

DOI: 10.1111/soc4.13044

REVIEW ARTICLE



WILEY

Tweakments: Non-surgical beauty technologies and future directions for the sociology of the body

Anna Dowrick¹ | Ruth Holliday²

¹Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK

²School of Sociology and Social Policy, University of Leeds, Leeds, UK

Correspondence

Anna Dowrick, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford OX2 6GG, UK. Email: Anna.dowrick@phc.ox.ac.uk

Funding information

Foundation for the Sociology of Health and Illness

Abstract

Science, aesthetics, the body, and the concerns they attach to, such as gender, 'race', class, age and consumer culture, are key objects of sociological investigation. These discourses have been reignited in recent years by changes in the availability, accessibility and affordability of medicalised cosmetic procedures. The most popular of these procedures are non-surgical 'tweakments' to the shape and/ or appearance of the face, usually through use of 'injectables' such as Botox and dermal fillers. This shift in focus from surgical procedures to minimally invasive injections has led more practitioners to join the market of potential providers and a wider variety of consumers to seek them out. This has been accompanied by panic about the risks to bodies and aesthetic standards if stewardship of beauty should fall into the wrong hands. We trace the history of medicalised cosmetic practices and academic discourses on the body, particularly how cosmetic practices are understood to produce the body as gendered and racialised. We then suggest future approaches for exploring the sociological significance of new cosmetic practices. We encourage researchers to explore how imaginaries of (un)desirable bodies shape debates about appropriate use of non-surgical cosmetic procedures, alongside investigation of the situated intersections of identity that are inscribed on bodies.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2022 The Authors. Sociology Compass published by John Wiley & Sons Ltd.

KEYWORDS

beauty, gender, science and medicine, sociology of health, aging, and medicine, sociology of science and technology, sociology of sex, gender, and sexuality

1 | INTRODUCTION

Discourses about beauty have been enlivened in recent years by changes in the availability, accessibility and affordability of cosmetic procedures, most notably the increasing ease of access to non-surgical procedures that produce temporary changes (Archard et al., 2016). Where once the scalpel was the central tool of "aesthetic medicine", the primacy of surgical incisions is increasingly challenged by lasers, needles and chemicals. Popular non-surgical procedures focus on the face, skin, hair and body fat (ISAPS, 2020). Injections of botulinum toxin and/or hyaluronic acid are used to smooth and sculpt facial features. Older skin can be sanded or chemically peeled off, and blemishes can be altered with intense pulsed light (IPL). Lasers are employed to deal with unwanted hair, and a variety of techniques (heating, cooling, lasers and sound waves) are used to target fat cells. These procedures blur the line between medical and beauty practices and are fast replacing, or at least postponing, more permanent and invasive interventions (Hermans, 2021). We refer to these non-surgical procedures collectively as 'medicalised cosmetic practices' as a way to reflect their status as existing in both medical and cosmetic worlds.

In this paper we focus on a particular category of these procedures called 'injectables', where substances are injected into the face to achieve temporary alterations, known colloquially as 'tweakments'. The most popular substances used are botulinum toxin ("Botox") used to temporarily paralyze small (mostly facial) muscles, minimizing lines and wrinkles, and hyaluronic acid ("fillers") used to plump out deep lines and add volume to skin. Effects last around 3–6 months, and costs vary between £200 and several hundred pounds per treatment. In 2020 there were over six million Botox and four million fillers procedures reported worldwide (ISAPS, 2020), with the global market estimated at \$3.2 billion for Botox (Fortune Business Insights, 2021) and \$5.5 billion for fillers (Fortune Business Insights, 2022). Combining elements of medicalised practices, pharmaceuticals and cosmetics, these have been nicknamed 'cosmeceuticals' (Mello, 2012).

We choose to draw attention to injectables because, as well as being the fastest growing category of non-surgical cosmetic procedures (ISAPS, 2019), they represent an important paradox. They are simultaneously mundane, every-day technologies (Cook & Dwyer, 2016) and sites of controversy and dispute between medical and beauty professions (Huwyler, 2021). Both their popularity and contestation indicate that injectables represent an important opportunity to revitalise sociological conceptions of desirable, or simply 'normal', bodies, and the role of different professions in producing them.

1.1 | Injectable identities and everyday body-work

Cook and Dwyer (2016, p. 887) reflect that Botox[™] has become 'hypernormalised, a domesticated, mundane technology that has largely disappeared into the flows and routines of everyday life'. Despite their ubiquity, there has been relatively little sociological investigation of how injectable cosmetic practices contribute to body-work. This is due perhaps to their hybrid position somewhere between make-up and cosmetic surgery. They also lack the sensationalism of high-risk procedures, or those targeted at sexualized body parts (Blum, 2003). Initial literature has built on Shilling's (1993) work on the body, self and social identity to understand how injectables are part of an array of products used to enhance value through 'body projects'. Brooks (2010, 2017) and Clarke and Griffin (2008) have emphasised how injectables target 'successful ageing' for women, whilst Rasmussen (2021), on the other hand, examines the growing emphasis on men, and the embodiment of masculinity, in the marketing of injectables. Looking across

marketing practices, Berkowitz (2017, p. 143), considers the gendering of 'frown lines' as worry lines for women and anger lines for men. Brooks (2017) asserts that the decision to undergo these less invasive anti-ageing procedures is increasingly positioned as rational and necessary, whereas 'enhancement' retains a stigma of vanity. These empirical studies highlight that the production of gender and age are still key to studies of marketing or engagement with 'cosmecuticals', though leaves unexplored questions of how other aspects of identity are produced through injectable body-work.

1.2 | Controversial sites of injection

The shift from surgical procedures to minimally invasive injections has changed the socio-technical landscape of medicalised cosmetic practices. Cook and Dwyer (2016), examining Botox, reflect on how the ease of access has enabled it to form a legitimate part of a wide range of social worlds, taking on different meanings in each. They argue that injectables have to be understood as situated, with attention given to where procedures are performed, by whom, and how this relates to knowledge and power.

The relative safety of injectables compared with surgical cosmetic procedures has meant that opportunities to participate in Botox and filler injections are found far from the surgeon's office or the glamorised 'Botox Party'. Locations of practice include dentist chairs, high street beauty salons, pharmacies, and domestic spaces—whether by mobile practitioners or DIY consumers using products and syringes bought from the Internet (Brennan et al., 2018). Allen (2009, p. 327), reflecting on practices or processes that involve multiple professions, notes that 'their breadth of appeal also disguises tensions between different agendas and frames of reference'. Berkowitz (2017), for example, describes 'turf wars' between medical and beauty professionals in the USA over Botox, and there is ongoing public and political debate over which professions are legitimate to deliver injectables in the UK (Joint Council for Cosmetic Practitioners, 2021; UK Parliament, 2021).

