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Periods and the Menstrualscape: Menstrual Products and Menstrual Manifestations in Scotland, 1870–2020

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The Period Products (Free Provision) (Scotland) Act 2021 is the first national legislation of its kind and makes provision for menstrual products at no cost to menstruators throughout Scotland. While the act is welcome, and ensconced public conversation about menstruation, it also simultaneously nationalized the practice of physical concealment through use of menstrual products. This article explores the historical debut of manufactured menstrual products in Scotland during the 20th century, and the junctures at which they rose to national significance. It does so through the concept of the *menstrualscape*. This term serves as shorthand to refer to the ephemera, material artefacts, and visual representations of menstrual products in relation to social and cultural beliefs. The menstrualscape sheds light on the historically relevant ideas and factors that undergird Scotland's Free Provision Act.



Introduction

The recent passage of the Period Products (Free Provision) (Scotland) Act 2021 for access to menstrual products in public accommodations and other venues in Scotland is a welcome development. Menstruation has become a national topic of conversation, and menstrual products, including the technologies of tampons, menstrual cups, and reusable pads and panties, are now part of the official record (Bildhauer, Røstvik, and Vostral, 2022). This national legislation for free products, deliberately made public, represents a stunning shift from veiled euphemisms of the past. With this turnaround, legislators pierced through many layers of menstrual stigma to arrive at a viable law. However, a contradiction remains: while the act ensconced public conversation about menstruation, it simultaneously nationalized the practice of physical concealment. This article explores the historical debut of manufactured menstrual products in Scotland, and the junctures at which they rose to national significance during the 20th century. Due to the semi-veiled language relating to menstrual products, it is useful to recognize their emergence more broadly; I therefore propose an analytical model that I term the *menstrualscape*. This model provides a means to examine the material culture of menstruation at different moments during the 20th century in Scotland and outlines the cultural footing for the Free Provisions Act.

The Menstrualscape

The *menstrualscape* is shorthand for the images, artefacts, and menstrual quotidian that emerge in a particular time and place. It is a concept that locates the manifestations of menstruation within prevailing cultural beliefs and practices. This approach to ephemera and technological artefacts is grounded in the field of science and technology studies and utilizes Adele Clarke's work on the *healthscape*. This concept includes both medicalization—applying medical approaches to social issues—and biomedicalization—marshalling technoscientific interventions for medical transformations—and how they are 'imbricated with popular and visual cultural materials, representations, and media coverage of things medical' (Clarke, 2010: 105). Clarke is interested in all the ways that medicine and its promises manifest in culture through, for example, literature, film, hospital architecture, and billboard advertisements. Menstruation operates similarly, but as a stigmatized bodily process many cues go unnoticed and are dismissible as 'just part of the landscape'. Like the *healthscape*, the *menstrualscape* calls attention to these manifestations. **Figure 1** represents prominent factors contributing to the *menstrualscape*, with overlapping bubbles whose affordances may be enlarged or minimized at various moments in time. Taken together, they help to draw a nuanced picture of 'things menstrual'. Additionally,

the menstruallandscape can be used as a tool to acknowledge and uncover tensions about menstrual products and gender that are related to a given place and time. The following are emerging themes and elements that I have identified from historical documents and archival materials that influence the menstruallandscape: (1) technoscience; (2) nation building; (3) the hygienic sublime; (4) passing and stigma; (5) personal identity; (6) women's rights and feminism; and (7) visual and media culture. These elements are recursive: they both influence the adoption of menstrual technologies and are also affected by the relevant associative factor. The menstruallandscape is not limited to these components and may in fact accommodate more. However, I will confine the argument to the aforementioned factors.

