

PLASTIC EFFECTS

The “Ongoing Process” of Hair Removal and the Multiple Temporalities of Plastic Pots

Louise Rondel

Abstract: Examining how the polypropylene pots in which depilatory wax is packaged are active in the production of ‘feminine’ hairlessness in London’s beauty salons and what happens as they are disposed of and incinerated, this article focuses on the making of bodies to explore plastic’s temporalities. Centering the materiality of the plastic packaging (strong, light, flexible, replaceable, disposable), the article explores what the pots *are* and so what the pots *do*: what they *effect*, including how plastic comes to configure bodies in different and potentially harmful ways. Considering how plastic endures in bodies brings to the fore its multiple temporalities, heterochronic, layered and folded into one another.

Keywords: beauty work, bodies, ‘femininity’, materiality, plastic packaging, pollutants, temporalities

When interviewing Marie, a white, middle-class professional British woman in her fifties, about her beauty practices, the conversation turned to body hair removal. Marie is a long-time if reluctant salon customer. Indeed, she spent much of the interview telling me about the treatments she does *not* have, emphasizing that she would much rather “have a nice breakfast” than spend time going to a salon or putting on make-up. Nonetheless, counterposed to other practices that she considers “vain,” she somewhat unwillingly undergoes a number of hair removal treatments, listing leg, bikini line, and arm waxing, as well as eyebrow and upper lip threading. For Marie, these hair removal practices are “necessary” for a ‘feminine’¹ appearance. It is also, she wearily told me with a laugh, “quite an ongoing process, because [the hair] grows back” (interview, March 2017). As soon as the treatment is complete and the unwanted hairs have been ripped out, they start growing again. Skin might



appear smooth for a fortnight or so, but slowly a soft fuzz reappears, becoming more and more noticeable. After four to five weeks, one has to return to the salon and do it all over again.

Centering the active role of plastic packaging in this never-ending production of ‘feminine’ bodies in the beauty salon, in addition to considering how other bodies are impacted by this consumption practice as the spent goods are disposed of, this article explores plastic’s multiple temporalities. As suggested by Marie, the task of making one’s body hairless is interminable. In London’s beauty salons, the wax used to do this is supplied in polypropylene pots,² a key material factor in enabling the repetitive removal of unwanted body and facial hair. These pots arrive in salons full of wax, are quickly used and emptied over the course of six or seven treatments, and are discarded. Transported across London in the back of refuse lorries, they are taken to a municipal waste plant where they are incinerated, with a plume of smoke being released from the chimney stack.

Taking the plastic pots as ‘vibrant matter’ (Bennett 2010), the article analyzes how bodies are shaped in interaction with the pots, both in the salon and in the wider city as ‘we’³ inhale what is emitted from the incinerator (Stallard et al. 2024), with differently distributed degrees of harm. Plastic is shown to have multiple temporalities or, in Laura Bear’s (2014: 5) terms, “multiple temporal rhythms that converge in [a] timespace.” The pots participate in a constant march from factory to marketplace to incinerator as they are filled, used, disposed of, and replaced (Wang 2011). They play a part in repetitive beauty practices and the ensuing entrenchment of socio-cultural expectations of a ‘feminine’ appearance. They are imbued with both the deep history of oil and the (unknown) deep future⁴ of potential toxic violence (Nixon 2011). They have an ability to be ‘always-new’ and, interrelatedly, are “already-waste” (Hawkins 2013a)—and they persist, materially and corporeally. Through an attention to the polypropylene pots, what they *effect*, and the bodies they produce (materially and conceptually) at different moments in their ‘social lives’ (Appadurai 1986), this article traces plastic’s time(s) not as linear or singular, but rather as heterochronic, manifold, layered, and knotted together (Bear 2014: 7–8), folded into one another.

Before turning to the main discussion, it is important to elaborate on the use of ‘effect’ and what plastic *effects*. I employ ‘effect’ as a verb—‘to effect’, “[with the] power to bring about a result; to bring about; to produce a result”—as distinct from ‘affect’, “to have a material effect on (something) or produce an alteration in it; to act on (somebody or their feelings) so as to bring about a response” (Allen 2012). With a nod to the use of ‘affect’ in forwarding what a body (human or otherwise) can do or its capacities to affect (see Anderson 2014: 10–11; Deleuze and Guattari 1987: 299), I employ ‘effect’ as a verb to emphasize the active role of the plastic and what it brings about. Rather than the more usual ‘effect’ as a noun or ‘affect’ as a verb in everyday language and, conversely, in academic theorizing, where it is often used as a noun (Gregg and

Seigworth 2010), my somewhat unconventional use of ‘effect’ as a verb calls the reader’s attention to the liveliness and power of the material in question. In this framing, I follow Gay Hawkins (2009: 193, emphasis added), who contends that, far from being passive, things “*prompt* certain actions”; or Sophie Watson (2015: 877; emphasis added) who posits that objects “*animate* ... spatial forms and socialities.” Considered thus, the plastic pots not only produce an effect but, more emphatically, have an active role in *effecting*, for example, an event or an action, a practice, a change, a bodily condition or configuration.

To analyze plastic’s multiple temporalities, the article examines how the plastic pots effect bodily configurations in two interrelated ways. First, the article considers how plastic, in rendering beauty products usable, has a role in effecting the production of the smooth ‘feminine’ body and the associated sedimentation of the ‘hairlessness norm’ (Tiggemann and Kenyon 1998) as a bodily expectation for women.⁵ Second, as the single-use packaging is invariably disposed of and taken to one of London’s incinerators, the article explores how plastic’s traces are released in the air that ‘we’ breathe, permeating and forming bodies beyond the salon, being incorporated differently by differently positioned bodies.

Thinking through its role in producing bodies in these ways highlights how plastic persists. I unpack how this persistence is inextricable from plastic’s properties and affordances, its disposability and replaceability, its ability to be ‘always-new’ and its positioning as “already-waste” as pots of wax are emptied and discarded and new ones manufactured and supplied to the salon “without concern” (Hawkins 2001: 9). These qualities are borne from the ‘deep time’ (Irvine 2014) of oil, a (seemingly) infinite feedstock with (seemingly) endless and malleable uses as multiple times become layered and multiple rhythms converge (Bear 2014: 5). Through an examination of repetitive beauty treatments, the disposability and replaceability of the products and the material and corporeal ‘afterlife’ (Hawkins 2009: 192; 2013a; 2013b) of plastic as waste, this article makes two key contributions. First, through an attention to materiality and corporeality, it draws together research from critical beauty studies considering why women engage in beauty work with literature that has examined how plastic now pervades every aspect of our lives (Altman 2015; Davis 2015; Ghosh 2019; Liboiron 2013). Second, the article contributes to literature on the multiplicity of time (Bear 2014, 2016; Pedersen and Nielsen 2013) by exploring “the time that leads into and flows out of”—*and* is constitutively entangled with—the present of the depilatory practice (Irvine 2020: 82) and underlining how this is palpably manifest, in matter and bodies.

