

*Introduction*

# **Anthropological Ideas of Pollution Revisited**

Categories, Values and the Legacy of Mary Douglas

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Chemical contaminant or abhorrent sexuality? 'Pollution' tends to be used in anthropology in two distinct ways. The term is, perhaps most obviously for those outside anthropology, used to refer to biological pollution: the physical threat to human (and other) life and health from 'contaminants' which threaten a previously 'pure' environment, for example, chemical, airborne, radioactive, or ecological. But, and more in line with classical anthropological work on this field, anthropologists also use the word to refer to social and individual challenges to a cultural idea of purity which may be seen in terms of religious practice, food-stuffs, social and sexual differentiation, and etiquette. Conceptualizations and understandings in the first sense are primarily naturalistic, cause and effect related, explanatory and empirical; in the second sense they are personalistic and interpretative, humanistic. 'Pollution' in both senses is an inherently negative state of affairs, and the concept shifts us into related ideas of purity, order (and disorder), to forms of categorization, and to the moral values and framings intrinsic to these ideas. For those of us who work with bodies and on medicine, notions of pollution and its moral connotations seem particularly pertinent, weaving into and through our objects of study in different ways and with different consequences. This collection draws together ethnographic work from a diverse range of contexts to consider how bodies, health and moral framings connect to, build on, and perhaps allow us to reconsider ideas of pollution core to the discipline.

## Pollution, Purity and Danger

Conceptions of pollution, purity, and ‘taboo’ have long been central to the field of social anthropology. Early work (e.g. Frazer 1922; Durkheim [1912] 1915) took these notions as exemplifying ‘primitive’ societies where transgression of locally meaningful restrictions had important moral and social impacts which were core to cultural organization, values and actions. However, despite this earlier rather functionalist framing, it is the work of Mary Douglas that has been most influential and enduring. Published over half a century ago, Douglas’ 1966 book *Purity and Danger* brought an approach which moved pollution from a concern within ‘simple’ and ‘primitive’ cultures to a conceptualization that creates and reinforces order and systems across all societies, including 1960s’ Britain. Douglas’ now classic conceptualization of dirt and pollution as ‘matter out of place’ (and from which we take the title of this book) is part of a piece of work that focuses more broadly on social systems and ordering, the significance of the boundary (including the boundaries of the human body) as well as a concern for those entities that fall between the categories created within these systems. Douglas’ thinking continues to resonate with anthropologists as well as those beyond the discipline, and in relation to a range of different topics. As Duschinsky (2016: 8), one of her critics, notes, *Purity and Danger* remains an ‘important provocation’ to contemporary research, contributing to ‘conversation that contaminates conventional disciplinary boundaries’.

*Purity and Danger* is now considered a foundational work within symbolic anthropology as well as drawing attention to the fact that the anthropological lens used to explore other societies may also be turned onto ‘home’ cultures. Indeed, in the case of *Purity and Danger*, a lens on the anthropologist’s home can be seen as operating in two ways. The first of these is that there might be consideration of anthropological concepts and their operationalization in relation to the societies in which anthropologists and the universities they worked in were mostly based in at this time. The second is that cultures of home are also brought to the fore in Douglas’ focus on the everyday functioning of the household. Cases of categorical and moral ordering – shoes are dirty on the bed but not on the floor – are drawn from seemingly boring and innocuous home practices such as cleaning and preparing food. Douglas’ theoretical explorations were thus rooted in the everyday, and in everyday activities frequently undertaken by women, at a time when anthropological topics, anthropology as a discipline (and academia more broadly) were mostly dominated by men and men’s activities. In *Purity and Danger* we find the

private sphere, as well as the public sphere, to be just as implicated in these constructions, and worthy of investigation and inclusion.

The book's approach more broadly can be seen as emerging from, and in many ways still located within, a particular period of time and a social (and anthropological) moment. Richard Fardon, a biographer of Douglas, suggests that *Purity and Danger* can be 'read as a message in tune with an era that fancied itself as a time of liberation from rules' (Fardon 2018: 24) as we recall the changing cultural dynamics of the 1960s. It is evident too that Douglas' concerns and approach can be related to her own experiences and interests. She draws on her African fieldwork with the Lele, her close examination of the Bible as a practising Catholic, and her experiences within the home to make her arguments. Fardon (1999) has pointed to particular life experiences, such as attending a restrictive Catholic boarding school, as key to her interest in ordering and categorization. We might note too that in the years since the publication of Douglas' book, pollution in its material, contaminate sense has arguably become more dominant than when Douglas was writing this work. What pollution 'is', the images it conjures up, and its visibility has changed from the pre-Chernobyl and pre-Bhopal context of 1960s' Britain. Pollution is now present in everyday discourse, with air pollution, for example, part of daily weather reports. Contemporary concerns about air pollution, land contamination, chemicals, microorganisms and toxic substances in oceans and waterways have shifted our focus away from the symbolic to material aspects of pollution and their effects.

