Welcome, ladies and gentlemen, to this celebration of this new landmark publication in ... um ... er ... well, how exactly can we characterise the field that Kirsty Douglas is writing in here? Her book is remarkable, and her vision highly original. She brings together geology, glaciology, biology, palaeontology, climatology, archaeology, anthropology, geography, cultural history, heritage studies, politics, museology, environmental history, local history, national history, world history, philosophy, literature, poetry and, and ... I could go on! It is an astonishing synthesis. This is a book that has grown out of years of deep thought, thousands of hours of wide-ranging and intensive research, and allow me to say, aeons of fertile, sub-conscious dreaming. It is therefore deeply scholarly but also, I think, intensely personal. It is Kirsty’s vision of her land. It is a highly intellectual vision. It is also a beautiful creation, a sensuous prose poem. And it is grounded; it is earthed (how appropriate these geological metaphors are!). It offers us many vital practical challenges about how to perceive, understand and manage this land.

The great French historian, Fernand Braudel, once wrote that ‘the historian can never get away from the question of time in history: time
sticks to his thinking like soil to a gardener’s spade.’ Yes, that’s true, but historians often assume time; it is their medium; it is their unexamined methodology; it is presented as undifferentiated in its flow and pace. But Kirsty does not assume that. She propels us into the metaphysics of time. Her history is vertiginous.

Let’s think about what she is dealing with. In the two hundred years following the European invasion of Australia in the late eighteenth century, the known age of the Earth increased from about 6,000 years to 4.6 billion years. Vast chronologies were opened up to the human imagination in just the last two centuries, the very period that has seen the making of modern Australia. Over a few decades in the middle of the nineteenth century, there was sudden and widespread acceptance of geological time. It was like suddenly looking into an abyss. Across the western world, the bottom had dropped out of time.

Modern Australia participated in that intellectual upheaval, as Kirsty’s book explores. European scientists found that to explore Australian space was to plumb global time. But in this land the time revolution was especially concentrated. When the British arrived in New South Wales, their industrial revolution at home was beginning to gather pace, fuelled by the fruits of imperialism elsewhere. Therefore, Australia, unlike most other parts of the New World, experienced colonisation and industrialisation almost coincidentally, a compressed, double revolution. British Australia was in the grip of the clock from its very beginning. So we have this incredible condensed transformation of time for Australian colonists, all in the space of a few decades of the nineteenth century: colonisation, clock-work, industrialisation, and then a new, vast chronology of deep time yawning open beneath them.

But Australia did not just condense and intensify the nineteenth-century transformation of time; it was also soon to experience its own,
distinct time revolution. A hundred years after Darwin and Lyell and Lubbock there came Mulvaney. The scientific discovery of human antiquity in Australia, always deeply known to Aboriginal people themselves, awaited the twin advances of professional archaeology and radiocarbon dating, both of which emerged here in the 1950s and 60s. As John Mulvaney wrote, ‘No segment of the history of *Homo sapiens* had been so escalated since Darwin took time off the Mosaic standard.’

When, at an expedition breakfast at Kenniff Cave in 1962 Mulvaney first received communication of the radiocarbon date of 13,000 years, he suspected a transmission error with an extra nought.

Surely the discovery of the human antiquity and deep geological and ecological history of this continent represents the most exciting revolution in our understanding of Australia’s past in our generation! Scientists are living with it every day; museums are learning exciting ways to display it; but historians have been slower to recognise its power and significance. Historians have often been indifferent, or even antagonistic, to the accommodation of deep time in their discipline, because of the documentary bias and modern orientation of their craft. *Pictures of Time Beneath* is therefore a breakthrough; it is a major work by a historian that brings science and the deep past into play in Australian history and heritage. Australia needs this book; and more generally, historians everywhere need this book.