I begin by reviewing literature from critical beauty studies that has examined the increasingly entrenched notion that a ‘feminine’ body must be a hairless body and the repetitive consumption practices to which this has given rise and which, in turn, further enable this appearance. In order to emphasize the active

role of the polypropylene pots in depilatory practices, I put this research into conversation with work from across the social sciences that has highlighted the absolute ubiquity of plastic in our everyday lives. With this theoretical framing in mind, I then outline my methodological approach, which attends both to the reasons why women engage in beauty work and to the liveliness of materials in these ‘feminizing’ practices. This ‘materio-centric’ (Hurdley 2010) approach highlights how plastic packaging actively participates in the salon and beyond, as waxing treatments are carried out and empty containers are disposed of. In the next two sections, I consider how plastic works in the salon to produce smooth ‘feminine’ bodies and long-standing notions of ‘feminine’ hairlessness, as well as what happens once the empty pots are thrown ‘away’,⁶ how their remnants endure in bodies as the salon’s interminable waste is incinerated and the emissions are released into London’s air.

The ‘Hairlessness Norm’ and the Pervasiveness of Plastic

Research in critical beauty studies has shown how beauty salons are places where primarily women “invest in femininity” (Black and Sharma 2001: 114); where, through their engagement with different forms of beauty work, “women are made women” (Widdows 2018: 11). Accompanying white, predominantly middle-class female customers to their salon appointments in London and interviewing them about their beauty practices (and as a white, middle-class female salon customer myself), I found that hair removal was more often than not mentioned as an important part of this ‘feminizing’ work: every woman with whom I spent time engaged in some form of body hair removal. Underlining the perceived necessity of depilation, visible body hair was described by research participants as “horrible,” “gross,” and “disgusting.” Removing it meant that they felt able to wear a “feminine frock” or even just to show their legs in the summer (interviews, December 2016–June 2017). These reactions are unsurprising given that since the 1990s, researchers in the UK, the US, and Australia have noted the increasing ubiquity of hairlessness in order to appear ‘feminine’, where “even a small amount of hair growth may be understood as a threat to femininity” (Toerien and Wilkinson 2004: 88).

This has resulted in what Marika Tiggemann and Sarah J. Kenyon (1998) term the ‘hairlessness norm’ for women, an entrenching expectation where visible body hair has become largely anathema to a ‘feminine’ appearance or ‘taboo’ (Smelik 2015). Extending to ever-novel parts of women’s bodies, at the salon frequented by one interviewee, waxing treatments are advertised for lower and upper legs, bikini line (basic, G-string, Brazilian⁷, Hollywood⁸), nipples, intimate bum, underarm, arms, bum cheeks, navel line, stomach, back, chest, shoulders, eyebrows, lip, chin, nose, ear, and neck. Simultaneously, the

expectation that women ‘should’ engage with these forms of hair removal is growing and intensifying (Widdows 2018: 96–120).

Returning to Marie’s comments with which I opened the article, body hair removal is “quite an ongoing process,” and so one needs to return to the salon again and again and again. The research on beauty practices has largely focused on the socio-cultural reasons that impel women to engage in repetitive and unending depilatory practices. The gendered, classed, and racialized expectations of ‘femininity’ become unveiled, along with how different women differentially meet these standards (or not) and the associated power relations imbued in definitions of ‘beauty’ or ‘femininity’.

It is often overlooked in works on the making of ‘feminine’ bodies in salons that such repetitive practices are predicated upon a whole suite of materials and their properties, the skills to work with these goods, and the replaceability (and so disposability) of spent products and their packaging. I build on the existing literature to additionally explore not only *why* but *how* hair removal happens in a Western European context. It is significant that this ongoing process requires—and, as I argue, *is effected by*—a constant flow of products to and through the beauty salon. Products that themselves are constituted by petro-products, like the wax, are largely packaged in plastic, all disposable, all replaceable. As Rebecca Herzig (2015: 189) instructs in her history of hair removal, in considering *how* depilatory practices happen, my research extends an attention to waxing’s wider “‘upstream’ production and ‘downstream’ effects”—and to how plastic’s past, present, and future are knotted together in the moment of waxing (see also Herzig 2009).

In this way, I add not only to the literature on beauty practices by emphasizing the materiality of beauty work, but also draw it into conversation with work on the pervasiveness of plastic. In their article on the ‘miasma’ of plasticizers, Max Liboiron (2013: 139) precisely describes how plastic completely permeates our lives and bodies: “From the latex paint on the walls, to the carpeting, tiling or varnish on the floor, the chair you sit in, your shoes, watch and cell phone, right down to the elastic in your underpants, you are a Plastic (Wo)Man.” Indeed, it is now axiomatic to say that every aspect of life and every body on the planet contains plastic, that “we are (en)plasticized” (Ghosh 2019: 277; see also Altman 2015; Davis 2015; Mah 2022).

I build on these contentions to examine not only how bodies contain plastic but also how plastic and its petro-properties play a role in *generating* particular bodily arrangements. First, starting in the beauty salon, I consider how plastic packaging enables ‘feminizing’ beauty practices in a material sense: *how* hair removal happens and smooth ‘feminine’ bodies are thus made (and repeatedly so) and, in turn, expectations of a particular ‘feminine’ appearance sedimented. Second, tied in with the repetition of these practices, I also think through what happens ‘upstream’ and ‘down-

stream' of the moment of removing hair, examining the replaceability and disposability of the packaging and how these too lead to plastic's lasting incorporation, as 'we' inhale emissions from the incinerator and bodies are formed in interaction with plastic's remnants.

There are multiple temporalities at play here. There is the ongoing work of hair removal, a treatment that 'needs' to be repeated every five to six weeks in order to maintain a socially acceptable smooth 'feminine' body. There is the entrenchedness of the 'hairlessness norm' for women. There is the fleetingness of the moment of consumption itself (a leg waxing appointment lasts 30–45 minutes). The materials—the wax, the fabric strips, the wooden spatulas, the plastic pots—are single-use, discarded once used, easily and quickly replaced on the beauty therapist's next visit to the wholesalers—a materially prompted, largely petro-given ability to be 'always-new' and 'already-waste'. The deep time of oil is embedded into these goods, "a kind of living dead among us" (Davis 2015: 352). Once finished with, incinerated, or landfilled, what the goods effect persists indefinitely, the deep (and uncertain) future of such petro-products. For example, enduring in the plume from the incinerator chimney as "Azeri lithosphere [floats] off into London air, carrying its carbon load into the atmosphere" (Marriott and Minio-Paluello 2013b: 180; see also Stallard et al. 2024), potentially transported on meteorological currents from Europe to Greenland (Liboiron 2013: 144); or as leachate that seeps from landfill sites "dispers[ing] known, unknown, and unknowable entities ... between geological strata ... between space and time" (Hird 2013: 107–108; see also Hird 2012).