However, despite being clearly situated in its time and its author, Mary Douglas' work continues to remain relevant, not least in how we understand what makes something polluting. A key aspect of Douglas' theoretical contribution relates to how boundaries themselves might be seen as ways through which meaning and purpose are established. 'Right' or 'proper' places, and their edges, become visible when boundaries are crossed by a transgressive object or person. Through Douglas' work we find that to pollute is to fail to remain in place, or to fall between places as a disagreeable interloper that does not sit within established categorical ordering. Within this mis-placing is an implied moral framing; pollution is inherently a negative categorical disorder. Pollution is both an issue of place and the right place: a movement into the wrong place. Not only do these ideas of pollution reveal the boundaries around place through their transgression therefore, but they also allow investigation of the value-laded assumptions and logics within the place and placing classifications where they sit. As such, concepts of pollution also connect us to related notions of purity, disgust, and risk, including the actions undertaken

around these, both at times of transgression and as part of daily life. Douglas' conceptualization of 'matter out of place' is therefore not only about taxonomic ordering but the moral ordering required for a coherent cultural cosmology and related expectations and practices for everyday life. Not only are these ideas still relevant but exploring them in relation to more contemporary contexts may indeed build on Douglas' earlier conceptualizations.<sup>1</sup>

## Categorical Shifts and Changing Boundaries

There has been much recent work within anthropology that focuses on chemical pollution and toxicity (see, for example, the edited double-issue on 'Toxic Flows' in *Anthropology Today*, Geissler and Prince 2020a; Widger 2021). Such research frequently intersects with the work undertaken within related disciplines such as geography, history, and Science and Technology Studies (STS) (Geissler and Prince 2020b), and has fed into the development of novel methodological approaches within anthropology, such as chemo-ethnography (Shapiro and Kirksey 2017) and bio-ethnography (Roberts 2019). Work in this area has highlighted the different relations, flows, and implications of living with toxicity. Linking to concerns around the Anthropocene (e.g. Tsing 2015; Tsing, Swanson, Gan and Bubandt 2017) and to climate change (e.g. Baer and Singer 2018), post-colonial legacies and capitalist expansion and values have been brought to the fore in such work, for example, Haraway's (2015, 2016) addition of the notions of the Plantationocene (damage to farms, forests and pastures from the transformation of these through slavery and other forms of exploited and alienated labour, Haraway 2015) and the Capitalocene (damage resulting from capitalist systems and expansion) to notions of the Anthropocene. The relationship between apparently 'social' categorical orders and their material impacts is difficult to unpack but it is the very point of these investigations. Biological impact is determined by inequality and social stratification as well as chemical pathways, the former not only making exposure more likely but more salient for already disadvantaged groups. For example, disposal chains moving chemical waste from the global north to the global south illustrate some of the ways through which pollution and the control of contaminants have the potential to create and reinforce inequalities, which recall earlier colonial relations (Pratt 2010; Nunn 2018; Balayannis 2020; Liboiron 2021). Poorer neighbourhoods and those made up of marginalized populations are often situated in areas more likely to be affected by pollution, areas with less social capital and agency to argue for redress

(Hoover 2017; Pollock 2021; Davies 2019). Furthermore, such chemical contamination can have greater impact on bodies made more susceptible through the stresses of social disadvantage (McEwen and Seeman 1999; Lipfert 2004; Clougherty and Kubzansky 2009). We also learn through careful ethnographic work, such as that undertaken by Adriana Petryna (2002) on the impact of the Chernobyl disaster on then-Soviet Ukraine, of the wider moral and political consequences of polluting events and the ongoing complexities of living with, and after, the exposure.