‘Deep time’ – that is, time that spans tens of thousands of years or even millions of years – is difficult to grasp, and perhaps impossible to truly comprehend or know. The person who probably coined the term ‘deep time’, the American John McPhee, has wondered whether humans can escape their essentially animal sense of time, their fixation with time measured in a few human generations. ‘The human mind’, he suggests, ‘may not have evolved enough to be able to comprehend deep time’.
Well, I have always thought of Kirsty’s mind as highly evolved, and here is a brilliant application of it – her mind is the leading edge of the human endeavour to understand and communicate deep time. And she performs it beautifully. Reading her is like watching a ballet dancer or a high-wire trapeze artist: the danger and delicacy of the art adds to the excitement, and the poise of the performer takes your breath away.

I think Kirsty travels so successfully in deep time because she not only understands and explains the science; she also enters it at the level of poetry and metaphor. After all, she is a published poet, and her poetic sensibility is very enabling in such a study. Metaphor may possibly be the only level on which we humans can truly comprehend such immensities of time.

*Pictures of Time Beneath* has an entrancing stratigraphy. It is multi-layered, even kaleidoscopic. At the heart of its elegant structure are three iconic Australian landscapes: Adelaide’s Hallett Cove, Lake Callabonna in the far north of south Australia, and the Willandra Lakes of south-western New South Wales. These landscapes introduce us to ancient glaciation, giant marsupials and deep human history. Kirsty excavates these landscapes of meaning, revealing complex and fascinating histories of ideas and also bringing their stories right up to the present with analyses of the politics of conservation, heritage and research. Woven in with the elucidation of the landscapes, then, is a series of detailed, archival investigations into recent human politics and culture. It is a dazzling achievement. This book began as a PhD thesis, but it could have been three. Kirsty’s aim has been to bring together several landscapes, just as it has been to bring together many disciplines. The juxtaposition of these landscapes, the synthesis of disciplines, and the sophisticated tapestry of stories within stories is immensely satisfying.
Scientists will be excited to see their work taken seriously, to see it integrated into cultural history and presented with such literary flair. Museum curators will be delighted to see difficult and important ideas distilled in the analysis of particular Australian landscapes, and in material culture. Mulvaney’s suitcase is in this book, just as it is also in the National Museum of Australia’s collection. Indeed, *Pictures of Time Beneath* is a perfect accompaniment to the Museum’s ‘Old New Land’ Gallery, which is inspired by some of the same intellectual sources. Heritage managers will welcome the book’s tough, intelligent thinking about geological heritage and iconic landscapes and about how they can be recognised, understood and conserved. Historians will be challenged to integrate deep time into their own narratives and to adjust their vision and stories to embrace much longer chronologies. And readers everywhere will relish a beautifully written book; they will respond to its poetic power, its witty storytelling, its elegant composition, and they will enjoy also its well-chosen and presented illustrations. Here is another great publication from CSIRO Publishing and its national-treasure-of-a-publisher, John Manger.

There is also a respectful – indeed loving – invocation of intellectual heritage in this book. In particular, the figure of Jim Bowler, the great Australian geomorphologist, benevolently stalks Kirsty’s investigation, especially the final third of the book where he becomes a historical character. Jim’s legendary restless curiosity, his aspiration to unite the sciences and the humanities, his quest both intellectual and spiritual; we can see these same virtues in Kirsty’s work.

At this moment in human history – in this critical predicament in which we find ourselves as we contemplate the grim implications for our species of anthropogenic climate change – at this moment we need histories that enable us to imagine the deep past and deep future of our
Earth. Kirsty’s book is therefore vital. It offers immediate, practical guidance for our land management, but it also enables us to see ourselves in time, on a planet where once we did not exist, as a contingent, historical species struggling to understand and act upon our environmental responsibilities.

Our sincere thanks to Mike Smith for chairing this event, and to the Centre for Historical Research here at the National Museum for hosting it. The Centre for Historical Research is a new, very enabling environment for fine research in Canberra, and it has fostered many positive partnerships between the academy and the museum, and between scholarship and practice. It is very appropriate that it should honour such a book.

Kirsty Douglas, as well as being a wonderful author, is also a lovely person. Those of us lucky enough to work with Kirsty know and love her as a colleague and friend, and we value very much her personal warmth, her grace, her wicked sense of humour and her intellectual brilliance. Congratulations, Kirsty, on this great achievement, and thank you for such inspiring work. It is my pleasure and honour to launch *Pictures of Time Beneath*. 