Centering the vibrancy of the plastic pots and the corporeal configurations they issue forth offers a way of thinking across these different scales of plastic time. Through different manifestations in bodies—as the immediate outcome of smooth skin or the long-established norm of hairless 'femininity' or as emissions inhaled with potential future health impacts—plastic's times are shown as distinctively non-linear, rather as multiple and enfolded (Bear 2014, 2016; Pedersen and Nielsen 2013).

Methods: Why *and* How Hair Removal Happens

In exploring how 'feminine' bodies are produced in London's beauty salons, I adopted a methodological approach that aimed to gain an understanding of why women engage in particular beauty practices while also being attentive to the active role of materials in achieving the desired appearance. I started the research by accompanying customers to hair and beauty appointments and interviewing them about their beauty practices. Using a snowballing technique, I recruited fourteen women mostly living in and around an affluent suburban South London neighborhood with a predominantly middle-class population.

All the customers self-identified as female and white; nearly all (with the exception of two who identified as working class) identified as middle class; all were working or had worked in professional occupations; and were aged between 25 and 75. With these participants, I conducted semi-structured interviews, “the agenda ... set by [my] interests yet with room for the respondent’s more spontaneous descriptions and narratives” (Brinkmann 2008: 2). Having gone with these women to their appointments and picking up on details I had noticed while in the salon together, during the interviews I asked the participants to elaborate on the experience of the appointment, why particular treatments were chosen, their choice of salon, past beauty work, and possible future beauty work. The interviews offered an opportunity to ask the customers to actively reflect on their choices and offered insight into why they engage with different beauty practices and, notably from what they recounted, with hair removal.

I additionally interviewed six hairdressers and beauty therapists, usually while they carried out different treatments, posing questions about their work life and their customer base. I spent time in the salons ‘observing’ the beauty therapists at work, keeping in mind Les Back’s (2012: 29) caveat on “how quickly we want to say ‘observation’ when describing social research” when, in fact, all our embodied and sensory faculties are at play. During these encounters, my attention was increasingly drawn to the materials with which the beauty therapists were working, prompting me to consider not only *why* women engaged in such ‘feminizing’ practices but *how* this making of a ‘feminine’ body was actually achieved. In this set of semi-structured interviews, as well as inquiring about beauty services and their daily routines more broadly, I started to specifically ask about the practical intricacies of the treatments and the products the beauty therapists were using. “What are you doing now?” “What is this?” “How does this work?” “What do you do with this?” Through this ‘observation’ and these interviews, the lively role of the different materials in effecting the production of ‘feminine’ bodies in the beauty salon was brought to the fore.

Building on this attention to the materials in the salon, I started to focus specifically on the plastic pots in which wax is packaged, approaching these polypropylene containers as ‘vibrant matter’, per Jane Bennett (2010). Refuting (Anglo-European) historic philosophical notions of “matter as passive stuff, as raw, brute, or inert” which have resulted in the “parsing of the world into dull matter (it, things) and vibrant life (us, beings),” I instead follow Bennett in considering things as “vibrant, vital, energetic, lively, quivering, vibratory, evanescent, and effluесcent” with “a positive, productive power of their own” (ibid.: vii, 112, 1). Things, here, “ha[ve] efficacy, can *do* things, ha[ve] sufficient coherence to make a difference, produce effects, alter the course of events” (ibid.: viii; original emphasis). Thus, the products and their packaging are active participants in the social world. In their vibrant materiality, they

prompt or animate or *effect* particular events, actions, practices, or bodily configurations. Methodologically, this necessitates becoming attentive to the properties and activities of these things—to what they *are* and so what they *do*.

I take this up in two intersecting ways. First, guided by Arjun Appadurai (1986: 3, 5; emphasis added) I consider that “commodities, like persons, have social lives” and that to examine these lives, “*we have to follow the things themselves*” (see also Coleman 2019, 2020). As such, I set out from the salon to follow depilatory wax in its plastic pots across London: from a wax-blending factory to a wholesalers’ store; onward to the salons where the products are quickly consumed; and ‘finally’ to a municipal incineration facility—one of seven incinerators in the capital (Roy 2020) where 63.3 percent of London’s waste ‘ends’ up (London Assembly 2022: 11). Of course, this is far from ‘final’ or the ‘end’ for the pots since, once discarded and incinerated, they have a “material afterlife” (Hawkins 2009: 192); what they effect projects for time unknown into the deep future.

Interrelatedly, as instructed by Bennett (2010: xiii–xiv), in order to explore “a nonhuman, thingly power, the material agency of natural bodies and technological artefacts,” I developed “a cultivated, patient, sensory attentiveness to nonhuman forces operating outside and inside the human body ... an attentiveness to things and their affects” and, I add, to what they *effect*. While following the plastic-contained products through the city and being taken on guided tours of each of the sites, I cultivated an attention to how the pots of wax behaved in different places, attuning myself to what they were doing and to what they were bringing about. By following the plastic-encased goods to and through the salons, the ways in which the lively materials effect practices, actions, and bodily formations were thus brought to the fore. Moreover, I moved with them not only in space but also in time, ‘observing’ the different stages of their ‘social lives’, emerging not as linear and distinct but as entangled and folded into one another.⁹

Plastic at Work and the Making of Hairless ‘Feminine’ Bodies

The 450-gram cylindrical plastic pots that are used to package depilatory wax play a central role in enabling hair removal practices. Indeed, the ‘easy’ removal of body hair using wax, the possibility of repeating the treatment, the work practices of the beauty therapists, and so the shaping and maintaining of a smooth ‘feminine’ body are in part contingent on this packaging as it renders the wax a useable material. Made from polypropylene,¹⁰ these containers form part of the 299 million tons of plastic that are produced each year (Liboiron 2016: 95). Jennifer Gabrys et al. (2013b: 9) describe how plastic “was the material that democratized consumption” as increasing amounts of goods could be produced