Anthropological and related work on pollution-as-material-contaminant therefore illustrates that social and symbolic framings are also implicated in this form of pollution; as we look closer at social and material contaminant forms of pollution, the distinction between these becomes less clear. Mary Douglas (1968) also refers to both physical and symbolic matter in her theorizing – matter is out of place literally and/or metaphorically, and the two loop into and around each other. The symbolic has tangible material impacts, and vice versa – they are not independent from each other. Such a framing leads to more nuanced approaches to the relationship between the material and symbolic in relation to pollution, for example in exploring how societies have recognized and dealt with (or concealed) biological threats, and the relationship of morality, responsibility, and outrage. These might also bring us to ask different sorts of questions and draw attention to different elements of our fieldsites: Douglas' work reminds us that there is value in recognizing, and potentially bringing together, the material and symbolic in anthropological analysis.

As such therefore, recent approaches to pollution, particularly as a material entity, may bring further nuance and development of Douglas' ideas. The Chernobyl and Bhopal disasters in the 1980s – both significant events in the understanding of pollution and its repercussions – bring in additional elements to how we might understand pollution, such as scales of contamination and levels of intensity. Scales and intensity complicate Douglas' framing of Category A, Category B and the stuff in between; Douglas' work leaves scarce room for considering spectrums. Within her discussion there is little reflection on things being 'a bit polluting', 'slightly more polluting' or 'very polluting', all notions with which scales and readings of levels of material pollution allow us to be more familiar. Notions of exposure are along a continuum for example, with markers indicating crossing into a level that might be seen as 'dangerous to health' or 'not so dangerous'. This may also lead us to question the possibility of ever being able to make clear distinctions between purity and impurity (Geissler and Prince 2020b).

Pollution that materially crosses the boundaries of geographical place, leaking and spreading beyond the borders of nation states and domestic

infrastructures, calls for united global responses and the introduction of policy and standards. It is harder to locate understandings of pollution as based within a particular geographically-located 'culture' or 'society', as Douglas' work implies. Place that matter is 'out' of takes on different dimensions and includes an expansive range of actors. The key role that multi-national industries and technological developments play in examples of particulate contamination highlight the interconnection between different sites as well as uneven power relations; scales of pollution can be vast and hierarchies deeply pertinent. Questions of independent measurement, standards, containment, decontamination, and the impact on human and wider environmental health become important. Time as well as place is stretched, bringing in histories that reach back to colonial pasts and practices that took place during the Industrial Revolution. Such timescapes also stretch far into the future as contaminants slowly leach into their environments and break down (the pollution caused by Chernobyl is estimated to require at least another 20,000 years to clear (Harrell and Marson 2011)). As well as shifting conceptualizations of time and place, hierarchies of scientific expertise and notions of risk feature more significantly in this field than the religious observances and taboos that are central in Douglas' *Purity and Danger*.<sup>2</sup>

The making, reinforcing and shifting of categories and the process of classification has been central to much other work undertaken within anthropology and cognate disciplines, particularly in relation to science and medicine, e.g. Geoffrey Bowker and Susan Leigh Starr's work on sorting and classification (2000), Ian Hacking's work on the looping effects of categorization (1995), and a range of scholarly work on diagnoses and labelling (e.g. Brown 1990, 1995; Jutel 2009). Such work draws attention to the situated and contingent nature of categorizations, including those being introduced to, and used within, contemporary biomedicine. Through such examples we note that the growth of new categories, and the reinforcement of existing ones, often emerges from a need to pin down or understand a particular phenomenon, to better comprehend relationships of connections, or to expand an existing limited classificatory system within existing conceptual frameworks and understandings. We can also consider how earlier categories have shifted or become less relevant. This includes the social categories that may have appeared to have been so clear (e.g. gender, class, ethnicity) within 1960s' Britain when Douglas was writing, if indeed they were ever as clearly defined as they appeared (Latour 1993). While it is increasingly impossible to draw and maintain many of the same boundaries as we did previously (Geissler and Prince 2020b), it is also worth considering who maintained these earlier categories and how. Pels and Salemink (1999) for example

point out that anthropologists, particularly those working in the early days of social anthropology, have failed to recognize the role of colonialism in maintaining the cultural structures often central to their work. This includes, for example, the Indian caste system (Pels 1999) and other structures upon which Douglas bases her discussions.<sup>3</sup>