Given the relative safety of the substances themselves, furore around injectables focuses on the risks associated with who wields the needle. Misplaced injections can block blood vessels or cause blindness, and poor needle and procedural hygiene can cause infection (Haneke, 2015; Kassir et al., 2020; Povolotskiy et al., 2018) A subtler aspect of the risk debate is the *aesthetic* risk of procedures, and relates to stewardship of what constitutes 'enough' rather than 'too much' beauty (Holliday et al., 2019). The risk here is of failed aesthetic performances ('botched jobs') and transgression of the boundaries of what is 'acceptable'. These include Botox producing a 'frozen face' (Lin, 2020) or over-filled features, such as lips, leading to 'duck lips' or 'trout pout' (Fletcher, 2014).

Building on this nascent field of study, in this paper we aim to examine what the simultaneous popularity and controversy of injectable cosmetic practices means for sociological study of the body. To establish what can be learnt from further investigation of injectables, we must first note the recurrence of key anxieties about the practices of producing beauty, usually in significant moments of technological development. In Part 1 we provide a history of the emergence of injectable cosmetic procedures, highlighting that new technologies reinstate old conflicts within the beauty industry, particularly between the beauty industry and medicine. In Part 2, we contextualise these conflicts in academic discourses of beauty and the body, with a particular focus on gender and race. In Part 3, to conclude, we suggest questions and directions for further sociological examination of non-surgical cosmetic procedures and the production of (un)acceptable bodies.

2 | PART 1: PRODUCING BEAUTY: A HISTORY OF BEAUTY PROFESSIONALS, INJECTABLE TECHNOLOGIES AND CONFLICTS

2.1 | Medicalising cosmetic practices

Medical histories of cosmetic interventions often begin in the 20th century with WW1 and the trench warfare that disfigured the faces of young conscripts and left them ashamed to return home (Gilman, 1999). Harold Gillies is well

known for developing a skin flap technology that enabled skin transfers to the face from elsewhere on the body, treating severe burns, along with other maxillofacial procedures that grafted bone to rebuild smashed jaws and cheeks (Thomas et al., 2019). The emphasis of these early surgeons was on restoring function, but, so the narrative goes, they often wanted to spare these casualties the disfigurement that harmed both personal relationships and economic independence (Bourke, 1996). In reality, however, aesthetic concerns pre-dated these reconstructive developments, with surgeons in the nineteenth century concerned to 'modify' or disguise stigmatized syphilitic or Jewish noses (Gilman, 1999; Haiken, 1997). Only with the Crimean War did surgeons begin to become 'respectable' through the treatment of deserving casualties, as opposed to those afflicted with the scars of diseases which they were expected to bear with fortitude (Mincer & Scholtz, 1988, cited in Davis, 1995). Post-War surgeons therefore took great care, to differentiate themselves from 'Beauty Doctors' or Beauticians and maintain their newly won status, distinguishing themselves through the Hippocratic Oath to 'do no harm' to healthy bodies. Plastic surgeons 'healed the sick', whilst Beauty Doctors or 'quacks' were presented as only 'beautifiers', often engaging in risky and dangerous practices with disastrous results (Haiken, 1997). This represented an early attempt to foreclose other professions from medicalised cosmetic practices. Medical notions of cleanliness and hygiene were invoked to create a practical and moral separation from the 'dirty' work of those who solely aimed to beautify (Adams, 2012). However, Naugler (2009) points to the huge difficulties in maintaining a clear cosmetic/reconstructive divide.

Another profession, emerging in the US at the beginning of the twentieth century—psychology—quickly became entangled with consumer culture and provided further justification for cosmetic surgery's expansion from 'cure' to 'enhancement'. Seized upon by the newly emerging profession of advertising, the Inferiority Complex derived from Adler in the 1920s (Hoffman, 1994), provided the justification for an increasing array of new products to alleviate body odour, yellowing teeth, unmanageable or unsightly hair, and other problems of the undisciplined body (Haiken, 1997). Definitions of 'medical need' expanded to include 'well-being, self-esteem, sexual realization and even happiness' (Edmonds, 2010, p. 245). By the 1970s the broader category 'self-esteem' was globally becoming the justification for cosmetic enhancement, and psychologists had successfully inserted themselves into the beauty industry both as 'media effects' critics of the advertising industry for provoking false desire for surgery, and as gatekeepers of legitimate need. A plastic surgeon in Edmonds' (2010) study of Brazilian cosmetic surgery, however, jokingly dismissed psychology's curative possibilities claiming: "The psychoanalyst knows everything but changes nothing. The plastic surgeon knows nothing but changes everything" (2010, p. 76).

2.2 | Injectable fillers: New battleground, old conflicts

The invention of the syringe in the mid-1800s was followed quickly by attempts to inject substances beneath the skin that could augment and shape bodies (Kontis & Rivkin, 2009). Surgeons discovered how to alter the shape of noses without scarring by operating from the inside to reduce bumps, hooks and 'angular prominence'. At the turn of the twentieth century paraffin was announced in the US as a miracle cure for 'saddle noses' ravaged by syphilis and other soft tissue defects—especially for filling out wrinkles (Haiken, 1997). It was also being used in Japan to 'enhance' the breasts of sex workers (alongside early experiments using liquid silicone) to meet the aesthetic requirements of American soldiers (Miller, 2006). Sadly, paraffin did not deliver on its promise, tending to migrate and cause 'wax cancers'—foreshadowing the Poly Implant Prostheses (PIP) breast implant scandal of the 21st century (Holliday et al., 2019). Despite trying many different recipes, in the 1920s US plastic surgeon Seymour Oppenheimer declared the use of paraffin over and advocated a public awareness campaign. He used the failure of paraffin as a filler as an opportunity to re-emphasise professional boundaries between medical practitioners and beauty doctors. He argued that paraffin injections, while 'dangerous even in the hands of the well-equipped surgeon' were 'doubly more dangerous in the hands of the ignorant, unscrupulous and uneducated "beauty doctor" (in Haiken, 1997, p. 22).

Paraffin, while ultimately withdrawn, spurred the search for a substance that could successfully and safely be used to sculpt features. Kontis and Rivkin (2009) recount the history of the different fillers used across the 20th

and 21st centuries. 'Fat transfer'—where fat is harvested from one part of the body to augment another—emerged contemporaneously to paraffin. Liquid silicone formally entered into cosmetic practices in the 1960s, with breast augmentation techniques having travelled back to the USA from Japan and popularised among Las Vegas showgirls. Similarly to paraffin, there were increasing reports of complications when the injected material migrated. The late 1970s heralded the advent of bovine collagen as the product of choice, and the 1980s saw the emergence of the lip filler phenomenon (which Kontis and Rivkin contend was popularised by Barbara Hershey in the film 'Beaches'). Another innovation of the 1980s was accidental, when Canadian ophthalmologist Jean Carruthers discovered that botulinum toxin—a powerful and potentially lethal muscle relaxant—could be used to temporarily minimise wrinkles when injecting it to subdue eyelid muscle spasms (Ting & Freiman, 2004). While not a 'filler', Botox rapidly joined collagen in the 'injectables' range, initially sensationalised through reports of 'Botox parties' in the media and later becoming domesticated as a staple of routine beauty practices (Cook & Dwyer, 2016). Hyaluronic acid joined the filler market in the early noughties. It fulfilled multiple desires of consumers and practitioners, surpassing its predecessors in safety, reversibility, and its ability to offer predictable, replicable results (Gold, 2007).