FIGURE 1: Empty plastic pots ready for filling inside the wax manufacturer's factory warehouse, United Kingdom, 2019. Photo by Louise Rondel

on a mass scale and at low cost. Of the total tonnage, “thirty-five percent of plastic produced is for the purposes of packaging” (Davis 2015: 352). Andrea Westermann (2013: 76–77) explains: “Plastic packaging, in particular, facilitated mass consumption ... The new ways of handling and distributing commodities in retail and wholesale were not only based on plastic containers and plastic bags, but also required an improved stackability of goods, achieved by material innovations like shrinkwrap.” In other words, not only plastic goods, but their plastic packaging is key in animating consumption. For example, handing out ice cream to conference-goers, activists James Marriott and Mika Minio-Paluello (2013b: 172) demonstrate how “ice cream cannot exist without its containers ... Take it out of its box and it becomes a runny, fairly inedible



FIGURE 2: Beauty salon work station. The wax in its plastic pots in the heater, London, 2019. Photo by Louise Rondel

and unsatisfying mess within minutes.” Gel wax without its plastic pot would, arguably, be worse: viscously oozing, sticking to everything within reach, near impossible to remove; it is an uncontrollable goop that acts as a liquid glue. On my visit to the wax manufacturers, as the door was opened to watch the wax being blended, the managing director warned me: “Wax is messy stuff, it’s sticky stuff. You’ll be two inches taller when you leave.” I immediately regretted wearing my best Nike Air Maxes, which began to squeak and stick to the factory floor (field notes, October 2019). Likewise in the salon, the beauty therapist described a similar situation: “That’s a fun game, getting wax off the floor! ... That’s what I spend most of my life doing, cleaning wax off the floor, honestly! Because every time, somehow, you can walk in it so you can hear it,

and my shoes stick!” (interview, October 2019). To be useable, the wax needs (plastic) containment.

The actual matter of the packaging matters. In her work on disposable plastic bottles, Hawkins (2013a: 54; emphasis in original) instructs us to consider “the ways in which materials might *participate* in processes of invention and translation—how they might inform or have a say in what they become” (see also Hawkins 2013b). Interrelatedly, by dint of their material properties, Hawkins (2013a: 52) explains how plastics “acquired the capacity to generate effects” that are economic, cultural, environmental, and more. Guided by these insights, the relationship between the polypropylene’s materiality, properties, and affordances—what it is, what it does, and what it effects—is put into relief. As well as containment and preventing the wax from becoming an unusable and annoying mess, the pots’ petro-derived materiality allows the wax to be transported from factory to salon (see figure 1), to be stored, to be heated and melted, and to be applied (see figure 2). The pots are sturdy and strong but with some give. They are rigid to pack and stack neatly in the warehouse and wholesalers; lightweight, hard, and unbreakable to be easily transported; heat-conducting so that the wax melts but with a high softening point so that they do not melt themselves; able to hold their shape, to be resealed, to be molded into the correct size and shape to fit into the wax heaters in the salons. The pots’ properties make their contents a transportable and consumable product. As Marriott and Minio-Paluello (2013b: 172) continue, plastic packaging “is now a necessary ingredient in the [consumption] experience.”

In the salons, how the pots behave and what they enable are apparent not only in containing the wax and rendering it usable (and stopping nearly everything getting covered in a sticky mess) but also in how the beauty therapists collaborate with them (Katve-Kaisa Kontturi, cited in Coleman 2020: 32) and other objects. Here the plastic pots work to effect particular labor practices. They play a role in prompting the ‘enskilment’ (Ingold 2000) of the beauty therapists, and, in turn, are implicated in making ‘feminine’ bodies as the skilled beauty therapists perform waxing treatments on increasingly numerous body parts. The literature on craftwork has shown how skill is precisely acquired through interactions between the body of craftworkers and the material things with which they work (ibid.; Lyon and Back 2012; O’Connor 2007). As Richard Sennett (2009: 125) describes, in the process of developing a craft, the craftsman (*sic*) is “engaged in a continual dialogue with materials,” developing “a material consciousness” (ibid.: 119), a bodily orientation to (and with) his (*sic*) objects. The craft of waxing is no different. The tools and products with which the beauty therapists work are central, including the plastic pots in which the wax is packaged.

‘Observing’ a beauty therapist at work, the dynamic interplay between her body and her objects, including the plastic pots, was evident. She began her day

by preparing the treatment room for her clients, switching on the small double-pot wax heater, which was placed atop a wheeled caddy. She considered her first appointments and made calculations—which parts of the body were being waxed, how much wax would be needed, how warm it would need to be—and put two pots containing different volumes of wax into the heater, setting each side of the pot heater to a different temperature. Informed by her experience of working with the materials (in her words, “what I know from working with this”), there were calculations going on with regard to heat, wax volume and consistency, and body part to be waxed, all in interaction with the products, tools, and plastic pots—their properties and how they behave. She explained:

The problem is when the wax gets low in the pot, it's actually very hard to do a full leg wax when you've only got that much coming out on your stick. So you have to use bigger [fuller] pots so what you then tend to get ... you can mix them up. So I can put them together if I want to ... You can mix them or you can keep the smaller [less full] pot, that's just for smaller areas. The risk in doing that is the lower down in the pot the wax is, the hotter I think it gets. So I don't do that, I mix them together. Yeah, it's just too little [in] there to heat it so it gets hotter. So once it's so low I don't like doing eyebrows with it so I'll get out something else [a new pot] and add to it (interview, October 2019).

Along with the wax, the spatula, and the client's body, the pots play an active role in the beauty therapist's labor practices. They have contributed to her acquisition of the skill of waxing and thus play their part in her dextrous ability to remove ‘unfeminine’ hair from a myriad of places.

As discussed, over the past 30 years, research in critical beauty studies has highlighted how body hair is increasingly anathema to a ‘feminine’ appearance in the UK, the US, and Australia. In addition to the socio-cultural expectations of ‘femininity’ that propel women to engage in beauty practices, I have shown that the products and their packaging actively participate in producing ‘feminine’ bodies, both in an immediate sense—the body that leaves the salon is a smooth body—and in the longer term of the sedimentation of expectations of what a ‘feminine’ body should look like. For, as Heather Widdows (2018: 68; original emphases) describes as she considers growing societal pressures surrounding a ‘feminine’ appearance, “the technological imperative” means that “the increase in what *can* be done adds to the pressure of what *should* be done.” In other words, in animating the relatively easy and repetitive removal of unwanted hair, these lively materials—the plastic pots and more specifically *the plastic properties* of these pots—play their part in strengthening the ubiquity of the ‘hairlessness norm’ for women as what is possible becomes what is ‘necessary’.

In this way, the plastic pots feed into the entrenched expectations of the smooth ‘feminine’ body. Enabling and, moreover, *prompting* these consump-

tion practices, as well as making easy their never-ending repetition, the work of plastic thus comes to endure in both tangible embodied expressions and long-standing societal notions of ‘femininity’. With its material properties stemming from fossils created between 252 million and 66 million years ago, plastic’s deep time is folded into how ‘we’ shape our bodies and the expectations of what bodies should look like today. An attention to plastic’s liveliness in the salon and how, due to its oily affordances, it is active in making ‘feminine’ bodies in both the immediate and longer term begins to show how plastic’s temporalities are multiple, knotting into one another.