Finally, it is worth noting too that the boundaries between anthropology and other disciplines are increasingly difficult to maintain, as indicated through the development of novel anthropological methods noted above, the move to different theoretical orientations such as Actor Network Theory (Latour 2007) and more-than-human or multispecies approaches (for an overview see Kirksey and Helmreich 2010) as well as the different sources we have drawn on in this Introduction. Recent theoretical orientations have opened up the anthropological lens to other actors and relations that might be included within anthropological investigation. The boundaries around what constitutes 'the social' itself have itself shifted and widened, with both our discipline and objects of study becoming more fluid. These societal shifts might be linked to a greater tolerance for unclear boundaries, and are perhaps indicative of living within late modernity (Beck 1992; Giddens 1991) with an associated desire for fluidity and liquid states as post-modern subjects (Bauman 2000). But perhaps more significantly, a social value has been placed on opening out these categories. Categorical shifts have been seen to better 'fit' to contemporary life or adapt to dynamic social worlds, enabling recognition (and validation) of living and identifying in diverse ways. These can allow a renegotiation of prescribed power relations and positioning that result from, and therefore also reinforce, structures like colonialism which have classically benefited some over others.

In an anthropological sense, such opening up of the discipline and its methods can also be generative for other forms of thinking and analysis. However, it is important to note too that boundary shifts have also raised additional questions and problems, and new 'in' and 'out' groupings. Rather than dispensing of boundaries altogether, boundaries have been re-drawn elsewhere, and, as Douglas argues, become meaningful in relation to these new contexts. How, and why, these have been redrawn, when, and with what (moral and other) implications and forms of maintenance required, can become productive research questions, which are explored within a number of the chapters within this collection.

The relevance of such questions hints at some of the ways through which the work of Mary Douglas stimulates analysis in a landscape where our objects of concern, and our methodological and disciplinary approaches, have moved far beyond the world evoked in *Purity and Danger*. There is much within Douglas' thinking that continues to be

relevant and generative. In this collection, rather than revisiting her work and applying this to novel contexts of chemical pollution, for example, we instead focus on work that builds on Douglas' important contributions to the field in ways that may be more masked by the recent anthropological focus on toxic environmental substances. The chapters speak to wider themes around bodies, dirt, and place, sites of moral inversion and reinforcement, and disgust and taboo in relation to psychological investigations, allowing different important aspects of Douglas' conceptualizations to emerge. Through such work we find a deeper exploration of these ideas and the novel relations that are forefronted or brought into question by her approach. In doing so, we again bring focus to pollution as an anthropological motif and the enduring work this provides as an analytic tool with which to think.

### **Pollution through Bodies, Morality and Place**

In this edited collection, we bring together chapters that revisit pollution and the ideas of Mary Douglas through exploration in, and implications for, different contexts and fieldsites. Crossing Ghana, India, the Netherlands, Japan, Trinidad, the UK, the USA and Outer Space, the chapters draw on different theoretical orientations from material and symbolic approaches to anthropology as well as the psychological implications of Douglas' work. Douglas herself drew on the psychological understandings of the day, including cognitive dissonance theory, in crafting her work (Duschinsky 2016) and the chapters reflect a range of different reverberations of *Purity and Danger* for scholars working on bodies, health and medicine. Across these contexts and orientations, the construction and transgression of different categories, or a failure to sit within these, is evident, with moral values and their implications interwoven and central to notions of what might be considered polluting, when, why, and how.

The first section of the book reviews pollution in bodies, dirt and place. Sjaak van der Geest leads off by looking at three aspects of defecation: dirt/shit. He elaborates (and sometimes disagrees with) Douglas' notion of matter out of place by exploring three effects of faecal dirt on human interaction and communication: namely disgust, humour, and rhetorical emphasis. With Dutch and Akan examples, he argues that the out-of-placeness of dirt does not necessarily imply a native judgement about disorder with a command to restore order. It can also provide an opportunity to relativize the established order in a humorous way or to call to attention to matters through metaphors of dirt.