Echoing earlier controversy about 'beauty doctors' performing surgeries and beauticians using paraffin, concern about modern 'fillers' is the risk they pose to consumers when in the 'wrong' hands (Archard et al., 2016). This is buoyed by widespread media portrayal of 'botched jobs'. Accordingly, some countries have begun implementing regulations limiting the practice of injectables to those with minimum training and qualifications (Keogh, 2013), with a view to limiting the participation of beauticians (lacobucci, 2022).

While jurisdictional disputes about which professions have a legitimate claim to engage in injectables are significant, they must also be contextualised in long-standing debates about stewardship of gendered, classed and racialised aesthetic excesses. In Part 2, we ground the popularity of injectables in a broader review of body-work and the production of acceptable bodies.

3 | PART 2: PRODUCING (UN)ACCEPTABLE BODIES

In this section we situate injectable cosmetic practices in the wider literature on the bodies that such procedures are intended to produce. Given the breadth of this literature, we focus on providing an overview of the key theoretical debates that illuminate trends towards injectable cosmetic body-work: the body and self; gendered bodies; and global, racialised bodies.

Additional insights, however, can be found in adjacent literature including: psychological literature on how people feel about how they look (Rumsey & Harcourt, 2012); representation of beauty in art (Davis, 2003; Jones, 2008; Morgan, 1991); 'Reality TV' (Skeggs & Wood, 2012; Wei & Zhen, 2015; Woodward & Fenton, 2022) and 'soap opera' style reality shows (Weber, 2009; Wood, 2017); popular culture (Gill & Scharff, 2011; McRobbie, 2004); and social media (Jones, 2013).

3.1 | The body and self

Understanding what is produced through any form of body modification, like injectables, first requires reflection on how the body relates to identity. The classic debate on this issue has questioned the role of the body versus the mind in selfhood. On the one hand, Enlightenment philosophers prioritized the mind (Descartes, for example, famously claims "I think therefore I am") and reason as the essence of being, whilst phenomenology and psychoanalysis have made bodies central to the knowing subject. Following Derrida (2001), however, subjects are organized in a binary logic. If (white) man is all mind, then woman and other Others are (at the mercy of their) bodies, governed by nothing but hormones, emotions and 'primitive' impulses (Shildrick, 1997). Man is culture, woman is nature (Ortner, 1972). For Foucault (1979a), the focus on rationality—the modern 'soul'—imprisons the body. To know oneself is to become the

embodied subject of powerful external regimes and disciplines. On the other hand, disciplines such as psychoanalysis (Freud, 1991; Irigaray, 1985) and phenomenology (Merleau-Ponty, 2013 [1945]; Crossley, 2001) foreground the body as a site of experiential knowledge, as 'lived' interiority and site of desire, albeit organized through normalizing discourses of proper sexuality and commodified pleasures (Butler, 1990; Foucault, 1979b).

Moving beyond binaries of body and mind, Grosz (1995) argues that internal and external elements of the body-subject connect external inscription with inner depth. Altering the body can alter and improve the self and offer individualized identities in line with prevailing norms:

The increasing medicalization of the body, based on processes of removal (incision, cutting, removing, and reduction) or addition (inlaying, stitching and injection), demonstrate a body pliable to power, a *machinic* organism in which 'components' can be altered, adjusted, removed and replaced (Grosz, 1995, p. 199).

The body, then, is a kind of threshold, between a lived interiority and a sociopolitical exteriority, between a nature that can never be known and a culture that can never fully colonize the psyche (see also Butler, 2011; Haraway, 1991). While abstract, these debates about the interrelationship of the body and mind remain influential in shaping the production of gendered and racialised bodies, as we discuss in the sections that follow.

Other scholars have investigated bodies as formed out of social and material environments, with a focus on the production of social difference. Bourdieu (1984) situates classed subjects as embodying their Habitus, a 'structuring structure' representing experiential and classed knowledges and tastes acquired during childhood within the family. While Bourdieu's model presents the classed body as relatively fixed, Shilling (1993) develops a theory of 'body projects', locating investments in the body as both a reflection and a method of social mobility in consumer culture. Giddens (1991) and Featherstone (1991) emphasise the importance of the body in consumer culture, not least as a site for conspicuous consumption (Simmel, 1976). These writers see individuals as active agents, working to improve their social position, albeit constrained to varying degrees by overarching structures.

These theories highlight some key tensions in approaches to the body and its modification. We now turn to the literature specifically concerned with cosmetic interventions, examining how beauty practices contribute to gendered or racialized hierarchies. In doing so we surface directions of inquiry for understanding medicalised cosmetic practices in general, and injectables specifically.

3.2 | Gendered bodies

3.2.1 | Technologies of oppression or empowerment?

Conceptions of selfhood described above—particularly those that connect bodies with women and rationality with men—have contributed to the gendering of beauty practices. Accusations of vanity have accompanied women's beauty practices from the beginning (Fraser, 2003), and feminists have been keen to eschew this narrative, demonstrating instead the patriarchal power relationships that enforce femininity for women. Drawing on structuralist feminism, Davis (1995) explored the 'agency' of cosmetic surgery recipients and the feelings of empowerment women gained from it, claiming women aspire to be *normal* (invisible) rather than beautiful (vain and visible). Women tended to centre low self-esteem, prior bullying or negative comments as the reason for their surgeries. However, Gimlin (2012) showed how different healthcare contexts shape cosmetic narratives, so that women in public healthcare systems were likely to guiltily justify cosmetic surgery as cure for low self-esteem, whilst their US counterparts framed it as reward for saving up and taking care of their body by eating well and staying fit, and expression of 'real' (feeling younger) identity.

Foucauldian feminists, such as Bordo (1993) present a docile body, painfully conforming with unattainable mediatized (photoshopped) beauty norms. Others have argued that we now live in a 'makeover culture' (Heyes, 2007;

Jones, 2008) and are subject to a 'cosmetic gaze' (Wegenstein, 2012) in which women's bodies are scrutinised for their potential for improvement in an 'economy of personhood' (Skeggs & Wood, 2012). Most of these writers tend to avoid the fleshy body itself, however, ignoring the material limits of its potential for change. They take for granted gender binaries, deploying 'identity knowledges' (Wiegman, 2012) and leave unexamined the production of trans- or gender non-conforming bodies.