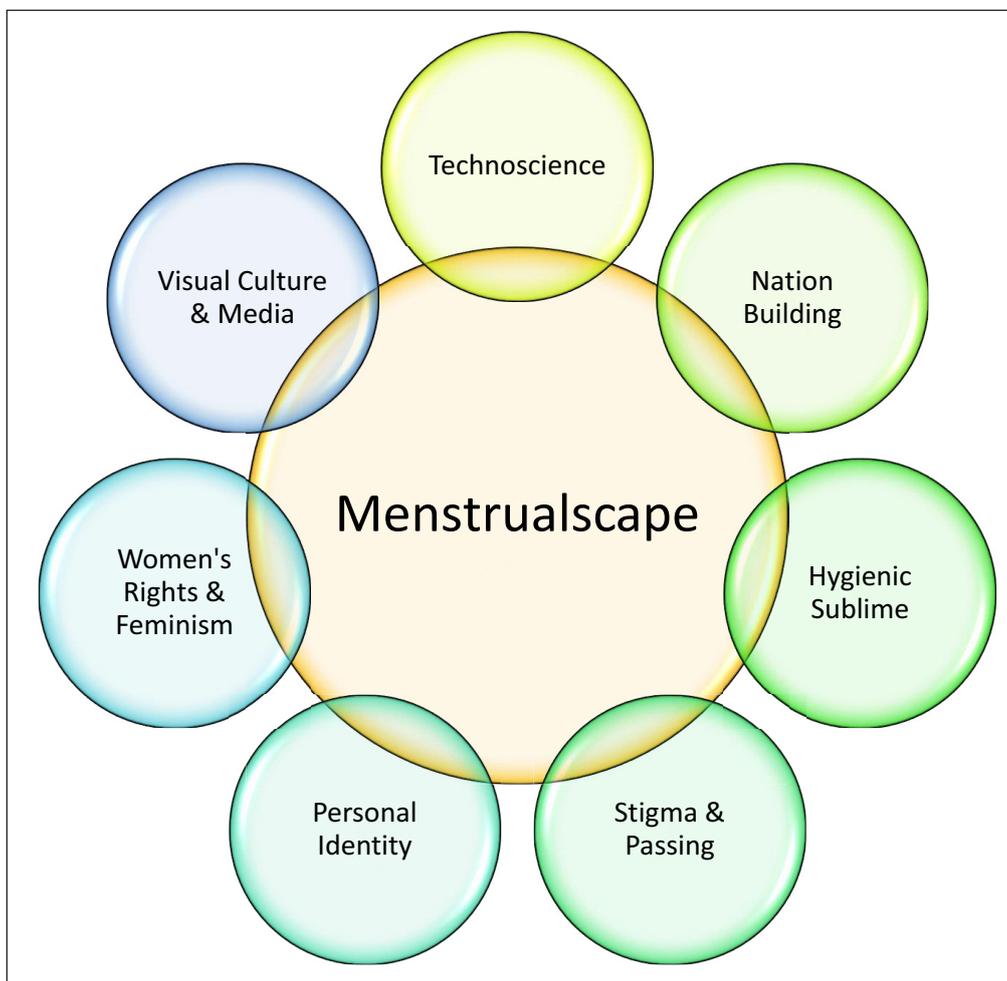


Figure 1: The menstruallandscape. Diagram representing the overlapping factors that affect menstrual material culture. The bubbles may be moved, or positioned to overlap, depending on the time, place, and circumstance. Diagram the author's own.

The following provides a guide and set of questions regarding elements of the menstruallandscape:

1. Technoscience: *In what ways are innovation, research and development, industrialism, economics, and distribution systems supporting menstrual technologies?* By conceptualizing menstrual products as technologies (Vostral, 2008), they fit into a larger narrative of menstrual capitalism (Crawford and Waldman, 2022) and menstrual commodification (Røstvick, 2022). As technoscientific artefacts they have also been deployed to demonstrate ‘progress’ and modernization (Vostral, 2008; Freidenfelds, 2009). Their uniqueness as technologies is, however, that they are simultaneously in plain sight, incorporated into everyday practices, and yet unmentionable.

2. Nation Building: *How do menstrual technologies contribute to the narrative of a nation? What do these stories say about the relationship to its citizens?* At critical junctures, national politics have challenged forms of menstrual stigma to benefit the state (Bildhauer, 2021). The nation also comes to rely on menstrual technologies to manage menstruation, often transforming women’s bodies to be more ‘acceptable’ in formerly sex-segregated spaces, such as industry during WWII (Vostral, 2008). When women cannot opt out of menstrual product use, they are compelled to purchase products and pay a required state or national tax, which contributes to the government coffers (Crawford and Spivak, 2017; Weiss-Wolf, 2017).

3. Hygienic Sublime: *To what extent do products capture menstrual fluid in order to present a clean body, elevating and transforming it to increase acceptability?* The pursuit of cleanliness through consumer goods, coupled with prescribed behavior, reproduces structural hierarchies of wealth, gender, and class, which Danya Glabau refers to as the ‘hygienic sublime’ (Glabau, 2019). It is sublime because of the scale of work and the impossibility of achieving purity, yet menstrual technologies are central to the problematic practice of domesticating, decontaminating, and sanitizing the body to absorb and hide menstrual fluid (Brumberg, 1998; Lahiri-Dutt, 2015). Beliefs about menstrual ‘dirt’ and pollution also motivate practices and systems of hygiene related to menstruation (Persdotter, 2022). The layered meaning of ‘hygiene’ is central to the gendered and historical terms ‘feminine hygiene product’ and ‘menstrual hygiene’ (Mandziuk, 2010).

4. Stigma and Passing: *To what extent is stigma mitigated by menstrual products, and incorporated into the notion of passing as a non-menstrual person?* Stigma pertains to the normalization of prejudices, beliefs, and ideologies about

menstruation that render it humiliating, shameful, or embarrassing, and reinforces the notion that women *should* hide the evidence of bodily fluid to claim respectability (Johnston-Robledo and Chrisler, 2013; Bobel, 2019; Alhelou et al., 2021). Technological passing is a framework that describes how women's use of menstrual products help them to pass as if they were non-menstrual (Vostral, 2008). Respectability politics which rely on stigma, however, work within a political framework so that the structures of inequity remain unchallenged (Collins-White, 2019). Demands for menstrual dignity serve as redress (Zivi, 2020; Cooper, 2021).

5. Personal Identity: *In what ways do menstrual products correlate with or disassociate from a menstruator's values and self-perceptions?* Menstrual products have been advertised to appeal to certain markets, but menstruators also incorporate or reject use of them based on personal beliefs. 'Teenager', 'laborer', 'environmentalist', or 'non-binary person', for example, are identities with whom menstrual product companies have sought to align at different historical moments (Brumberg, 1998; Koskenniemi, 2021; Røstvik, 2022).

6. Women's Rights and Feminism: *How are women's rights and feminism represented, and what is the discourse that advocates deploy regarding menstrual products?* Activists have publicly questioned misguided and harmful assumptions about women, their rights, and their health. The women's health movement of the 1970s challenged underlying ideologies of paternalism, misogyny, and prejudice and asserted that menstruation was a normal part of the reproductive cycle (Kline, 2010). More recently, intersectional identities have influenced attitudes about menstrual product use, safety, sustainability, and menstrual activism (Bobel, 2010; Bobel and Fahs, 2020), with attention being paid to law and how it can address menstrual injustice (Johnson, 2019; Steele and Goldblatt, 2020; McKay, 2021).