Chapter 2 (Rebecca Lynch) follows this excretory lead by recounting how women understand and deal with 'urinary incontinence' (as the medics call it). Conversation with women being treated for the condition emphasize the issue of anticipating, preventing, and concealing leaks of urine in the course of everyday life. While the clinician's concern is with quantity (how many pads?), for the women a major concern is the place of leakage. At home?: not too bad. On public transport?: disaster. Urine, argues Lynch, is an anomalous substance which is not exactly part of the body but not totally divorced from it either. Leaking in general is associated with the female body (lactation, menstruation), as is care for those who leak (babies, the elderly). Leaking women perceive themselves as older because they leak: to leak rather than to excrete signals bodily decline and loss of self-control – 'I had wet myself'. Leaking involves a concern with smell, being 'dirty', and avoidance of intimacy. The place of 'place' of pollution is made by incontinence pads, toilets, seating arrangements, husbands who know, colleagues who don't, daughters with cover stories, feeling safer or more at risk. Qualifying Mary Douglas, Lynch argues that dirt and place are continually defined by women's daily practice which could be diverse, contradictory, and conflicted. Women make the categories of dirt and place rather than already existing 'out there' beyond the individual.

Chapter 3, 'Yesterday's coffee is tomorrow's coffee' (Aaron Parkhurst and David Jeevendrampillai), takes human's bodies and their excreta away from Earth and into Outer Space. The main concern for the international space station and for planning future habitats on the moon or Mars is the issue of how to process human bodily waste and if possible, how to recycle it. How dirty is dirt? Can we use the fluid content of urine derived from yesterday's cup of coffee to prepare fresh coffee for tomorrow? What about shit? An engineer who had worked on an Antarctic base agreed with the anthropologists in a group to plan off-world habitats that a proximity to faecal smell determined hierarchy on the base. But the architects told the anthropologists they have over-emphasized their traditional interests: 'you guys must be loving this!'. The chapter notes that the development of 'closed loop systems' for conserving and producing coffee can never be 100 per cent perfect and may have directives for more ecological terrestrial life. Considering what filth is in space helps us to clarify what filth would be on Earth.

The chapters in the next section deal with different notions of purity and symbolic inversion. Roland Littlewood in Chapter 4 argues that accepted social systems of purity/pollution may be opposed by individuals or groups who choose to practise deliberate impurity forsaking the value of purity itself. Such antinomianism may privilege a more

internalized 'moral' perspective than the previous institutionalized social distinctions. They offer the possibility of reincorporation of the abject, thus enabling a less stigmatizing position for the sick and the mad. The Aghoris of India reject the caste system and consume alcohol, bodily excreta, and human flesh. They sleep and meditate on top of corpses, they engage in coitus with menstruating prostitutes. On behalf of other Hindus, the Aghoris absorb pollution and have recently established a network of orphanages and medical clinics. The Earth People of Trinidad similarly engage in deliberate foul language, and go naked into town provoking the police and citizens in a public rejection of the modern state, education, medicine, and religion.

Ellie Reynolds in 'Orgasmic Excess and Alienation' considers InTouch, a transgressive female-led group. They practise public female masturbation to the point of orgasm, not as with the Aghoris or the Greek philosopher Diogenes as an explicitly antinomian practice where value lies in its pollution, but as a therapeutic and spiritual release of psychic energy, a concept they derive from a Californian New Age healing and Chinese medicine. This energy communicates itself into others, into group solidarity and work for the community just as the space station translates its pollution into a useful resource. Ironically, in the course of InTouch's transition from a small enthusiastic space into a commercial operation, some members accuse it of having 'polluted' the original teaching.

In Chapter 6, Joseph Calabrese emphasizes that Douglas made a clear decision between symbolic (social) pollution and material pollution, arguing against the extreme relativist position that as the world has to be perceived by human beings, 'material pollution' is a cultural production. Calabrese suggests that in Western industrialized societies, particularly the United States, having the War on Drugs ethnocentrically positioned psychoactive substances (symbolic alien pollutants from indigenous cultures) as really physically polluting and dangerous. Supported by major pharmaceutical companies and many physicians, medico-legal prohibition of these substances has resulted in the incarceration of hundreds of thousands of non-violent offenders who, in the United States, perform prison labour vital to the functioning of the penal system. Drawing on Rene Giraud's emphasis on vital social roles or scapegoats in maintaining the social stability and control, Calabrese argues this constitutes a new form of slavery. He argues that many polluting psychiatric substances like cannabis, ibogaine and peyote have certain positive mental health benefits. He concludes by a note common to all ethnographers that it is the social context of institutions that is significant not the presumed material core.