The Replaceability and Disposability of Plastic and the Air That ‘We’ Breathe

Further highlighting the manifold nature of plastic’s time, in contrast to the deep-seated expectation of ‘femininity’ as hairless, both the actual moment of consumption in the salon and the outcome (smooth legs) of depilatory waxing are characterized by their fleetingness. Leg waxing treatments take less than an hour and need to be repeated every five to six weeks as the hair regrows. The life of the product and its packaging is equally fleeting. Depending on the size of the client and the body parts being waxed, the plastic pot of wax is emptied after approximately seven clients (interviews with beauty therapists, October 2019). The salon’s shelves are thus in constant need of replenishment. New pots of wax are always needed and indeed always available in the beauty therapist’s weekly trips to the wholesalers’ store. Chief in creating plastic’s ability to be ‘always-new’ and so in playing a role in effecting repetitive depilatory practices is a (seemingly) inexhaustible supply of oil, drawn from the deep lithic layers of the Mesozoic era. It appears as if pots and products can always be manufactured—quickly, cheaply, infinitely—to fulfill an unending demand.

Inseparable from their ‘always-newness’, the pots are easily disposable. Once emptied of wax, they are immediately thrown ‘away’. They have been “*made to be wasted*” where “the calculability of [the material] has been predicated on how easy it is to waste—on its *disposability*” (Hawkins 2013a: 50; emphases in original; see also Mah 2022), making space for more packaged products to restock the salons’ shelves ready for the next customer, and the next, and the next. As Hawkins (2001: 9) contends, “the capacity for serial replacement is also the capacity to throw away without concern” (and vice versa). Citing a 1956 statement made by Lloyd Stouffer, then editor of *Modern Packaging*, at a plastics industry conference (“The future of plastics is in the trash can”), Alice Mah (2022: 8, 24–45) describes how petrochemical companies have been heavily invested in creating new markets for their wares,

and single-use plastics offer seemingly never-ending opportunities for growth and profit. Oil's 'infinite' availability (and the imperative of profit) enables or, rather, *promotes* disposability where plastic's ability to be 'always-new' is inextricable from its positioning as 'already-waste'.

Precisely illustrating the taken-for-grantedness of our ability to simply throw 'away' and replace, the managing director of the wax-blending factory recounted that until the early 1980s used wax would be boiled up, filtered for hair, and reused, but nowadays it would be unthinkable. Indeed, when I asked a beauty therapist about this, she visibly balked before laughing as it seemed so ridiculous. That beauty therapists now do not (have to) clean and repackage the wax—or come into close corporeal contact with used, sticky, hairy wax (Hawkins 2001)—is in part attributable to the product and the pots' ability to be 'always-new' and, as such, 'already-waste'. That the thought of having to filter and reuse the wax is both so disgusting and so absurd underlines the extent to which the materials' (including plastic's) 'always-newness' is embedded in beauty consumption and the associated labor practices. The spent products and their plastic packaging are simply and easily thrown 'away'.

Mirroring the interminable stream of products needed to produce 'feminine' bodies, the garbage produced by the beauty salon is incessant. Trash bags after trash bags are filled with used waxing strips, spent spatulas, cotton wool pads, paper bed rolls, and empty plastic pots, along with used nail files, old gel polish, tint and tinting brushes, eyelash glues, cotton buds, traces of cleansers, toners and moisturizers, and the plastic packaging in which all of these come.

Following the now discarded pots, plastic effects again come to the fore. In the salon, the polypropylene pots have worked to enable hair removal, but once thrown 'away', they do not just vanish. Hawkins (2001: 10) states that "as anyone who has stood at the edge of a tip or started down a drain and felt the wave of horror and fascination would know, this ethos of disposability is a technical and spatial fantasy," for "there is no spatial or temporal 'outside' in which to deposit toxic materials" (Litvintseva 2019: 152), including plastics that "gain in toxicity" (Davis 2015: 351). Disposed of, the plastic pots have a "material afterlife" (Hawkins 2009: 192). They, of course, go somewhere and persist long after the moment they are no longer useful as packaging, in space, in time, and in bodies. Imbued with the deep history of oil, these petro-products stretch into space and percolate into a deep future.

From the salons, the bags of trash are taken to one of London's municipal incinerators. Deposited from the back of the refuse lorry into the incinerator's waste transfer station, the trash bags muddle with garbage from homes and other small businesses across the city to form an amorphous brown-red colored mass. The transfer station can hold up to six thousand tons of waste, and from this mound a massive crane picks up five tons at a time, placing it in the incinerator. Burning at 850 degrees, the garbage is quickly reduced to



FIGURE 3: The incinerator chimney plume, London, 2025.
Photo by Louise Rondel

ash as the smoke is directed up the chimney stack (see fig. 3), passing through filters designed to clean the emissions as much as possible. The plume from the chimney is blown eastward for at least 30 miles, making landfall somewhere over the Thames Estuary. Altogether this takes less than 24 hours and is repeated on the six days of the week that the salons are open (field notes, February 2018–January 2020).

Research into what is emitted during the process of incineration and the impacts on human health for those living near incinerators is ongoing (Negri et al. 2020; Stallard et al. 2024; Subiza-Pérez et al. 2020; van Dijk et al. 2015). However, despite the cleaning offered by filters as the pots and other spent goods are incinerated, some of the packaging's remains are likely released into the air that 'we' breathe, being carried on London's prevailing winds and effecting another set of bodily configurations.¹¹ Drinking from a bottle of Coca-Cola before incinerating the plastic packaging, Nancy Tuana (2008: 198–199)

forwards the notion of the “viscous porosity of the flesh—my flesh and the flesh of the world” to highlight the constitutive relationship between bodies and (toxic) materials. Tuana describes imbibing and inhaling the bottle’s contents (ibid.: 201–202):

When I drink coke out of a plastic bottle, I have been taught to think of myself as a natural being and the bottle as a cultural artifact, a product of technology ... Now incinerate that bottle and breathe deeply. The components of the bottle have an agency that transforms that naturally occurring flesh of my body into a different material or structure than what occurs in nature. The parts of the plastic become as much a part of my flesh as parts of the coke that I drank.

Not only are bodies permeable to our environment but in continuously occurring “molecular interaction[s]” (ibid.: 202), they are literally made by what ‘we’ take in. Following the now discarded packaging and other spent products from the salons to the incinerator and onward in the plume thus illuminates another way in which plastic comes to be incorporated and endure in viscously porous bodies as ‘we’ “breathe deeply.”