McRobbie (2009) argues that beauty is increasingly associated in popular culture with empowerment rather than docile femininity, but that 'looking good' relies on significant cultural capital to make the right consumer choices. The relative affordability of injectables, compared with surgical procedures, has enabled more women to engage in temporary alteration of the body, but creates additional work in navigating aesthetic risk. Cosmetic procedures that are considered 'excessive' (for example, too much lip filler resulting in a 'Trout Pout') build from existing middle-class constructions of working-class women in terms of excess—too much makeup, jewellery or 'flesh' (Skeggs, 1997, 2004). Botox and fillers also readily connect to a consumer discourse of 'ageing well'—minimising signs of ageing—reflecting the enduring fetishization of youth (Sontag, 1997). For Banet-Wesier, Gill & Rottenberg (2020), empowerment is only ever further subordination to a regime of beauty. They claim that even women who don't fit beauty norms (and might once have escaped its reach) are now nevertheless required to be 'positive, confident and glowing' (Banet-Weiser, Gill & Rottenberg, 2019, p. 5).

Despite the emphasis in the literature on female cosmetic practices, around a third of cosmetic surgery patients are men (Holliday & Cairnie, 2007; Holliday et al., 2019), meaning men's cosmetic interventions also require investigation (Atkinson, 2008; Rasmussen, 2021). Contributions to this nascent field have claimed that men's aesthetic value or 'erotic capital' (Hakim, 2010) is played out in sexual fields, especially for gay men. Green (2011) for instance, shows how gay men use growth hormones to promote youthful looks or combine steroids or protein with the gym to build muscle and increase erotic capital on 'the scene'. There has also been investigation of emerging cosmetic practices among heterosexual men, manifest in discourses of the 'meterosexual' in the West and the 'flower boy' (kkotminam) or 'little fresh meat' (xiao xian rou) in East Asia (Holliday & Elfving-Hwang, 2012; Hua, 2021).

3.2.2 | Re-thinking oppression and empowerment with body-technologies

Socio-technical or soma-technical approaches (that see bodies, not as natural entities, but as already intertwined with technologies) attempt to overcome the split between oppression and empowerment. Rather than thinking about body technologies, such as injectables, as good or bad, or as something we choose to apply to our bodies, it attempts to explore their uses and effects and how they are embedded within particular social and cultural contexts (Sullivan & Murray, 2009).

Techné is not a means at our human disposal, in terms of technologies that we at will apply to the body, rather, techné is 'the dynamic means in and through which corporealities are crafted, that is, continuously engendered in relation to others and the world' (Sullivan & Murray, 2009, p. 3).

In addition, rather than seeing media as a set of (fake) representations that cause affective responses, most usually conceived of as feelings of lack, Kember and Zylinska (2012, p. 17) propose the concept of 'mediation'—the condition of 'being in and becoming with the technological world'. In this respect bodies are not shaped by media or technologies, but rather human possibilities are performed through media, bodies and technologies. Media and bodies are constructed by what is technologically possible and culturally imaginable and these are co-constitutive. New technologies therefore facilitate new manifestations of masculinities and femininities. For instance, the gendering in Botox marketing of the line that forms between the eyebrows, framed as 'anger' lines for men, and 'worry' lines for women, and the refiguring of 'crow's feet' as the more feminine 'smile lines' (Berkowitz, 2017). Rasmussen (2021) deploys this framework in her article 'Men Don't Do Botox' to demonstrate how clinic websites and practitioners

use Botox to create a 'masculine face', while simultaneously making new, less effeminophobic kinds of masculinity possible.

Having examined how injectable cosmetic practices have the potential to both reinforce and disrupt performances of masculinity and femininity, in the next section we review the literature on the intersection between cosmetic practices and racialised bodies.

3.3 | Global, racialised bodies

Medicalised cosmetic practices enter into racialised and globally situated discourses of beauty, reflecting colonial legacies and national identity politics. Skin, for example, has been an important site of racialised cosmetic intervention. Entangled in the intersection of 'race' and class, 'colourism' has differentiated people by 'shade' in places like the Caribbean and Latin America (Figueroa, 2013; Tate, 2016), or in terms of caste in India (Ayyar & Khandare, 2013). Here, light skin is said to confer advantage in the racialized hierarchies that were the legacies of slavery and colonialism. A lighter-is-better culture underpins the profitable global market for skin lightening products, the most popular of the racialised cosmeceuticals (Jacobs et al., 2016).

Skin bleaching has been the target of many public health campaigns, which emphasise the toxicity of their ingredients. Tate (2016) debates this as a 'white' moral panic that fails to acknowledge the similar risks of tanning, one that constructs black women, in a classic colonial move, as naive and in need of protection. She also points instead to the arduous and anxious performance of blackness that light-skinned black women must enact to avoid accusations of passing and privilege. Beginning in the 1960s civil rights movement, the Black is Beautiful campaign fought for inclusion and challenged racist definitions of beauty, celebrating dark skin and the natural Afro, instead of trying to emulate hairstyles designed for other hair. Performing blackness, 'whitening' or even 'lightening' practices are embroiled in highly complex power relations of 'race' and nationality. This offers lessons for interpreting emerging medicalised discourses of the dangers of injectables. These debates similarly foreground the health aspects of beauty practices, failing to examine the complex production of identities that they contribute to.

Other kinds of cosmetic procedure, such as nose re-shaping (Edmonds, 2010; Gilman, 1999) or eye-widening (by stitching a fold into the upper eyelid) (Holliday & Elfving-Hwang, 2012; Miller, 2006), have also been characterized as whitening or westernizing practices made desirable through 'internalized racism' (Davis, 2003; Kaw, 1997). White western scientific racism, which created rules of proportion designed to infer inferiority, has long influenced the exclusion of those who were 'disproportionate' from definitions of beauty that prized 'fine features' and 'pale complexion' (Gilman, 1999; Holliday & Sanchez Taylor, 2006). The aforementioned early uses of paraffin as a filler in Japan to 'enhance' the breasts of sex workers for the pleasure of American soldiers (Miller, 2006) can be interpreted as a violent embodied manifestation of such racism.

However, assumptions of the primacy of the western gaze in cosmetic trends has been critiqued. Holliday & Elfving-Hwang (2012) have explored the highly situated cosmetic practices that constitute what is known in South Korea as the 'Korean Look', which include widening of the eyes. Providers and consumers assert this is not westernizing, but that they are producing a different, Korean beauty. Similarly, Edmonds (2010) explores the growth of cosmetic surgery in Brazil and its connection to Brazil's specific racial history of emphasising 'mestiza' (mixed) identities. Since beauty and sexuality are highly valued modes of social mobility, procedures that enable consumers to look more mixed are popular, such as the 'Brazilian Butt Lift'. This procedure involves making the buttocks higher and rounder through insertion of silicone implants or fillers, or by fat transfer from another part of the body through liposuction. The global uptake of the use of fillers to produce a 'butt-lift', representing exactly the characteristics that white women had wanted to minimize until the last decade, is an important example of the global flows of beauty practices.

