# Chapter 2 Researching With Children of the Anthropocene: A New Paradigm?

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## ABSTRACT

This chapter takes the age of Anthropocene as the time of human entanglement in the fate of the planet, dated by some from the bombing of Hiroshima and Nagasaki. We propose, however, that the full awareness of the consequences of this entanglement will only be felt by children born in the twenty-first century into an entirely different world than the one we know and understand. Interestingly, in the light of this contention, early childhood leads the field of educational research in posthuman scholarship, which we associate with the rise of scholarly work galvanised around the notion of the Anthropocene. These approaches draw variously on Haraway's common worlds, Barad's new materialism, and Deleuze and Guatarri's nomadic philosophies.

### INTRODUCTION

This chapter takes the age of Anthropocene as the time of human entanglement in the fate of the planet (Zalasiewicz, Williams, Steffen, & Crutzen, 2010) and the 'wicked problem' of how to decentre the human in education research and practice.

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#### Researching With Children of the Anthropocene

The new geological epoch of the Anthropocene is dated variously as beginning with the industrial revolution, the bombing of Hiroshima and Nagasaki, or the vast changes in the geological record produced by plastics. We propose, however, that the full impact of the consequences of this entanglement will only be felt by children born in the twenty first century into an entirely different world than the one we know and understand. Interestingly, in the light of this contention, early childhood leads the field of educational research in the rise of posthuman scholarship galvanised around the notion of the Anthropocene. These approaches draw variously on Haraway's common worlds (2008; 2015; 2016) Barad's new materialism (2003; 2007), and Deleuze and Guatarri's nomadic philosophies (1987).

Our focus in this chapter is on the application of posthuman philosopher of physics, Karen Barad's theory of agential realism. The core operational concept of agential realism is 'intra-action' explicated in her book, *Meeting the Universe Halfway*, through the central idea of entanglement: 'To be entangled is not simply to be intertwined with another as in the joining of two separate entities, but to lack an independent self-contained existence' (Barad, 2007, p. x). In this philosophy the individual subject emerges only through the mutual entanglements of different bodies of matter, each with their own force or agency. She calls this 'agential realism' in which 'the primary ontological unit is not independent objects with independently determinate boundaries and properties but rather phenomena that signify the ontological inseparability' of each (Barad, 2007, p. 23). While feminist poststructuralism as a research paradigm has long been interested in materiality with a history dating back to such feminist philosophers as Grosz, Braidotti and Kirby, we argue that Barad's concepts of entanglement and intra-action offer a paradigmatic break between old and new materialism.

We illustrate our paradigmatic argument with empirical research with young children in an early learning centre in relation to the simultaneous emergence of matter, bodies and language. In one outing with fifteen children aged from 3 to 5 years we documented the co-emergence of language and materiality in their embodied intra-actions with sticks, water and drain hole in a local creek (drainway). Through a methodology of deep hanging out with children, during which we record quick fieldnotes on iPhone apps, short videos and still photographs, we tease out from the multitude of simultaneous intra-actions how sticks and water, bodies and movement, hole and lizard come into being.

In exploring these empirical instances of agential realism, we consider how the application of posthuman approaches in early years learning responds to the wicked problem of decentring the human for the age of human entanglement in the fate of the planet. In doing this we propose that the examples of the application of posthuman approaches more generally in early childhood offer possibilities for research and practice across the different sectors of education research and practice.

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