Despite a lack of certainty surrounding emissions from incinerators, working with people who live adjacent to them in order to develop air monitoring tools, the research group Citizen Sense (2017) reports that residents are concerned about “a range of gaseous species that include nitrogen oxides and ammonia, which are precursors to secondary particulate matter.” There is evidence from public health studies to suggest connections between proximity to waste incineration plants and adverse birth outcomes (Ashworth et al. 2014) and an increased risk of cardiovascular issues and cancers (Romenelli et al. 2019). These possible and unevenly distributed harms to health encapsulate what Rob Nixon (2011: 2) has termed ‘slow violence’, a form of violence “occur[ing] gradually, ... [a] delayed destruction that is dispersed across space and time, an attritional violence that is typically not viewed as violence at all,” and is easily attributable to other factors. This is a violence that connects spaces and bodies, experienced corporeally as a form of “chemical and radiological violence ... somatized into cellular dramas of mutation” (ibid.: 6), extending into the deep future with an unknowable duration.

From garbage mounds, incinerators, and chimney plumes, the petro-infused remains of plastic packaging persist in the air that ‘we’ breathe, and so in our bodies (some more vulnerable than others) and in time. Attending to the ongoing vibrancy of the pots as rubbish and how they continue to shape bodies beyond the beauty salon, plastic’s time is further shown as distinctly non-linear and multiple as the repeated consumption practices and an ‘always-newness’ (enabled by fossils formed in the Mesozoic era) are folded into the unknown deep future.

Conclusion: Plastic's Enduring Incorporations

Taking plastic packaging to be a 'vibrant material' (Bennett 2010) with a 'social life' (Appadurai 1986), this article has focused on the polypropylene pots in which depilatory wax is packaged and how they effect bodily formations in order to explore plastic's multiple and entangled temporalities. Building on research in critical beauty studies that has examined the socio-cultural expectations propelling (for the most part) women to the beauty salon to remove 'unfeminine' hair and putting this into conversation with literature that has emphasized the all-pervasiveness of plastic, I have contended that the products themselves and the plastic containers in which they are packaged equally play a key role in enabling and animating beauty practices and so in making 'feminine' bodies. The oil-given material properties of the polypropylene—strong, rigid, flexible, lightweight, moldable, with a high softening point—provides the pots with particular ways of acting to play their part in ultimately enabling the removal of body hair. This is, as salon customer Marie described, "quite an ongoing process." The smooth body is temporary, one must go back to the salon again and again and again to maintain a suitably 'feminine' appearance. In their 'easy' disposability and their 'easy' replaceability, how the pots act are also tied into this never-ending-ness as one can return to the salon "without concern" (Hawkins 2001: 9). Single-use, 'always-new', 'already-waste' polypropylene is key in this simultaneously fleeting and repetitive moment of consumption and is thus a significant participant in the ongoing process of hair removal. In making hair removal possible, the polypropylene also plays a role in making hair removal 'necessary' (Widdows 2018), serving to entrench the ubiquity of social expectations of 'feminine' bodies as hairless. Attending to what plastic effects shows how it endures in bodies beyond the salon as well. It (potentially) materially shapes the bodies of those who live under the trail of incinerator plumes as plastic is disposed of and emissions circulate in the air that 'we' breathe, penetrating 'viscously porous' bodies (Tuana 2008)—forming flesh, slowly, violently, projecting into the deep future.

By considering the different ways in which the plastic pots effect bodily configurations (materially and conceptually), plastic's multiple temporalities are put into relief, not as singular and linear but as multiple and heterochronic (Bear 2014). Borne from the deep time of oil, plastic facilitates and prompts mass and ongoing consumption, fleeting moments that can be repeated. In the salon, it plays a role in the sedimentation of socio-cultural norms of 'femininity'. It has the ability to be 'always-new' and, inextricably, 'already-waste'. It endures into a deep (and unknown) future in smooth skin among the myriad other ways in which bodies are repeatedly 'feminized' through beauty work and, interrelatedly, it persists in lungs and flesh.

Acknowledgments

Thank you especially to the project participants who generously shared their time and knowledge with me. With thanks to Patrick O'Hare and Richard D. G. Irvine for inviting me to contribute to this collection and for their insightful comments on earlier versions of the article. Thank you to the reviewers and editors for their helpful input as the article developed. Thanks also to the attendees of the "Plastic Time" workshop for their valuable feedback on the original presentation.

Louise Rondel is a Research Associate at the School of Architecture and Cities, University of Westminster. Working across urban sociology and critical beauty studies, her research focuses on the relationship between bodies and spaces, urban infrastructures, the uneven distribution of toxicity, labor practices, and beauty consumption. She also co-curates "Infrastructural Explorations," a series of walking workshops that invite participants to critically engage with different forms of infrastructure and their impacts on the urban landscape. ORCID-ID: 0009-0007-3273-5430. E-mail: louise.rondel@gold.ac.uk

Notes

1. The terms 'feminine' and 'femininity' appear in quotation marks throughout to recognize that this is but one version of 'femininity' and that it is socially, culturally, and materially constructed. Additionally, the version of 'femininity' that I examine is specifically the version worked upon in beauty salons and so is heavily tied in with outward appearance. It is also important to acknowledge that 'feminine' bodies are not the only expression of gender worked upon in the salons and produced through hair removal and other beauty practices.
2. In the UK, the majority of warm or gel wax is packaged in plastic pots. These waxes are sometimes also packaged in metal containers, which is more common in the US.
3. 'We' appears in quotation marks throughout to underline the uneven distribution of air pollution and "the *differences* in breathing" for different social groups (Neimanis and Phillips 2019: 134; original emphasis).
4. Thanks to Richard D. G. Irvine for suggesting this apposite concept.
5. Research in the UK and the US has demonstrated that it is predominantly those who identify as women who engage in hair removal and other beauty practices (Berkowitz 2017; Elsesser 2019). Research has also shown that most women modify their bodies in some way through beauty work (Herzig 2015; Mintel 2017).
6. The word 'away' appears in quotation marks as this waste, of course, has to go somewhere.

7. An intimate form of waxing where all the pubic and anal hair is removed except for a thin strip on the mons pubis.
8. An intimate form of waxing where all the pubic and anal hair is removed.
9. See Knowles (2014) and Marriott and Minio-Paluello (2013a, 2013b) who follow the journey of plastic from its origins as oil in Kuwait and Azerbaijan.
10. "A thermoplastic material made by polymerization of propylene ($\text{CH}_2\text{:CHCH}_3$). It is similar to high-density polythene but stronger, lighter, and more rigid" (Isaacs 2003).
11. The incinerators operate strictly within the Environmental Agency's limits. However, these regulatory limits are not set at absolute zero, so they do allow some emissions to be released (see also Liboiron 2021).