7. Visual Culture & Media: *What media items and images circulate concerning menstrual products, and how are they represented and interpreted?* Print advertisements, artwork, graphic design, magazine articles, newspaper articles, consumer packaging, and public health messaging generate visual meaning relating to menstrual products, and influence how menstruation is conceptualized in different time periods (Delaney, Lupton, and Toth, 1987; Oxley, 1998; Houppert, 1999; Merskin, 1999; Spencer, 2022). This category also includes menstrual education materials, literature, songs, social media, and television and radio (Fahs, 2016; Røstvik, 2018; Tomlinson, 2021; Ghanoui, 2022).

These questions and factors will serve as a guide for this article, which is also organized chronologically. It uses the menstruallandscape model to think through prominent developments in Scotland, where menstrual products have garnered national meaning and have reflected historical tensions between the public acknowledgement and private concealment of menstruation.

The goals of this article, however, have been somewhat thwarted by limitations imposed by the COVID-19 pandemic. I was working with members of the Menstruation Research Network (UK), and our proposal for an Arts and Humanities Research Network Award, funded by the Royal Society of Edinburgh, included meeting in person at the University of St Andrews to present and share our research. The proposed research also included archival field trips, where we planned to collaborate to locate, assess, and discuss primary evidence from Scotland. This, though, was not to be. Covid lockdowns and restrictions curtailed these aspects of our research. For those of us not living in Scotland, and without access to UK library search engines, these limitations were felt acutely. Thus, the research presented here derives from evidence available through online databases and is, therefore, by definition, incomplete.

The Menstruallandscape in Scotland

In the late-19th and early-20th centuries, the menstruallandscape first appeared in local and regional Scottish newspapers and their print advertisements. The examination of menstrual advertising is not new (Simes and Berg, 2001; Kissling, 2006; Røstvik, 2018; Przybylo and Fahs, 2020; Winkler and Bobel, 2021), but thinking about it in terms of the broader assemblage of the menstruallandscape helps to locate the discourse that undergirds the Period Products (Free Provision) (Scotland) Act 2021.

Scotland participated in industrialism and manufacturing during the late-19th century, and catamenials¹ were a product of a burgeoning modern consumerism. They could be purchased at Robert Thomson & Co., on Bridge Street in Aberdeen, Scotland, which sold everything from enema syringes, catheters, waterproof capes, and fishing trousers to sanitary towels (Robert Thomson & Co, 1886). Their advertisement in *The Aberdeen Journal* demonstrated that sanitary towels were an element of economic trade and distribution systems. Moreover, they satisfied desires for hygiene as an imperative of everyday life (Brumberg, 1998). Southalls' Sanitary Towels from Birmingham, England, for example, were advertised in *The Aberdeen Journal* (Watt & Grant, 1887).

¹ The term *catamenial* has fallen from the vernacular but was used in patents and corporate documents to refer to the broad category of products that absorb monthly flow. It is derived from the Greek word *catamenia*, meaning monthly and menses. *Catamenial* still serves as an adjective in medical definitions of ailments.

These sanitary towels were touted in the ‘New Inventions’ section of *The Lancet*, a premier British medical journal reaching practitioners in Scotland. The journal described the cotton-wool pads as disposable, which were ‘intended to be burnt after use’. Costing only ‘one penny each’, they were cheap enough to throw away, and their disposal enacted expectations of how to practice hygiene. The article continued, noting that improvements to the pad prevented ‘injury of the clothes by the arrest of the absorption’, which had posed a problem in the original design (Robinson, 1887; Anon., 1895: 1522; Hawthorne, 2009). That clothing would be ‘injured’ by blood stains when a pad failed indicated the worth and value of garments, the difficulty of keeping them clean in an era of laborious handwashing, and the significance of hygiene. The language also emphasized the purported technological improvement of the pad through increased absorption. Here, hygiene and technoscience, elements from the menstruallandscape, appeared and worked hand-in-glove to reinforce respectability and behavior.

An 1898 advertisement for sanitary towels in *The Illustrated London News*, rather than in Scotland, nevertheless captured the prevailing tone about menstruation, as well as Southalls’ aspirations for international business, with its product ‘sold by all drapers, outfitters, and chemists throughout the world’ (Southalls, 1898: 37). The advertisement, shown in **Figure 2**, also capitalized on the product’s antiseptic qualities—reflecting the hygienic sublime—and pictured a nurse holding a young child, to signal medical cleanliness as well as maternal caretaking. The advertisement promoted and accepted the indecorous nature of menstruation by avoiding direct mention of it, but still boasted that the products ‘Are Indispensable for Ladies Travelling’, which was a class cue for people who had sufficient means (Southalls, 1898: 37). Despite the advertisements and endorsements in medical journals, these products were comparable to or worse than flannel and birds-eye cloth that women could fold and pin to their undergarments, and for many it was not worth the trouble (Gilbreth, 1927). While the images, technology, and distribution indicated the emergence of the menstruallandscape, the sanitary towels were not yet wholeheartedly incorporated into women’s daily, bodily routines.

Contributing to the menstruallandscape were advertisements for new innovations, such as rubber aprons and step-ins, sold from the early 1900s to the 1930s. The apron was worn tied or attached to the waist, draping over the buttocks and thighs. In this way, the apron was layered between the body and slips and skirts, thus shielding outer fabrics from leaks and potential stains. By the 1920s, however, these were falling out of vogue. They twisted, tore, and were not easily laundered. This may account for numerous advertisements of blow-out sales in the *Evening Express* of Aberdeen, listing ‘Ladies’ Sanitary Aprons’ for ‘Final clearance of all Rummage Lots at Kinghorns’ (Kinghorns,



Made entirely of White Absorbent Wool of Downy Softness.

SOUTHALLS'
"SANITARY TOWELS"

Absorbent,
Antiseptic.