Menon (2019) similarly observes a rejection of Westernization amongst cosmetic surgeons in her study of cosmetic surgery in Malaysia. As an historic trading post, Malaysia mixes ethnic Chinese and ethnic Indian migrants

with a Malay majority under 'soft-Muslim' identity (Ormond, 2013). In this context both Westernizing and Koreanizing surgeries are seen as 'fake' by cosmetic surgeons. Whilst westernisation belongs to the past, Koreanization is associated with 'perverted excess,' or 'modernity run amok' in a 'dubiously appealing, technologized future' (Menon, 2019, p. 8). Chinese and Indian features, however, are constructed as 'natural' and suitable for any body. Countering constructions in the literature of powerful surgeons imposing norms of white femininity on gullible patients who have internalized patriarchal and colonial norms, Menon portrays surgeons as 'in the middle', exercising 'aesthetic agency' as 'cultural intermediaries', translating abstract ideals circulating in regional media into concrete looks, within the limits of the material, fleshy bodies they work on. East Asian beauty ideals were also drawn from traditions such as *mien shiang* or face reading. Sunken temples, which could signify a bad relationship with one's husband, were filled out using injectables. Through this work, and the development of Halal injectable products for export to Muslim countries, or to attract Muslim cosmetic tourists, Malaysian surgeons help create postcolonial, cosmopolitan 'Asian' bodies that enact Pan-Asian ascendancy.

4 | PART 3: WHAT NEXT? IMAGINING AND SITUATING BODIES

Having contextualised debates about the role of different professions in producing beauty, and examined how the rise in popularity of injectables can be understood within existing conceptualisations of the gendered and racialised bodies, we now propose an agenda of future directions for investigating injectables and the sociology of the body.

4.1 | Imagining bodies

The affordability, acceptability and accessibility of injectables means that an increasing number of people are able to participate in their use, as both practitioners and consumers, whilst others remain excluded (or uninterested). The sociological significance of this 'democratising' effect is that it creates possibilities for multiple imaginaries of what bodies and selves these technologies could and should contribute to as they enter gendered, racialised and globally situated discourses of beauty (Cook & Dwyer, 2016).

Griesemer (1992, p. 54) contends that 'what makes a tool right for the job... is the joint articulation of tools, jobs and claims'. Foregrounding debate about who should hold the tools distracts from examination of what 'job' injectables do, and what imagined identities this job is claimed to contribute to. A medicalised focus on how to safely use injectable technologies forecloses examination of how these cosmetic practices shift the boundaries of 'normal' bodies, and fails to consider the consequences of positioning healthcare professionals as gate-keepers (and intermediaries) to such technologies. Moreover, it limits other debates about cosmeceuticals, including discussion of the normative factors influencing why, how and if we should engage in beauty-work, as well as the social and symbolic risks of non-participation.

We interpret cosmeceutical-body interactions as particularly fertile ground for what Jasanoff and Kim (2015, p. 6) describe as 'sociotechnical imaginaries':

Collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology

This concept is particularly useful for examining moments of emergence, contestation and stabilisation in the use of new technologies. This is relevant in imagining future gendered and racialised identities produced with injectables because of their inherent transience. This unboundedness is able to generate both hope for their potential and fear for how 'far' they could go (Berlant, 2011; Coleman & Figueroa, 2010). Liakounakaou's (2020) investigation of the

increased popularity of cosmeceuticals in austerity-era Greece, for example, reveals how feelings of hope are held in tension with crisis:

They enable processes and imaginations of transformation, such as the illusion of fighting against or reversing time, of controlling (the ageing body), in many cases offering a dreamlike 'escape' from mundane everydayness; but they also carry a kernel, a hope, a touch of the immortal (ibid, 101)

Haraway's (1991) seminal depiction of the cyborg body made clear that there is no natural state, with bodies and technologies already inextricably combined (see also Balsamo, 1992). Rasmussen (2021) highlights this in her exploration of how Botox produces a space for new, emergent, 'non-effemiophobic' masculinities. The ways in which bodies are seen and evaluated depends on technologies of looking and transformation, and these technologies are always embedded in culture. We suggest that future research probes the ways in which new technologies of enhancement are connected with re-imaginings of the body. Moreover, we encourage examination of the role of different practitioners, acting as gatekeepers to injectables and stewards of beauty, in the imagining and shaping of (un)acceptable selves. Building connections with the sociology of professions, such as literature regarding boundary contestation (e.g. Nancarrow & Borthwick, 2005), would be a productive avenue of exploration.

4.2 | Situating bodies

The body has long been a site of 'social, political and geographical inscriptions, production, or constitution' (Grosz, 1995, p. 23). The phenomenon of non-surgical cosmetics draws further attention to the situatedness of bodies. What cosmetic technologies such as injectables offer is the opportunity to quickly, easily and temporarily embody (or resist) the values of a given context. The parts of consumers' identities that are 'tweaked' to achieve value are therefore important sites of study for understanding a variety of sociological concerns about the making of modern selves.

We suggest a shift from research on *bodies-that-consume*—which foreground the factors that motivate consumer desire—to *bodies-in-production*—instead examining what kinds of selves and relations are made through cosmetic practices (though recognising that bodies can be both simultaneously—see Shilling's (1993) work on body projects). Moreover, we see this as an opportunity to undertake broader analyses which examine bodies as productive of intersectional identities. This enables a move away from the predominant focus in the beauty literature on the production of gender, instead investigating how gender is produced relative to other situated aspects of identity such as age, race and sexuality.

We encourage research that pays particular attention to the production of racialised, global bodies, building from Menon's (2019) investigation of the cosmopolitan 'Pan-Asian' body, enhanced with Halal tweakments. The 'natural' racialized body has been eclipsed by the constructed cosmopolitan-but-located body, the body that is at once global but also belonging to the nation. 'Situating' or locating beauty and cosmetic cultures is therefore vital for future research. Such research could consider what the temporality of short-term cosmetic alterations enabled by injectables (and other medicalised cosmetic practices) contributes to 'glocalised' identity.

Furthermore, we encourage that studies of situated bodies engage in what bodies feel. It is easy to forget that bodies are fleshy, feeling things when engaged in discourses of cosmetic practices. Where feelings are discussed, shame is often foregrounded as a motivating factor in consumer decisions (Northtrop, 2013). There has been comparatively little written on pleasure in contemporary cosmetic practices. We advocate for further studies into the pleasures of situated cosmetic practices, and the affects that pleasure is held in tension with. This approach also opens doors for critical investigation of the pleasures of resistance and what is produced through anti-beauty movements, such as 'Escape the Corset' in South Korea, where young women make TikToks of themselves smashing their make-up and cutting off their hair (Lee & Jeong, 2021).

