, how can such change(s) be achieved? These are questions that scholars in sustainability education aim to answer. Some of the contours of the associated scholarship are reflected in our Special Issue on Education for Sustainability in a Time of Crises (Volume 36, 2020) and again in this Issue 1 of Volume 37 (2021). This Editorial points the reader to such contours, with specific reference to the relation between descriptive research and theory building.

One response to the question of what change is needed, is that society must become aware of the existence, nature and gravity of environmental issues, and in his paper analysing a survey in Nakuru City, Dr Paul Waititu concludes that social media are not used to raise environmental awareness among communities, even in a media-savvy nation such as Kenya. This study on social media use could build on the research into an 'eco-feedback' application by Calitz, Cullen and Odendaal in Volume 36, and the “shifts to online learning” explored by Tshiningayamwe, Silo and Dirwai in that same issue. However, our engagement with new technology in the service of sustainability and education is very much an under-theorised area of scholarship, simply calling out for stronger theory and more research.

And if there is awareness of climate and related crises and the need for change, what then? As the transitions and systems theory literature explored by Rosenberg and Ramsarup (2020) points out, systems change includes institutional change, and many environment and sustainability educators rightly look to their own institutions, whether these be schools, colleges or universities, to motivate for and enact change.

The transformations required in educational institutions, as described by Professor Godwell Nhamo in this issue, are comprehensive and foundational, involving curriculum and pedagogy, research and community engagement, and campus and resource management. Effecting such fundamental changes is not easy, and Nhamo describes a three-year process at his institution, one of the biggest universities on the African continent, with details of the challenges he experienced as he worked to drive this change. Such descriptive case studies have an important place in scholarship, but only if they are presented and analysed with a view to contributing to theory development in order to guide (further)
praxis. Nhamo does this by drawing on a selection from the growing number of studies in other universities on the continent and globally, including a study by Dr Wilma van Staden on climate responsive innovation in an agricultural college system, published in SAJEE Volume 36 – thus making a contribution towards theory development in the field of higher education and sustainability.

Universities are important in the response to climate change and other environmental challenges, not only as sites of change, but as potential enablers of change elsewhere, as argued, for example, in relation to agriculture and mining (Rosenberg, Shumba, Ngoma & Cobban, 2021). The second paper in this issue that explores transformation in institutions of higher education draws on a case study from Zimbabwe. In this example of an institutional change process, emerging theory has been used to guide the change process itself, and authors Urenje, Chauraya and Chikunda describe the ‘change project approach’ that powerfully connects individual awareness-raising and professional development with institutional and wider systems change. The change project approach emerges as a salient model of process worth further application, experimentation and theorising.

The issue of theory is highlighted in this Editorial because in the past two volumes, there has to some extent been a predominance of descriptive papers, understandable perhaps in the face of the pandemic and other challenges that emerged to confront educational settings, and the call for researchers to respond to these. We seem to have arrived at a new cusp of descriptive work, from which we need to build new theory if we are to advance our practice as sustainability education scholars, and the field. In the process, we could profitably also reach for older work, including research and theory in other disciplines, to consider where they may be useful, and where they should be challenged.

In their viewpoint Michael Hammond-Todd and David Monk do just this, reading back over educational theory from John Dewey and David Orr, and forward into the current scholarship on the Anthropocene. They identify anthropogenic forces which include our intelligence as a species, our engineering efforts and our emotions. These can all drive both positive and negative actions. Among the emotions, the authors single out fear, desire and love, and love emerges as the emotion of choice to animate actors with the motivation and energy to address environmental issues like climate change. It remains to be seen to what extent love – for Earth, for all of humanity and other beings – will drive decisions at COP26 in Glasgow.

In the past, the UN Conferences on Climate Change had to contend with dualisms being played off against each other: Nature vs Society, North vs South, West vs East, Ecology vs Economy. The remaining two papers in this issue explore such dualisms as features of neo-liberal thinking and practice. With reference to river management, Dr Mary Murphy explores divergence in the disciplines that need to work together to rescue rivers around the world, and the conundrum of Structure vs Agency: which one holds the most potential for change? Dr Tom Jeffery writes from the context of modern-day museums, where Nature vs Culture and West vs Rest dualisms may be evident in the practice of museum collections, which he argues, prevents museums from being more relevant to latter-day societal crises.
From these two very different contexts, both authors argue for greater relationality, that could be achieved by disrupting dominant dualisms and associated practices. Both authors identify the philosophical framing of dialectical and social critical realism (as evident in the work of Margaret Archer and Roy Bhaskar) as an important passageway to new realities.

A recent Conference on Critical Realism (September 2021) showed that critical realism as both metatheory and methodology is being applied in a growing body of research and scholarship. As the well-supported conference theme of (Re)Envisaging Emancipatory Research, Science and Practice showed, critical realism has found application in many change-oriented fields including sustainability education.

There is in fact no shortage of theoretical framings to explore as we research and write in order to deepen our understanding of how best to support – and be – the change the world needs; complexity theory, regenerative systems theory, activity theory, reflexivity, expansive learning, multi-level transitions and just transitions theory, eco-socialism, eco-feminist-socialism, environmental economics and well-being economics are other, often compatible, examples (outlined in Rosenberg & Ramsarup, 2020). Scholars writing for SAJEE are encouraged to cast the net wide, and deep, to inform the role and practice of education and learning in the societal transformations necessitated by climate change and other environmental crises. As COP26 may yet demonstrate, there is a dire need for such guidance. SAJEE authors, reviewers, editors and production teams all strive to make their contribution in this regard.

References