Are Indispensable for Ladies Travelling.
(IMPROVED.)

1/-, 1/6, & 2/- per doz.

FREE SAMPLE on application to the Lady Manager, 17, Bull St., Birmingham.

ALSO A CHEAPER MAKE AT 6d. PER DOZ. | SUPERIOR TO ANY HALF PENNY "TOWEL" ON THE MARKET.

Mixed Sample Packets (three of Size 0, one each 1, 2, and 4) post free from the Lady Manager for 8 Stamps.

SOLD BY ALL DRAPERS, OUTFITTERS, AND CHEMISTS THROUGHOUT THE WORLD.

Figure 2: Print advertisement for sanitary towels. 'Southalls' 'Sanitary Towels'. Summer Number. *Illustrated London News*, 13 June 1898, p. 37. The *Illustrated London News* Historical Archive, 1842-2003.

1916). This veiled language still utilized cleanliness as a selling point, but also indicated the expansion of the menstruallandscape and 'things menstrual'.

Menstrual capitalism gained footing in the 1920s, occurring both in Scotland and internationally (Heinrich and Batchelor, 2004). New jobs and economic expansion could now be linked to burgeoning national commerce. In Edinburgh, a job posting in 1927 read: 'Salesmen wanted to call on drapery trade (Kotex sanitary towels) in the North Scotland district' (Lord & Thomas, Ltd, 1927). Here, the United States company Kimberly-Clark Corporation, who manufactured Kotex sanitary napkins, was making inroads to compete with Southalls' Towels, no doubt motivated by Southalls' market expansion in New York City (Southalls, 1892). While the Edinburgh job advertisement specified a male applicant, the Southalls' Sanitary Towels advertisement [Figure 2] referenced a 'Lady Manager' in London, and menstrual pad advertisements from Liverpool newspapers indicated that this position was shifting toward a preference for women as well (H R Roberts, 1928). The H. R. Roberts Variety Store in Liverpool and the A. Burnet & Co., Ltd. in London both advertised the 'Kumfee' sanitary napkin and instructed that 'Ladies' should make inquiries about the product to the 'Manageress' (A Burnet & Co Ltd,

1928). The female manager was a new and important paid position and expanded the affordances of the menstralscape. Menstrual etiquette associated with respectability and the performance of menstrual passing dictated that women approach women—instead of men—with such inquiries to avoid shame. Because of this, businesses now saw it fit to hire women drapers with specific duties to manage sales of sanitary towels. This advert exemplified the growing need for women’s economic labor in public places, which also required managing the body with commodified menstrual products.

Women’s labor and its national implications were already keen issues in Scotland (Smitley, 2009). Industrialization was linked to national economic power, and Dundee, for example, was home to a robust jute industry, which also happened to employ at least two thirds of its mill operatives as women. Dundee was also known as a ‘woman’s town’ due to its high level of female employment, with a demographic ratio of three women for every two men (Wainwright, 2003). As geographer and historian Emma Wainwright argues, between 1870 and 1930, women there were ‘brought under closer scrutiny’ and ‘medical supervision’ by the Dundee Medical Officer of Health (MOH) in order to trace and address infant mortality (Wainwright, 2003: 167). This points to ways in which women’s bodies and women’s health were of government concern with regards to children’s health, mothers’ caregiving, fertility, and national welfare. Within such a context, it is hardly surprising that sanitary towels and sanitary napkins would be marketed as salubrious. While most sanitary napkin advertisements during this time can be characterized as depicting aspirations of upward mobility, in Dundee this was not the case. Most of the women were of the laboring class and without disposable income, which may explain why purveyors marketed free sample products of Kotex to cultivate consumers in Dundee and Dalkeith (Kotex Limited, 1928; W. Lawson, 1928). Consuming products, practicing ‘hygiene’, and participating in nation building, were all part of the growing menstralscape. These themes foreshadowed issues that circulated during the formulation of the current Period Products Act, including national identity around health, well-being, and government intervention with the body.

Protection of the nation took more direct forms during World War II, and the procurement of menstrual pads became a national concern to reduce women’s absenteeism in the workforce. The retooling of factories for the war effort, and reliance on women as welders at shipyards in Dundee, for example, elevated the importance of their labor (University of Dundee, 2017). Performing labor outside of the home, women required disposable sanitary napkins and towels to manage their periods and accommodate the strict time schedules of industry that did not necessarily correlate with their bodily rhythms (Vostral, 2008). It is no surprise that resources were commandeered for war aims, with demands on wool, cotton, and wood fiber affecting

material supplies for menstrual pads. However, while vouchers were required to purchase food and clothing to limit shortages and distribute goods to all citizens, in 1941 the Board of Trade, as shown in **Figure 3**, exempted sanitary towels, baby clothing, mending wools, and elastic, amongst other materials, from such limitations (Board of Trade, 1941). Attention to the menstruallandscape reveals the prioritization of menstrual products as a national necessity; ignoring menstruation and its management threatened national imperatives, productivity, and output.



RATIONING

of Clothing, Cloth, Footwear

from June 1, 1941

Rationing has been introduced, not to deprive you of your real needs, but to make more certain that you get your share of the country's goods—to get fair shares with everybody else.

When the shops re-open you will be able to buy cloth, clothes, footwear and knitting wool only if you bring your Food Ration Book with you. The shopkeeper will detach the required number of coupons from the unused margarine page. Each margarine coupon counts as one coupon towards the purchase of clothing or footwear. You will have a total of 66 coupons to last you for a year; so go sparingly. You can buy where you like and when you like without registering.