References

- Allen, Robert, ed. 2012. *The Penguin English Dictionary*. 3rd ed. London: Penguin Books.
- Altman, Rebecca. 2015. "American Petrotopia: An Intimate History of Plastic," ed. Pam Weintraub. *Aeon Magazine*, 11 March. <https://aeon.co/essays/plastics-run-in-my-family-but-their-inheritance-is-in-us-all>.
- Anderson, Ben. 2014. *Encountering Affect: Capacities, Apparatuses, Conditions*. Farnham: Ashgate.
- Appadurai, Arjun. 1986. "Introduction: Commodities and the Politics of Value." In *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai, 3–63. Cambridge: Cambridge University Press.
- Ashworth, Danielle C., Paul Elliott and Mireille B. Toledano. 2014. "Waste Incineration and Adverse Birth and Neonatal Outcomes: A Systematic Review." *Environment International* 69: 120–132. <https://doi.org/10.1016/j.envint.2014.04.003>.
- Back, Les. 2012. "Live Sociology: Social Research and Its Futures." In *Live Methods*, ed. Les Back and Nirmal Puwar, 18–39. Malden, MA: Wiley-Blackwell.
- Bear, Laura. 2014. "Doubt, Conflict, Mediation: The Anthropology of Modern Time." *Journal of the Royal Anthropological Institute* 20 (S1): 3–30. <https://doi.org/10.1111/1467-9655.12091>.
- Bear, Laura. 2016. "Time as Technique." *Annual Review of Anthropology* 45: 487–502. <https://doi.org/10.1146/annurev-anthro-102313-030159>.
- Bennett, Jane. 2010. *Vibrant Matter: A Political Ecology of Things*. Durham, NC: Duke University Press.
- Berkowitz, Dana. 2017. *Botox Nation: Changing the Face of America*. New York: NYU Press.
- Black, Paula, and Ursula Sharma. 2001. "Men Are Real, Women Are 'Made Up': Beauty Therapy and the Construction of Femininity." *Sociological Review* 49 (1): 100–116. <https://doi.org/10.1111/1467-954X.00246>.

- Brinkmann, Svend. 2008. "Interviewing." In *The SAGE Encyclopedia of Qualitative Research Methods*, ed. Lisa M. Given, 471–472. Thousand Oaks, CA: SAGE.
- Citizen Sense. 2017. "Deptford Park." *Deptford Data Stories*, 14 November. <https://datastories-deptford.citizensense.net/deptford-park>.
- Coleman, Rebecca. 2019. "Glitter: A methodology of following the material." *MAI: Feminism and Visual Culture*, 15 May. <https://maifeminism.com/glitter-a-methodology-of-following-the-material/> (accessed: 23 February 2021).
- Coleman, Rebecca. 2020. *Glitterworlds: The Future Politics of a Ubiquitous Thing*. London: Goldsmiths Press.
- Davis, Heather. 2015. "Life and Death in the Anthropocene: A Short History of Plastic." In *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies*, ed. Heather Davis and Etienne Turpin, 347–358. London: Open Humanities Press.
- Deleuze, Gilles, and Félix Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*. Trans. Brian Massumi. Minneapolis: University of Minnesota Press.
- Elsesser, Kim. 2019. "The Link between Beauty and the Gender Gap." *Forbes*, 28 October. <https://www.forbes.com/sites/kimelsesser/2019/10/28/the-link-between-beauty-and-the-gendergap/?sh=7c307fb25545>.
- Gabrys, Jennifer, Gay Hawkins, and Mike Michael, eds. 2013a. *Accumulation: The Material Politics of Plastics*. Abingdon: Routledge.
- Gabrys, Jennifer, Gay Hawkins, and Mike Michael. 2013b. "Introduction: From Materiality to Plasticity." In Gabrys et al. 2013a, 1–14.
- Ghosh, Ranjan. 2019. "Plastic Literature." *University of Toronto Quarterly* 88 (2): 277–291. <https://muse.jhu.edu/article/732562>.
- Gregg, Melissa, and Gregory J. Seigworth. 2010. "An Inventory of Shimmers." In *The Affect Theory Reader*, ed. Melissa Gregg and Gregory J. Seigworth, 1–25. Durham, NC: Duke University Press.
- Hawkins, Gay. 2001. "Plastic Bags: Living with Rubbish." *International Journal of Cultural Studies* 4 (1): 5–23. <https://doi.org/10.1177/136787790100400101>.
- Hawkins, Gay. 2009. "The Politics of Bottled Water: Assembling Bottled Water as Brand, Waste, and Oil." *Journal of Cultural Economy* 2 (1–2): 183–195. <https://doi.org/10.1080/17530350903064196>.
- Hawkins, Gay. 2013a. "Made to Be Wasted: PET and Topologies of Disposability." In Gabrys et al. 2013a, 49–67.
- Hawkins, Gay. 2013b. "The Performativity of Food Packaging: Market Devices, Waste Crisis and Recycling." *Sociological Review* 60 (S2): 66–83. <https://doi.org/10.1111/1467-954X.12038>.
- Herzig, Rebecca. 2009. "The Political Economy of Choice: Genital Modification and the Global Cosmetic Services Industry." *Australian Feminist Studies* 24 (60): 251–263. <https://doi.org/10.1080/08164640902887452.c>
- Herzig, Rebecca. 2015. *Plucked: A History of Hair Removal*. New York: NYU Press.
- Hird, Myra J. 2012. "Knowing Waste: Towards an Inhuman Epistemology." *Social Epistemology* 26 (3–4): 453–469. <https://doi.org/10.1080/02691728.2012.727195>.