5 | CONCLUSION

The growth in and availability of 'tweakments' through injectable cosmeceuticals is raising a number of concerns. What are its risks? Who should administer such procedures? How are they continuous with or distinct from earlier, more invasive cosmetic surgery and domestic beauty practices? In order to answer some of these questions, we returned to its roots in separation of plastic surgeons from beauty doctors at the turn of the twentieth century and the problematic use of paraffin-based injectables that spurred the search for safer alternative. We then revisited the academic literature on bodies and beauty and how these relate to structures of gender, class and 'race'. We have argued that cosmetic procedures must be seen as located in particular historical and geographical contexts. Finally, we signalled future directions for research that explore how imaginaries of (un)desirable bodies shape debates about appropriate use of injectables, alongside investigation of the situated intersections of identity that are produced through temporary procedures.

ACKNOWLEDGEMENTS

Dowrick's contribution to this paper was supported by funding from the Foundation for the Sociology of Health and Illness. Holliday received no funding for her contribution to this work.

CONFLICT OF INTEREST

There are no conflicts of interest to report.

ORCID

Anna Dowrick https://orcid.org/0000-0002-2937-6728

ENDNOTES

- ¹ The aesthetic changes are temporary, but in some instances adverse events take place with longer term impacts. See Povolotskiy et al. (2018).
- ² Botox is a brand name used to refer to all injectable forms of botulinum neurotoxin.
- ³ Costs drawn from NHS estimates in 2022; https://www.nhs.uk/conditions/cosmetic-procedures/.

REFERENCES

- Adams, J. (2012). Cleaning up the dirty work: Professionalization and the management of stigma in the cosmetic surgery and tattoo industries. Deviant Behavior, 33(3), 149-167. https://doi.org/10.1080/01639625.2010.548297
- Allen, D. (2009). From boundary concept to boundary object: The practice and politics of care pathway development. Social Science & Medicine, 69(3), 354-361. https://doi.org/10.1016/J.SOCSCIMED.2009.05.002
- Archard, D., Montgomery, J., Caney, S., Clancy, T., Edwards, J., Gallagher, A., Greenfield, A., Haimes, E., Hughes, J., Jackson, R., Lawrence, D., Pattinson, S., Shakespeare, T., Siddiqui, M., Watson, C., Weiss, R., Widdows, H., Wishart, A., Yeung, K., ... Harvey, K. (2016). Cosmetic procedures: Ethical issues. Nuffield Council on Bioethics. https://www.nuffieldbioethics.org/ wp-content/uploads/Cosmetic-procedures-full-report.pdf
- Atkinson, M. (2008). Exploring male femininity in 'crisis': Men and cosmetic surgery. Body & Society, 14(1), 67-87. https://doi. org/10.1177/1357034x07087531
- Ayyar, V., & Khandare, L. (2013). Mapping color and caste discrimination in Indian society. In R. Hall (Ed.), The Melanin millennium. Springer. https://doi.org/10.1007/978-94-007-4608-4_5
- Balsamo, A. (1992). On the cutting edge: Cosmetic surgery and the technological production of the gendered body. Camera Obscura, 10(1), 207-237. https://doi.org/10.1215/02705346-10-1_28-206
- Banet-Weiser, S., Gill, R., & Rottenberg, C. (2020). Postfeminism, popular feminism and neoliberal feminism? Sarah Banet-Weiser, Rosalind Gill and Catherine Rottenberg in conversation. Feminist Theory, 21(1), 3-24. https://doi. org/10.1177/1464700119842555

Berkowitz, D. (2017). Botox nation: Changing the face of America. NYU Press.

Berlant, L. (2011). Cruel optimism. Duke University Press.

Blum, V. (2003). Flesh wounds: The culture of cosmetic surgery. University of California Press.

Bordo, S. (1993). Unbearable weight: Feminism, culture and the body. University of California Press.

Bourdieu, P. (1984), Distinction: A social critique of the judgement of taste, Routledge,

Bourke, J. (1996). Dismembering the male: Men's bodies, Britain and the Great War. Reaktion Books.

Brennan, R., Wells, J. S. G., & Van Hout, M. (2018). 'Saving Face': An online study of the injecting use of DIY Botox and dermal filler kits. *Plastic Surgery*, 26(3), 154–159. https://doi.org/10.1177/2292550318767432

Brooks, A. (2017). The Ways Women Age: Using and refusing cosmetic intervention. NYU Press. Retrieved from https://nyupress.org/9780814724057/the-ways-women-age/

Brooks, A. T. (2010). Aesthetic Anti-ageing surgery and technology: Women's friend or foe? *Sociology of Health & Illness*, 32(2), 238–257. https://doi.org/10.1111/j.1467-9566.2009.01224.x

Business Insights, F. (2021). Botulinum toxin market size & share: Global report. Retrieved from https://www.fortunebusinessinsights.com/industry-reports/botulinum-toxin-market-100996

Business Insights, F. (2022). Dermal fillers market size and growth. Retrieved from https://www.fortunebusinessinsights.com/industry-reports/dermal-fillers-market-100939

Butler, J. (1990). Gender trouble: Feminism and the subversion of identity. Routledge.

Butler, J. (2011). Bodies that matter: On the discursive limits of sex. Routledge.

Clarke, L. H., & Griffin, M. (2008). Visible and invisible ageing: Beauty work as a response to ageism. *Ageing and Society*, 28(5), 653–674. https://doi.org/10.1017/S0144686X07007003

Coleman, R., & Figueroa, M. M. (2010). Past and future perfect? Beauty, affect and hope. *Journal for Cultural Research*, 14(4), 357–373. https://doi.org/10.1080/14797581003765317

Cook, P. S., & Dwyer, A. (2016). No longer raising eyebrows: The contexts and domestication of Botox as a mundane medical and cultural artefact. *Journal of Consumer Culture*, 17(3), 887–909. https://doi.org/10.1177/1469540516634414

Crossley, N. (2001). The social body: Habit, identity and desire. Sage.

Davis, K. (1995). Reshaping the female body: The dilemma of cosmetic surgery. Routledge.

Davis, K. (2003). Dubious equalities and embodied differences: Cultural studies on cosmetic surgery. Rowman and Littlefield.

Derrida, J. (2001). Writing and difference. Routledge.

Edmonds, A. (2010). Pretty modern: Beauty, sex and plastic surgery in Brazil. Duke University Press.

Featherstone, M. (1991). Body modification. Sage.

Figueroa, M. G. M. (2013). Displaced looks: The lived experience of beauty and racism. Feminist Theory, 14(2), 137–151. https://doi.org/10.1177/1464700113483241

Fletcher, L. (2014). Mastering the art of lip rejuvenation: Identifying patterns and techniques. *Journal of Aesthetic Nursing*, 3(8), 374–381. https://doi.org/10.12968/JOAN.2014.3.8.374

Foucault, M. (1979a). Discipline and punish: The birth of the prison. Penguin Books.