NUMBER OF COUPONS NEEDED

Men and Boys		Adult	Child	Women and Girls		Adult	Child
Unlined mackintosh or cape	..	9	7	Lined mackintoshes, or coats (over 28 in. in length)	..	14	11
Other mackintoshes, or raincoat, or overcoat	..	16	11	Jacket, or short coat (under 28 in. in length)	..	11	8
Coat, or jacket, or blazer or like garment	..	13	8	Dress, or gown, or frock—woollen	..	11	8
Waistcoat, or pull-over, or cardigan, or jersey	..	5	3	Dress, or gown, or frock—other material	..	7	5
Trousers (other than fustian or corduroy)	..	8	6	Gym tunic, or girl's skirt with bodice	..	8	6
Fustian or corduroy trousers	..	5	5	Blouse, or sports shirt, or cardigan, or jumper	..	5	3
Shorts	..	5	3	Skirt, or divided skirt	..	7	5
Overalls, or dungarees or like garment	..	6	4	Overalls, or dungarees or like garment	..	6	4
Dressing-gown or bathing-gown	..	8	6	Apron, or pinafore	..	3	2
Night-shirt or pair of pyjamas	..	8	6	Pyjamas	..	8	6
Shirt, or combinations—woollen	..	8	6	Nightdress	..	6	5
Shirt, or combinations—other material	..	5	4	Petticoat, or slip, or combination, or cami-knickers	..	4	3
Pants, or vest, or bathing costume, or child's blouse	..	4	2	Other undergarments, including corsets	..	3	2
Pair of socks or stockings	..	3	1	Pair of stockings	..	2	1
Collar, or tie, or pair of cuffs	..	1	1	Pair of socks (ankle length)	..	1	1
Two handkerchiefs	..	1	1	Collar, or tie, or pair of cuffs	..	1	1
Scarf, or pair of gloves or mittens	..	2	2	Two handkerchiefs	..	1	1
Pair of slippers or goloshes	..	4	2	Scarf, or pair of gloves or mittens or muff	..	2	2
Pair of boots or shoes	..	7	3	Pair of slippers, boots or shoes	..	5	3
Pair of leggings, gaiters or spats	..	3	2				

CLOTH. Coupons needed per yard depend on the width. For example, a yard of woollen cloth 36 inches wide requires 3 coupons. The same amount of cotton or other cloth needs 2 coupons.

KNITTING WOOL. 1 coupon for two ounces.

THESE GOODS MAY BE BOUGHT WITHOUT COUPONS

‡ Children's clothing of sizes generally suitable for infants less than 4 years old. † Boiler suits and workmen's bib and brace overalls. † Hats and caps. † Sewing thread. † Mending wool and mending silk. † Boot and shoe laces. † Tapes, braids, ribbons and other fabrics of 3 inches or less in width. † Elastic. † Lace and lace net. † Sanitary towels. † Braces, suspenders and garters. † Hard haberdashery. † Clogs. † Black-out cloth dyed black. † All second-hand articles.

Special Notice to Retailers

Retailers will be allowed to get fresh stocks of cloth up to and including June 28th, of other rationed goods up to and including June 21st, WITHOUT SURRENDERING COUPONS. After those dates they will be able to obtain fresh stocks only by turning in their customers' coupons. Steps have been taken, in the interests of the smaller retailers, to limit during these periods the quantity of goods which can be supplied by a wholesaler or manufacturer to any one retailer however large his orders. Further information can be obtained from your Trade Organisations.

ISSUED BY THE BOARD OF TRADE

Figure 3: Rationing of clothing, cloth and footwear from June 1. Board of Trade 1941 *Daily Telegraph & Morning Post*. London, England. June 3, p. 5. The Telegraph Historical Archive. The red underlining has been added by the author to call attention to the category of sanitary towels that could be purchased without a ration coupon.

To somewhat alleviate this problem, the government prohibited certain exports, including sanitary towels, as reported by *The Economist* in 1941. Demand was so great for sanitary towels that they were not to leave the United Kingdom. The article noted that ‘Licences [sic] will also be required for the export of sanitary towels, including substitutes, and articles manufactured wholly or mainly of cellulose wadding, but licences [sic] for these goods will not normally be granted’ (Anon., 1941). According to The CultureNL Museums Collections (encompassing different museums and collections from the North Lanarkshire region of Scotland), these shortages were so serious that the House of Commons procured pads from abroad and by 1942 ‘the Association of Sanitary Towel Manufacturers was formed to assist the Government in British production and distribution’ (North Lanarkshire Council, n.d.). It was only in 1946 that sanitary towels might be exported, with as few as 185 [units not labeled] valued at £3,842 escaping UK borders according to records of the House of Commons (Parliament, 1946). Even after the war, when prices started to fall, many supplies were still limited, with available sanitary towels down 21% in August of 1947, and down 11% in July 1948, which indicated an unmet need (Anon., 1948). Thus, menstrual concealment became nationalized during WWII: the value of menstrual pads to productivity aims was a national concern and a problem requiring government intervention.

Throughout the war, the menstruallandscape continued to include themes of hygiene and women’s identity as industrial laborers, but the material shortages and constraints on sanitary towels provided an ideal opportunity to promote a new menstrual product—the tampon—branded as ‘Tampax sanitary protection worn internally’. Though tampons had been developed in the United States in the 1930s, it was not until World War II that they were advertised more broadly and adopted by users in Scotland. The advertisements placed in the *Airdrie & Coatbridge Advertiser* and the *West Lothian Courier*, both from Scotland, instructed women to look for a sign that said, ‘We Stock TAMPAX’ when they shopped at the ‘chemist or draper’ (Tampax Ltd, 1943: 12). In this way, women would not need to ask a clerk or manager in the store for supplies—a request which would presumably cause embarrassment. Invisibility still prevailed regarding menstrual fluid, and the associated menstrual technology. A wartime advert indicated that ‘You can take TAMPAX away in your handbag...it’s as handy to carry as to use’ (Tampax Ltd, 1943: 3). This language assured menstruators of the tampon’s discretion, and both the product and the advert contributed to menstrual passing, a factor within the menstruallandscape.