- Hird, Myra J. 2013. "Waste, Landfills, and an Environmental Ethic of Vulnerability." *Ethics and the Environment* 18 (1): 105–124. <https://doi.org/10.2979/ethicsenviro.18.1.105>.
- Hurdley, Rachel. 2010. "In the Picture or Off the Wall? Ethical Regulation, Research Habitus, and Unpeopled Ethnography." *Qualitative Inquiry* 16 (6): 517–528. <https://doi.org/10.1177/1077800410370676>.
- Ingold, Tim. 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London: Routledge.
- Irvine, Richard D. G. 2014. "Deep Time: An Anthropological Problem." *Social Anthropology* 22 (2): 157–172. <https://doi.org/10.1111/1469-8676.12067>.
- Irvine, Richard D. G. 2020. *An Anthropology of Deep Time: Geological Temporality and Social Life*. Cambridge: Cambridge University Press.
- Isaacs, Alan, ed. *The Macmillan Encyclopedia*. 2003. "Polypropylene." Aylesbury: Market House Books.
- Knowles, Caroline. 2014. *Flip-Flop: A Journey Through Globalisation's Backroads*. London: Pluto Press.
- Liboiron, Max. 2013. "Plasticizers: A Twenty-First Century Miasma." In Gabrys et al. 2013a, 134–149.
- Liboiron, Max. 2016. "Redefining Pollution and Action: The Matter of Plastics." *Journal of Material Culture* 21 (1): 87–110. <https://doi.org/10.1177/1359183515622966>.
- Liboiron, Max. 2021. *Pollution Is Colonialism*. Durham, NC: Duke University Press.
- Litvintseva, Sasha. 2019. "Asbestos: Inside and Outside, Toxic and Haptic." *Environmental Humanities* 11 (1): 152–173. <https://doi.org/10.1215/22011919-7349466>.
- London Assembly. 2022. "Too Good to Waste: Environment Committee." https://www.london.gov.uk/sites/default/files/too_good_to_waste_-_environment_committee.pdf.
- Lyon, Dawn, and Les Back. 2012. "Fishmongers in a Global Economy: Craft and Social Relations on a London Market." *Sociological Research Online* 17 (2): 1–11. <https://doi.org/10.5153/sro.2692>.
- Mah, Alice. 2022. *Plastic Unlimited: How Corporations Are Fuelling the Ecological Crisis and What We Can Do About It*. Cambridge: Polity Press.
- Marriott, James, and Mika Minio-Paluello. 2013a. *The Oil Road: Journeys from the Caspian Sea to the City of London*. London: Verso Books.
- Marriott, James, and Mika Minio-Paluello. 2013b. "Where Does This Stuff Come From? Oil, Plastic, and the Distribution of Violence." In Gabrys et al. 2013a, 171–183.
- Mintel. 2017. "Sales of Colour Cosmetics to Hit £2 billion in 2017." 19 June. <https://www.mintel.com/press-centre/sales-of-colour-cosmetics-to-hit-2-billion-in-2017/>.
- Negri, Eva, Francesca Bravi, Simona Catalani, et al. 2020. "Health Effects of Living Near an Incinerator: A Systematic Review of Epidemiological Studies, with Focus on Last Generation Plants." *Environmental Research* (May) 184: 109305. <https://doi.org/10.1016/j.envres.2020.109305>.

- Neimanis, Astrida, and Perdita Phillips. 2019. "Postcards from the Underground." *Journal of Public Pedagogies* 4: 127–139, ed. WalkingLab. <https://doi.org/10.15209/jpp.1181>.
- Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.
- O'Connor, Erin. 2007. "Embodied Knowledge in Glassblowing: The Experience of Meaning and the Struggle towards Proficiency." *Sociological Review* 55 (S1): 126–141. <https://doi.org/10.1111/j.1467-954X.2007.00697.x>.
- Pedersen, Morten Axel, and Morten Nielsen. 2013. "Trans-temporal Hinges: Reflections on an Ethnographic Study of Chinese Infrastructural Projects in Mozambique and Mongolia." *Social Analysis* 57 (1): 122–142. <https://doi.org/10.3167/sa.2013.570109>.
- Romenelli, Anna Maria, Fabrizio Bianchi, Olivia Curzio, and Fabrizio Minichilli. 2019. "Mortality and Morbidity in a Population Exposed to Emission from a Municipal Waste Incinerator: A Retrospective Cohort Study." *International Journal of Environmental Research and Public Health* 16 (16): 2863. https://www.mdpi.com/1660-4601/16/16/2863?utm_source=researchgate.net&utm_medium=article.
- Roy, Inori. 2020. "UK Waste Incinerators Three Times More Likely to Be in Poorer Areas." *Unearthed*. <https://unearthed.greenpeace.org/2020/07/31/waste-incinerators-deprivation-map-recycling/>.
- Sennett, Richard. 2009. *The Craftsman*. London: Penguin Books.
- Smelik, Anneke. 2015. "A Close Shave: The Taboo on Female Body Hair." *Critical Studies in Fashion and Beauty* 6 (2): 233–251. https://doi.org/10.1386/csfb.6.2.233_1.
- Stallard, Esme, Matt McGrath, Patrick Clahane, and Paul Lynch. 2024. "Burning Rubbish Now UK's Dirtiest Form of Power." BBC, 15 October. <https://www.bbc.co.uk/news/articles/cp3wxgje5pwo>.
- Subiza-Pérez, Mikel, Loreto Santa Marina, Amaia Irizar, et al. 2020. "Explaining Social Acceptance of a Municipal Waste Incineration Plant through Sociodemographic and Psycho-environmental Variables." *Environmental Pollution* 263 (Pt A): 114504. <https://doi.org/10.1016/j.envpol.2020.114504>.
- Tiggemann, Marika, and Sarah J. Kenyon. 1998. "The Hairlessness Norm: The Removal of Body Hair in Women." *Sex Roles* 39 (11): 873–885. <https://doi.org/10.1023/A:1018828722102>.
- Toerien, Merran, and Sue Wilkinson. 2004. "Exploring the Depilation Norm: A Qualitative Questionnaire Study of Women's Body Hair Removal." *Qualitative Research in Psychology* 1 (1): 69–92. <https://www.tandfonline.com/doi/abs/10.1191/1478088704qp006oa>.
- Tuana, Nancy. 2008. "Viscous Porosity: Witnessing Katrina." In *Material Feminisms*, ed. Stacey Alaimo and Susan Hekman, 188–213. Bloomington: Indiana University Press.
- van Dijk, Chris, Wim van Doorn, and Bert van Alfen. 2015. "Long Term Plant Bio-monitoring in the Vicinity of Waste Incinerators in The Netherlands." *Chemosphere* 122: 45–51. <https://doi.org/10.1016/j.chemosphere.2014.11.002>.

- Watson, Sophie. 2015. "Mundane Objects in the City: Laundry Practices and the Making and Remaking of Public/Private Sociality and Space in London and New York." *Urban Studies* 52 (5): 876–890. <https://doi.org/10.1177/0042098014531630>.
- Wang, Min'an. 2011. "On Rubbish." *Theory, Culture & Society* 28 (7–8): 340–353. <https://doi.org/10.1177/0263276411424758>.
- Westermann, Andrea. 2013. "The Material Politics of Vinyl: How the State, Industry, and Citizens Created and Transformed West Germany's Consumer Democracy." In Gabrys et al. 2013a, 68–86.
- Widdows, Heather. 2018. *Perfect Me: Beauty as an Ethical Ideal*. Princeton, NJ: Princeton University Press.