

The logo for the Anthropology Book Forum, featuring a stylized blue and white circular design on the left side of a dark blue header bar.

# Anthropology Book Forum

Open Access Book Reviews

Davis, Heather M. 2022. *Plastic Matter*. Durham: Duke University Press, pp. 176, ISBN 978-1-4780-1775-2

In Uruguay, milk comes in polyethylene sachets. It wasn't always thus: glass bottles were the standard fare for most dairy producers, including the much-loved national dairy cooperative CONAPROLE, until the 1990s. The switch to plastic was arrived at after a long period of research and had its supporters and detractors, with the respective camps associated with modernity and tradition. When the decision was made, the accumulation and dispersal of these lightweight plastic sachets in the environment became a symbol of plastic pollution, sparking a novel Extended Producer Responsibility (EPR) scheme whereby school students would return the empty bags to their classrooms and CONAPROLE would ensure that they were collected and recycled into black bin bags that were provided to schools. Although this scheme has been disbanded, the plastic milk sachet is now firmly ensconced in Uruguay's consumer culture, as I found out by the negative reaction when I suggested to CONAPROLE directors that they might trial a return to glass bottles in a pilot electric milk float.

It was thus with excitement that I read in the preface to Heather Davis's *Plastic Matter* that her own grandfather had, whilst working at Dupont, been involved in the development of the plastic milk sachet, part of what she calls her "complicated inheritances." As she writes, "the initial milk bag had no corresponding container" and her grandmother disliked them, since she had to "keep the bags in a bowl or transfer the milk to a pitcher" where they would "flop around and spill everywhere" (viii). Eventually, writes Davis, "a corresponding plastic pitcher, made from a harder and more durable plastic, was developed to go along with the milk bags" (viii). The example of the milk sachet highlights some of the characteristics of plastic products: as they replace traditional materials, they initially encounter resistance, and one of the ways that they overcome this resistance is by combining with more plastic. Got a problem with plastic? I've got the solution: more plastic! The milk sachet corresponds to what Davis calls the "circular operations of plastic matter" (12), where petrochemicals are often called upon to protect us from themselves, whether synthetic suits for oil workers or plastic linings for landfill.

In this short but theoretically stimulating book, Davis explores how plastic indexes and alters how humans relate to our environment, ourselves, and other species. The key concepts that underpin the books are helpfully encapsulated in its four substantive chapters: plasticity, synthetic universality, plastic media, and queer kin. Plasticity precedes plastic or in Davis's words, "the orientation to matter as plastic emerged long before plastic itself" (25). From at least Plato onwards, matter has been portrayed by some as passive substance to be moulded by hand and by mind; by the sculptor, the artist, the mason. Fast forward to the mid-twentieth century and the early experiments with synthesising natural materials (cellulose *et al.*) have given way to the rapid proliferation of the synthetic polymers that came to be known as plastics. Spurred by the intensive military research that took place on both sides during WWII, by the mid-1950s the German company I.G. Farber began "synthesizing a new polymer almost every day for ten years" (29). If the properties of natural materials had to be accounted for before being given a form, synthetic polymers held open the tantalising possibility that these could be united, that plastics could be given a property that suited its purpose. They could be heavy or light, strong or weak, opaque or translucent, as the circumstance required.

This is not, however, quite the same as claiming, as Davis does, that with plastics form and substance are created simultaneously (29). Anyone familiar with the plastics industry knows that the nurdle or pellet (substance) precedes the form that it is then given through blowing, extrusion, or injection techniques. Davis must know this too, but there is very little information about the manufacture of plastics in this book. Davis writes that "synthetics appear virtually out of thin air, or from the imaginations of chemical engineers, forgetting or rendering invisible the infrastructures, ideologies, labor, and materials essential to their production" (47), attributes of what she calls plastic's "synthetic universality." Yet if one task of the critical plastics scholar is to reveal some of these alienated facets of the material, we could have perhaps expected to find more about plastic's labour regimes and infrastructures in this book.

In fairness, that is clearly not where Davis's main interest lies, which is instead centred not only on plastic matter but on plastic time: the ways that plastic connects us with both our planetary ancestors and future generations. Another circular feature of plastic then is that it returns, however altered, to its original form – (techno)fossil – and in this sense, Davis asserts, "plastic has the ability to take us back and forward in time, millions of years, to be a vector of time travel" (55). Before the digital revolution and indeed as part of it, plastics have also

enabled us to freeze a moment in time through their deployment in visual media, the “films” that we watch indexing the (celluloid) plastic film that was essential for the capture and preservation of the image. This benevolent use gives way in Davis’s telling to what she calls “petro-time,” a piling up of pasts through photography but also the way that the toxic legacy of petrochemical production cannot neatly be inserted into a chronological frame. In places like Rochester, former headquarters of Kodak, past environmental crimes such as groundwater pollution continue to unpredictably haunt the lives of its now predominantly black residents. Chemical exposure can remain as latent harm, surfacing only in later generations, its origins diffuse and difficult to trace. Kodak filed for bankruptcy in 2012, and is unlikely to be settling any medical bills.

Davis’s final substantive chapter turns to queer theory – she opens with the memorable vignette of a Norwegian fisherman who caught a cod that had swallowed a dildo – to suggest that we might think of plastics and the bacteria that break them down as “queer kin.” This is an intriguing thesis that posits an alliance between queer unproductive futures, and the negative impacts that (petro)chemicals are thought to be having on fertility. Many of the anxieties about threats to reproduction, Davis notes, are tied up with “the perceived threat to traditional masculinity” and heteronormativity (88). Nevertheless, an alliance between toxic plastics producers and the LGBTQIA+ community is a queer one indeed, and Davis acknowledges the challenge of celebrating queer body formations whilst also holding petrochemical companies responsible for the harms that they disproportionately visit upon Black, Indigenous, and poor bodies. There is a hint of search for redemption in Davis’s final chapter: perhaps by hacking heteronormative reproductive futures plastics might at least spite the patriarchal system that spawned them?

There are of course more conventional redemptive features of plastics, yet few are to be found in this book because there is little about human attachment to plastics in everyday life, about the “social life of plastic” in Appadurai’s sense. For Davis, plastics maintain themselves “stubbornly apart from the relations of the world” until they are eventually “marked by the passage of time, by the inquisitive gestures of animals, by the roots of plants and the digestive capacities of microbes” (55). Yet whilst it is true that synthetics do not “tell the stories of the earth” (ibid) as rocks do, they can tell stories of humanity large and small. Individually, a bottle might bear the trace of being chewed, a jacket worn down by the elements, a plastic bag the imprint of fingers that have shared its load. Future generations will decide the lesson to be

drawn from the story of how plastics found their way into every surface of the earth, our food chain, and our blood streams. Yet the story of plastics, as this timely book indicates, cannot be told without reference to wonton chemical engineering, prolific production and disposal, a belief in the superiority of the synthetic, and a resultant accumulation without metabolization.

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