The tone of the advertisements changed at the end of the war, however. Economics that privileged male wage labor now found women’s employment superfluous (Hartmann, 1982) and this fact was downplayed in the post-war menstruallandscape.

Tampax advertisements in Scotland quickly embraced the so-called return to normalcy and sought to enforce conventions of femininity. A review of Scottish Tampax advertisements between 1943 and 1947 in the *Perthshire Advertiser* and *Motherwell Times* shows that Tambrands, Inc. purchased advertising with a high monthly frequency, such as the ‘Beauty is Not Looks Alone’ campaign, which ran 13 times in 1947 [Figure 4]. The menstruallandscape now contained adverts focused on leisure and consumerism, which included sunbathing, swimming, and beauty. The underlying theme of anxiety related to menstrual stigma remained, now neutralized by the ‘peace of mind’ and ‘assurance’ provided by the technology. Gone were the references to industrial jobs and war; though freedom was a theme, it was expressed, for example, by going to play golf, a national Scottish pastime (Tampax Ltd., 1946). Overall, the advertisements prescribed a consumerist and active national identity for women.

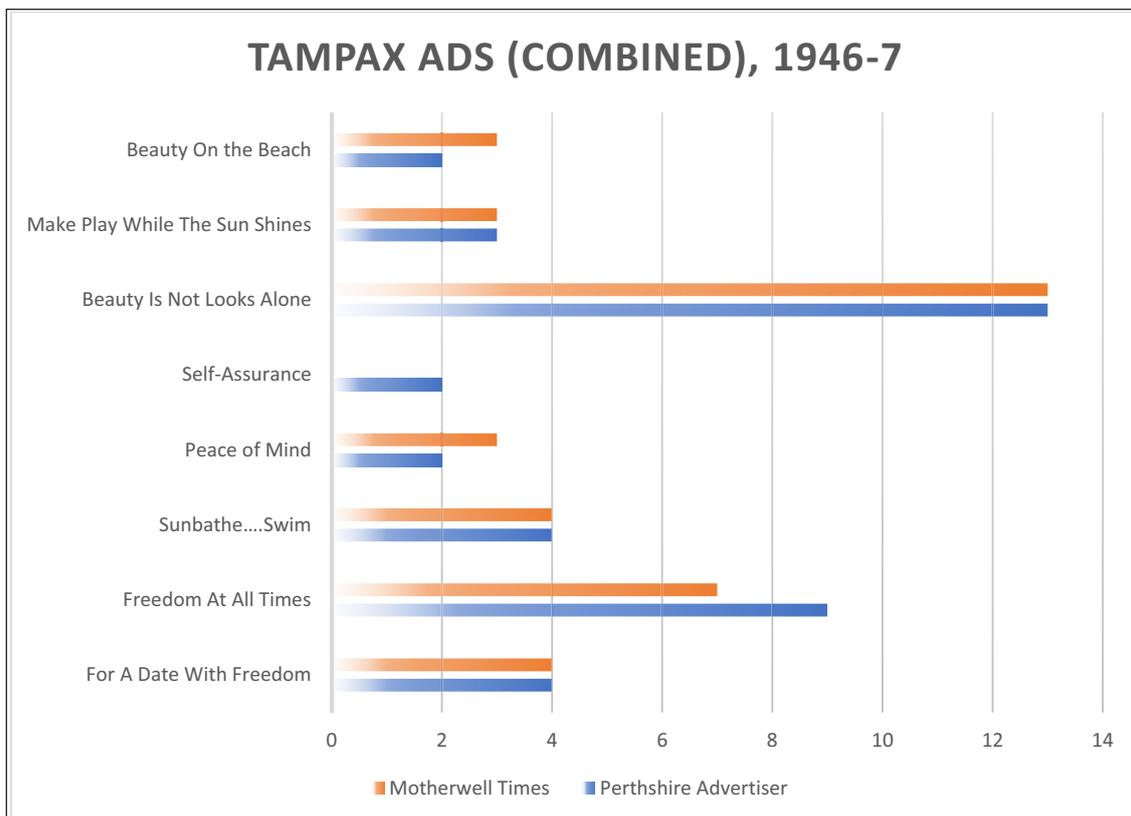


Figure 4: chart depicting frequency and repetitions of ads, including their headline titles, in two Scottish newspapers. *Motherwell Times* and the *Perthshire Advertiser*, 1946–1947.

The menstruallandscape became more robust during the 1960s and 1970s, with visual media, including menstrual education films, increasingly commonplace in Scotland

(Ghanoui, 2022). Corporations were reacting to the shifting social terrain that was influenced by the women's liberation movement and the civil rights movement (Browne, 2014), as well as new laws codifying fair practices in the UK, including the Equal Pay Act of 1970, the Sex Discrimination Act of 1975, and the Race Relations Act of 1976. Menstrual product advertisements appropriated the language of freedom with new pads such as Carefree, Stayfree, and New Freedom. The pads also marked a transition to thinner designs and notably eliminated belts and tabs with the new technoscientific material of removable adhesives. Another product that capitalized on technological developments while adopting the rhetoric of freedom was period underwear. In Irvine, Scotland, the 'Woman's World' section of the local newspaper promoted a new product: New Freedom Panties. This article from 1970 called them a 'pantie with a plus' and 'a new idea in panties'. The 'plus', it claimed, was a 'tiny flat plastic gripper that, during menstruation, holds a new type of towel securely and comfortably in place, without belts, loops, or pins' (Anon., 1970). Appropriating the theme of 'freedom' to sell products, the advertisements nevertheless promoted the benefits of menstrual concealment and not the more radical political demands of feminism (Vostral, 2008). By the late-20th century, the major companies had honed the paradox of discretion and expression that aligned with the expansion of menstrual capitalism (Crawford et al., 2020; Røstvick, 2022).