Foucault, M. (1979b [1976]). The history of sexuality Volume 1: An introduction. Allen Lane.

Fraser, S. (2003). Cosmetic surgery, gender and culture. Palgrave Macmillan.

Freud, S. (1991). On sexuality: Three essays on the theory of sexuality and other works. Penguin.

Giddens, A. (1991). Modernity and self-identity. Stanford University Press.

Gill, R., & Scharff, C. (2011). New femininities: Postfeminism, neoliberalism and subjectivity. Palgrave.

Gilman, S. (1999). Making the body beautiful: A cultural history of aesthetic surgery. Princeton University Press.

Gimlin, D. (2012). Cosmetic surgery narratives: A cross-cultural analysis of women's accounts. Palgrave Macmillan.

Gold, M. H. (2007). Use of hyaluronic acid fillers for the treatment of the aging face. Clinical Interventions in Aging, 2(3), 369–376. https://doi.org/10.2147/cia.s1244. http://www.ncbi.nlm.nih.gov/pubmed/18044187

Green, A. I. (2011). Playing the (sexual) field: The interactional basis of systems of sexual stratification. *Social Psychology Quarterly*, 74(3), 244–266. https://doi.org/10.1177/0190272511416606

Griesemer, J. (1992). The role of instruments in the generative analysis of science. In A. E. Clarke & J. H. Fujimura (Eds.), The right tools for the job: At work in twentieth-century life sciences (pp. 47–76). Princeton University Press.

Grosz, E. (1995). Volatile bodies: Towards a corporeal feminism. Allen & Unwin.

Haiken, E. (1997). Venus envy: A history of cosmetic surgery. Johns Hopkins University Press.

Hakim, C. (2010). Erotic capital. European Sociological Review, 26(5), 499–518. https://doi.org/10.1093/esr/jcq014

Haneke, E. (2015). Managing complications of fillers: Rare and not-so-rare. *Journal of Cutaneous and Aesthetic Surgery*, 8(4), 198. https://doi.org/10.4103/0974-2077.172191

Haraway, D. (1991). Simians, cyborgs and women: The reinvention of nature. Free Association Books.

Hermans, A. M. (2021). Lifting, sculpting, and contouring: Implications of the blurred boundary between cosmetic procedures and 'Other' beauty products/services. *Poetics*, 90, 101610. https://doi.org/10.1016/j.poetic.2021.101610

Heyes, C. (2007). Self-transformations: Foucault, ethics and normalized bodies. Oxford University Press.

Hoffman, E. (1994). The drive for self: Alfred Adler and the founding of individual psychology. Addison-Wesley.

Holliday, R., & Cairnie, A. (2007). Man made plastic: Investigating men's consumption of aesthetic surgery. *Journal of Consumer Culture*, 7(1), 57–78. https://doi.org/10.1177/1469540507073508

Holliday, R., & Elfving-Hwang, J. (2012). Gender, globalization and aesthetic surgery in South Korea. *Body & Society*, 18(2), 58–81. https://doi.org/10.1177/1357034x12440828

- Holliday, R., Jones, M., & Bell, D. (2019), Beautyscapes: Mapping cosmetic surgery tourism, Manchester University Press,
- Holliday, R., & Sanchez Taylor, J. (2006). Aesthetic surgery as false beauty. Feminist Theory, 7(2), 179-195. https://doi. org/10.1177/1464700106064418
- Hua, W. (2021). Gentle yet manly: Xiao xian rou, male cosmetic surgery and neoliberal consumer culture in China. Asian Studies Review, 45(2), 253-271. https://doi.org/10.1080/10357823.2021.1896676
- Huwyler, G. (2021). Unnecessary or negligent? A look into the regulation of non-surgical cosmetic intervention in Europe. Trinity Student Medical Journal, 21(1), 11-13. https://ojs.tchpc.tcd.ie/index.php/tsmj/article/view/2190
- lacobucci, G. (2022). Ministers to introduce licensing for non-surgical cosmetic procedures. BMJ, 376, o539. https://doi. org/10.1136/BMJ.O539
- International Society of Aesthetic Plastic Surgery. (2019). ISAPS international survey on aesthetic/cosmetic procedures performed in 2019. Retrieved from https://www.isaps.org/wp-content/uploads/2020/12/Global-Survey-2019.pdf
- International Society of Aesthetic Plastic Surgery. (2020). ISAPS international survey on aesthetic/cosmetic procedures performed in 2020. Retrieved from https://www.isaps.org/wp-content/uploads/2022/01/ISAPS-Global-Survey_2020.pdf Irigaray, L. (1985). This sex which is not one. Cornell University Press.
- Jacobs, M., Levine, S., Abney, K., & Davids, L. (2016). Fifty shades of African lightness: A bio-psychosocial review of the global phenomenon of skin lightening practices. Journal of Public Health in Africa, 7(2), 552. https://doi.org/10.4081/ jphia.2016.552
- Jasanoff, S., & Kim, S.-H. (2015). Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power. Chicago University Press.
- Joint Council for Cosmetic Practitioners. (2021). JCCP 10-point plan for safer regulation in the aesthetic sector. Retrieved from https://www.jccp.org.uk/ckfinder/userfiles/files/10%20point%20plan.pdf
- Jones, M. (2008). Skintight: An anatomy of cosmetic surgery. Berg.
- Jones, M. (2013). Media-bodies and Photoshop. In F. Attwood, V. Campbell, I. Hunter, & S. Lockyer (Eds.), Controversial images: Media representations on the edge (pp. 19-35). Palgrave Macmillan.
- Kassir, M., Gupta, M., Galadari, H., Kroumpouzos, G., Katsambas, A., Lotti, T., Vojvodic, A., Grabbe, S., Juchems, E., & Goldust, M. (2020). Complications of botulinum toxin and fillers: A narrative review. Journal of Cosmetic Dermatology, 19(3), 570-573. https://doi.org/10.1111/JOCD.13266
- Kaw, E. (1997). Medicalization of racial features: Asian American women and cosmetic surgery. Medical Anthropology Quarterly NS, 7(1), 74-89. https://doi.org/10.1525/mag.1993.7.1.02a00050
- Kember, S., & Zylinska, J. (2012). Life after new media: Mediation as a vital process. The MIT Press.
- Keogh, B. (2013). Review of the regulation of cosmetic interventions final report. https://assets.publishing.service.gov.uk/ government/uploads/system/uploads/attachment_data/file/192028/Review_of_the_Regulation_of_Cosmetic_Interventions.pdf
- Kontis, T. C., & Rivkin, A. (2009). The history of injectable facial fillers. Facial Plastic Surgery, 25(2), 67-72. https://doi. org/10.1055/s-0029-1220645
- Lee, J., & Jeong, E. (2021). The 4B movement: Envisioning a feminist future with/in a non-reproductive future in Korea. Journal of Gender Studies, 30(5), 633-644. https://doi.org/10.1080/09589236.2021.1929097
- Liakounakaou, A. (2020). The many faces of Botox: Beauty, crisis and cosmeceuticals in Greece. (unpublished doctoral dissertation). UCL.
- Lin, M. (2020). Can you have too much Botox? The Conversation. https://theconversation.com/can-you-have-too-muchbotox-128517
- McRobbie, A. (2004). Post-feminism and popular culture. Feminist Media Studies, 4(3), 255-264. https://doi.org/10.1080/ 1468077042000309937
- McRobbie, A. (2009). The aftermath of feminism: Gender, culture and social change. Sage.
- Mello, S. (2012). Selling a super cosmeceutical: Contextualising risk in direct-to-consumer advertising of BOTOX® cosmetic. Health, Risk & Society, 14(4), 385-398. https://doi.org/10.1080/13698575.2012.680951
- Menon, A. (2019). Cultural gatekeeping in cosmetic surgery: Transnational beauty ideals in multicultural Malaysia. Poetics, 75, 101354. https://doi.org/10.1016/j.poetic.2019.02.005
- Merleau-Ponty, M. (2013). Phenomenology of perception. [1945). Taylor and Francis.
- Miller, L. (2006). Beauty up: Exploring contemporary Japanese body aesthetics. University of California Press.
- Mincer, M., & Scholtz, R. (1988). Schönheitsoperationen. Mosaik Verlag.
- Morgan, K. P. (1991). Women and the knife: Cosmetic surgery and the colonization of women's bodies. Hypatia, 6(3), 25-53. https://doi.org/10.1111/j.1527-2001.1991.tb00254.x
- Nancarrow, S. A., & Borthwick, A. M. (2005). Dynamic professional boundaries in the healthcare workforce. Sociology of Health & Illness, 27(7), 897-919. https://doi.org/10.1111/j.1467-9566.2005.00463.x
- Naugler, D. (2009). Crossing the cosmetic/reconstructive divide: The instructive situation of breast reduction surgery. In C. Heyes & M. Jones (Eds.), Cosmetic surgery: A feminist primer (pp. 225-238). Ashgate.
- Northtrop, J. M. (2013). Reflecting on cosmetic surgery: Body image, shame and narcissism. Taylor and Francis.