The chapters in the last section take us in a more psychological direction. Simon Dein looks at Mary Douglas' interest in Leviticus and Deuteronomy to outline Israelite food prohibitions in the contexts of larger notions of pollution including aberrant sexual practices, bodily functions, disease, and blasphemy. Criticizing her use of a Durkheimian structuralist approach to pollution, he argues for more bodily origin of pollution categories in individual emotions, notably disgust. He summarizes recent work on disgust which support his critique of a purely cognitive and structuralist approach. By contrast Quinton Deeley (Chapter 9) looks at the history of the word 'taboo' as he considers forbidden practices among the Huaulu of the Moluccas, notably the forbidden practice of eating crocodile meat. Itself overdetermined, taboo keeps powerful emotions at a distance, dissipating attention from the ideas and associations of the taboo it itself manages. Deeley, like Franz Steiner, cautions against a single psychological process underlining taboo, but nevertheless looks for source models in cognitive neuroscience and psychology which might help us to understand the power of taboo by motivating avoidance and inhibition of thought and action.

Deeley considers neurocognitive aspects of the amygdala, the frontal cortex and the insula, which mediates disgust and the rather different patterns of associative learning and symbolic learning. A given avoidance norm, whether of food, sex, bodily secretion, or violence, acquires a rich somatic density, an emotional significance which 'over-determines' a particular conformity. He ends by considering the psychiatric examples of the two poles of taboo: criminal psychopathy (minimal observance) and clinical obsession (maximum observance).

In his concluding Afterword to the collection, André Singer highlights the powerful role that anthropologists can have in situating, gathering, and presenting accounts of those affected by pollution. Reflecting on Douglas' concerns in *Implicit Meanings* (1975) in relation to radioactive pollution, Singer moves beyond the focus on more symbolic aspects of pollution covered in previous chapters to consider political decisions that can drive pollution. He describes the film he made on the consequences of nuclear bomb testing in Nevada and Kazakhstan during the Cold War. This work considered the impact of material pollution on two communities many thousands of miles distant from each other but confronted by the same politically driven pollutant circumstances. His interviews with some of the scientists involved and some of the survivors describes how the two areas, one in the United States, one in the Soviet Union, were selected based on their relative remoteness and for their 'low population density': both in fact including numbers of indigenous inhabitants –

Kazak farmers and Shoshone nomads. Both groups were assured of the patriotic necessity of the tests while precautions and warnings of radioactivity were downplayed. The Kazaks were rewarded with distribution of vodka once they saw their domestic animals die in strange ways. After the international ban on above ground tests in 1963 and later cessation of nuclear explosions by most countries involved, survivors at the two test sites were permitted to meet together; they compared notes, recognizing the similarities of government coercion, sickness and environmental devastation on both sides. Singer's Afterword is a reminder that whether considering symbolic or material aspects of pollution, there is real importance in describing neglected topics, disrupting given understandings, and 'giving voice' to those ignored in other accounts.

Through the chapters notions of pollution as 'matter out of place' are situated in a range of different contexts and as a concept with psychological, as well as anthropological traction. Thinking with and through Mary Douglas' work in these different locations illustrates the continued salience of her thinking, as well as the presence of pollution in the everyday. As is evident in Douglas' classic book, small practices of negotiation and working with ideas of purity, dirt, and ordering take place continuously throughout daily life, through, for example, cleaning, food preparation and consumption, and of course excretion activities. These practices reinforce that constructions of pollution don't happen elsewhere or separately from us but are made and re-made through our everyday actions. Pollution remains a relevant topic not only as an anthropological motif or aspect of theory therefore, but as an embodied aspect of mundane daily life, including in the lives of anthropologists themselves.

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## Notes

1. The work of Mary Douglas is perhaps particularly ripe for a contemporary revisiting and this book might, to some extent, be seen to continue some of the discussions in Duchinsky, Schnall and Weiss' edited 2017 collection, *Purity and Danger Now: New Perspectives*. Duchinsky, Schnall and Weiss' collection aims to 'shed fresh light' on topics raised in *Purity and Danger* in relation to more recent thinking across the social sciences and humanities. We draw on *Purity and Danger* for a similar stimulus but focus specifically on anthropological work on bodies, morality, and dirt, and how Douglas' ideas continue to resonate and have particular meaning for scholars working in these fields, especially in the context of recent and developing work on material pollutants.
2. Douglas' later work revisits and further develops her thinking on pollution in *Purity and Danger* in relation to risk, specifically relating these to 'Western' or Euro-American contexts (Douglas 1982, 1992).
3. We are grateful to Sally Atkinson for drawing our attention to Pel's work and relevance here.

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