Compelled use of menstrual products was so ubiquitous by the late-20th century that they were normalized as necessities, regardless of the cost. The Fine Fare Superstore in Aberdeen ran a regular voucher for 5p off a box of Kotex sanitary towels (quantity unknown), clarifying 'You pay only 7p' (Fine Fare Superstore, 1971). At the Care Market in Aberdeen in 1974, Kotex New Freedom pads cost 34p for the 24-count economy pack, equivalent to about £3.94 when adjusted for inflation in 2022 (Care Market, 1974: 7). Changes to the cost were also affected by the Value Added Tax (VAT) which replaced the Purchase Tax (PT) and Selective Employment Tax (SET) in 1973. *The Aberdeen Press and Journal* ran a full page of guidelines issued by H. M. Government, which alerted readers of the changes to come. The category of 'Chemists' Goods, Toiletries, and Cosmetics' contained numerous items related to health and the body, including 'sanitary products' (HM Government, 1973: 8). The category clarified that 'NHS prescription charges and medical, dental, and nursing services do not carry VAT and do not change price'. Items specifically included in the category were perfume, lipstick, shampoo and soap, which would go down in price because the 10% VAT was less than the regular PT. There were exceptions. Sanitary towels, toilet paper, and toothbrushes formerly did not carry PT, but would go up in price because of VAT (HM Government, 1973: 6). The change to VAT was related to the UK joining the European Economic Community, and the subsequent

interest in creating economic integration of markets, goods, and capital. Here, the element of menstrual economic inequity was instantiated, with the 5% VAT on ‘women’s sanitary products (WSPs)’ to the current zero-rate only enacted in January of 2021 (HM Revenue & Customs, 2011) following Brexit.

The Scottish Act

This historical examination has demonstrated the long presence of menstrual material culture and menstrual products in Scotland. The menstruallandscape model helps to make visible examples in the Scottish context during the 20th century, when menstrual products rose to national significance. Scotland is experiencing another such moment with its Period Products (Free Provision) (Scotland) Act 2021. The Introduction (Bildhauer, Røstvik and Vostral, 2022) to this edited collection provides an analysis of the contemporary advocates who promoted the bill, the politicians who helped enact it, and addresses current issues regarding socioeconomic concerns and gender equity; these topics will therefore not be repeated here. This article’s focus on the application of the menstruallandscape model to Scotland’s history aims to enhance understandings of why there was fertile ground for the bill, and to locate ‘things menstrual’ that contributed to the long historical arc and overall culture in which the law is situated.

To recap the elements of the menstruallandscape, the following observations gesture to areas in which Scotland exhibited strong evidence of its connection to the past, and where things may develop in the future. The observations point to areas in which systematic future studies utilizing the lens of the menstruallandscape may be conducted, to test its effectiveness as a model, and determine how it might shed further light on menstrual politics.

Technoscience: Technoscientific products evolved from Southalls’ Towels to ‘pantie with a plus’. Currently, many menstruators have accepted new technologies such as menstrual cups, and distribution systems, through schools and food pantries, provided these items before the bill was considered (see Bildhauer, Røstvik and Vostral, 2022).

Nation Building: From the need to commandeer sanitary pads during WWII and prevent their export, to their protected status from taxes, menstrual products held national importance and therefore required government intervention. National identity is significant to Scotland (Combes et al., 2001) and, through the Period Products (Free Provision) (Scotland) Act 2021 Scotland can craft its identity as a country that cares about its constituents by providing persons with free menstrual products.

Hygienic Sublime: Cleanliness remained an important factor informing the ‘acceptability’ of menstruating bodies, especially for industrial workplace demands. Currently, the importance of disposability equating to hygiene is being reconsidered and reframed as harmful to the environment (Borunda, 2019). Reusable products, including washable pads and menstrual cups, challenge this imperative, and are freely available at some locations in Scotland (see Bildhauer, Røstvik and Vostral, 2022).

Stigma and Passing: Invisibility and concealment were cornerstones of menstrual product efficacy and the rhetoric of advertisements throughout the 20th century, and the Period Products (Free Provision) (Scotland) Act 2021 presents a new iteration of this. The campaign for the bill centered on ‘period dignity’, couched to alleviate poverty, reduce absenteeism at work and school, and improve menstruators’ self-esteem (McKay, 2021). The act challenges menstrual stigma, but it reinforces the contemporary ‘double-bind’ of openly discussing periods while simultaneously reinforcing old tropes of concealment (Koskenniemi, 2021).

Personal Identity: The commodification of products was coupled with skillful appeals to personal identities, many of which have morphed over the past one hundred years. The wording of the Period Products (Free Provision) (Scotland) Act 2021 removes references to ‘women’ and instead speaks of ‘person’ or ‘persons’. The official act only once references ‘menstrual’ and ‘menstruation’ on page seven (Period Products (Free Provision) (Scotland) Act 2021). However, ‘period’ serves to capture the essence of menstruation, de-medicalizing it while utilizing direct and common language to reach Scottish constituents and citizens.