Ormond, M. (2013). Neoliberal governance and international medical travel in Malaysia. Routledge.

Ortner, S. B. (1972). Is female to male as nature is to culture? Feminist Studies, 1(2), 5–31. https://doi.org/10.2307/3177638 Povolotskiy, R., Oleck, N. C., Hatzis, C. M., & Paskhover, B. (2018). Adverse events associated with aesthetic dermal fillers: A 10-year retrospective study of FDA data. American Journal of Cosmetic Surgery, 35(3), 143–151. https://doi.org/10.1177/0748806818757123

Rasmussen, S. R. (2021). Men don't do Botox, they do Brotox: Emerging configurations of masculinity in the marketing of cosmetic treatments online. *Somatechnics*, 11(1), 27–47. https://doi.org/10.3366/Soma.2021.0338

Rumsey, N., & Harcourt, D. (2012). The Oxford handbook of the psychology of appearance. Oxford University Press.

Shildrick, M. (1997). Leaky bodies and boundaries: Feminism, postmodernism and (bio)ethics. Routledge.

Shilling, C. (1993). The body and social theory. Sage. https://doi.org/10.4135/9781473914810

Simmel, G. (1976). The metropolis and mental life. Free Press.

Skeggs, B. (1997). Formations of class and gender: Becoming respectable. Sage.

Skeggs, B. (2004). Class, self, culture. Routledge.

Skeggs, B., & Wood, H. (2012). Reacting to reality television: Performance, audience and value. Routledge.

Sontag, S. (1997). The double standard of aging. In M. Pearsall (Ed.), The other within us (pp. 19–24). Routledge. https://doi.org/10.4324/9780429496059-2

Sullivan, N., & Murray, S. (2009). Somatechnics: Queering the technologization of bodies. Ashgate.

Tate, S. A. (2016). Skin bleaching in Black Atlantic zones: Shade shifters. Macmillan.

Thomas, R. L., Fries, A., & Hodgkinson, D. (2019). Plastic surgery pioneers of the central powers in the great war. *Craniomax-illofacial Trauma and Reconstruction*, 12(1), 1–7. https://doi.org/10.1055/s-0038-1660443

Ting, P. T., & Freiman, A. (2004). The story of Clostridium Botulinum: From food poisoning to Botox. *Clinical medicine* (London, England), 4(3), 258–261. https://doi.org/10.7861/clinmedicine.4-3-258

UK Parliament. (2021). Botulinum Toxin and Cosmetic Fillers (Children) Act 2021. Retrieved from https://bills.parliament.uk/bills/2620

Weber, B. R. (2009). Makeover TV: Selfhood, citizenship, and celebrity. Duke University Press.

Wegenstein, B. (2012). The cosmetic gaze: Body modification and the construction of beauty. MIT Press.

Wei, L., & Zhen, S. (2015). Are you the one? China's TV dating shows and the Sheng Nu's predicament. Feminist Media Studies, 15(2), 239–256. https://doi.org/10.1080/14680777.2014.913648

Wiegman, R. (2012). Object lessons. Duke University Press.

Wood, H. (2017). The politics of hyperbole on Geordie Shore: Class, gender, youth and excess. European Journal of Cultural Studies, 20(1), 39–55. https://doi.org/10.1177/136754941664055

Woodward, S., & Fenton, L. (2022). Editorial: Love Island: Gender, sexuality and intimate relationships. Frontiers in Sociology, 6, 235. https://doi.org/10.3389/fsoc.2021.781970

AUTHOR BIOGRAPHIES

Anna Dowrick is an interdisciplinary social scientist, spanning medical sociology, medical anthropology and science and technology studies. She works in the Medical Sociology and Health Experiences Research Group at the University Oxford. Her research explores how social injustice manifests through bodies and experiences of health and illness, with a view to informing and improving the design of public services.

Ruth Holliday is Professor in the School of Sociology and Social Policy at the University of Leeds. Her research interests are primarily located in contemporary cultural theories of gender, sexuality, class, the body and popular culture. She is particular interested in the social and cultural uses of aesthetics and currently apply these themes to two substantive areas—'elective' cosmetic surgery and material culture (especially kitsch).

How to cite this article: Dowrick, A., & Holliday, R. (2022). Tweakments: Non-surgical beauty technologies and future directions for the sociology of the body. *Sociology Compass*, 16(11), e13044. https://doi.org/10.1111/soc4.13044