Women’s Rights and Feminism: The women’s liberation movement gained traction in Scotland during the 1970s, and currently there is a growing body of activists calling for menstrual rights and menstrual justice (Johnson, 2019; Steele and Goldblatt, 2020; Bildhauer, Røstvik and Vostral, 2022). Menstrual justice organizations such as the Menstrual Cup Coalition, Hey Girls social enterprise, and Bloody Good Period (UK) were central to the promotion of the bill and continue to be involved in the distribution of goods as outlined in the act (see Bildhauer, Røstvik and Vostral, 2022).

Visual Culture and Media: From the first advertisements for menstrual products in local newspapers, to product testimonies on contemporary social media accounts, menstrual products continue to be subjects within the visual menstrualscape of Scotland.

Conclusion

This historical examination of period products in Scotland, and key moments when they gained national attention, demonstrate both the tension between revelation and concealment, and changing gender expectations. The menstruallandscape is a useful lens by which to see some of the everyday, taken-for-granted elements of menstrual ephemera which were in abundance throughout 20th-century Scotland. Developed elements of the menstruallandscape were part of the overall logic that gave meaning to the passage of the Period Products (Free Provision) (Scotland) Act 2021. The act, however, simultaneously holds two countervailing notions. The first is an outspoken and shame-free public discussion of periods; the second is the nationally sanctioned concealment of that same menstrual fluid with menstrual products. Often distinguished by its dramatic scenery or identified by the trope of bagpipes, the act provides a different way to imagine Scotland: a country seeking to forge a new kind of relationship with its menstruating citizens.

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References

- A Burnet & Co Ltd** 1928 In the Interests of Comfort [advertisement]. *The Daily Mirror* [London, England], 4 December, p. 12.
- Alhelou, Nay, Purvaja S, Kavattur, L R and Winkler, Inga T** 2021 'We like things tangible': A critical analysis of menstrual hygiene and health policy-making in India, Kenya, Senegal and the United States. *Global Public Health*. DOI: <https://doi.org/10.1080/17441692.2021.2011945>
- Anon.** 1895 Southall's New Sanitary Towel. *The Lancet*, 134(3746), 15 June, p. 1522. DOI: [https://doi.org/10.1016/S0140-6736\(02\)05665-9](https://doi.org/10.1016/S0140-6736(02)05665-9)
- Anon.** 1941 Commodity and Industry News. *The Economist*, 8 November, p. 576.
- Anon.** 1948 Consumer Goods. *The Financial Times*, 30 October, p. 5.
- Anon.** 1970 Pantie with a Plus. *The Irvine Herald* [Irvine, Scotland], 18 September, p. 3.
- Bildhauer, Bettina** 2021 Uniting the Nation through Transcending Menstrual Blood: The Period Products Act in Historical Perspective, *Open Library of Humanities* 7(2). DOI: <https://doi.org/10.16995/olh.6339>
- Bildhauer, B, Røstvik, C M and Vostral, S L** 2022 Introduction: The Period Products (Free Provision) (Scotland) Act 2021 in the Context of Menstrual Politics and History. *Open Library of Humanities*, 8(1). DOI: <https://doi.org/10.16995/olh.8159>
- Board of Trade** 1941 Rationing of Clothing, Cloth and Footwear from June 1 [announcement] *Daily Telegraph & Morning Post* [London, England], 3 June, p. 5. The Telegraph Historical Archive [Last Accessed: 7 March 2022].
- Bobel, Chris and Breanne, Fahs** 2020 From Bloodless Respectability to Radical Menstrual Embodiment: Shifting Menstrual Politics from Private to Public. *Signs*, 45(4): 955–983. DOI: <https://doi.org/10.1086/707802>
- Bobel, Chris** 2019 *The Managed Body: Developing Girls & Menstrual Health in the Global South*. London: Palgrave Macmillan. DOI: <https://doi.org/10.1007/978-3-319-89414-0>
- Bobel, Chris** 2010 *New Blood: Third-Wave Feminism and the Politics of Menstruation*. New Brunswick: Rutgers University Press.

- Borunda, Alejandra** 2019 How Tampons and Pads Became so Unsustainable. *National Geographic*, 26 September. <https://www.nationalgeographic.com/environment/article/how-tampons-pads-became-unsustainable-story-of-plastic> [Last Accessed: 21 July 2022].
- Browne, Sarah** 2014 *The Women's Liberation Movement in Scotland*. Manchester: Manchester University Press.
- Brumberg, Joan Jacobs** 1998 *The Body Project: An Intimate History of American Girls*. New York: Vintage.
- Care Market** 1974 For Value and Service Look for this Sign [advertisement]. *The Press and Journal* [Aberdeen, Scotland], 28 August, p. 7.
- Clarke, Adele** 2010 From the Rise of Medicine to Biomedicalization: U.S. Healthscapes and Iconography, Circa 1890-Present. In: Clarke, Adele, Mamo, Laura, Fosket, Jennifer Ruth, Rishman, Jennifer, and Shim, Janet (eds.) *Biomedicalization: Technoscience, Health, and Illness in the U.S.* Durham: Duke University Press. pp. 105–146. DOI: <https://doi.org/10.2307/j.ctv125jk5c.8>
- Collins-White, Mali** 2019 Rethinking the Human: Anti-Respectability and Blackhood. *American Studies Quarterly*, 71(1): 141–149. DOI: <https://doi.org/10.1353/aq.2019.0007>
- Combes, Emma, Hibbert, Sally, Hogg, Gillian, and Varey, Richard** 2001 Consuming Identity: the Case of Scotland. In: Gilly, Mary C and Meyers-Levy, Joan (eds.) *NA - Advances in Consumer Research*, Volume 28. Valdosta, GA: Association for Consumer Research. pp. 328–333. <https://www.acrwebsite.org/volumes/8507/volumes/v28/NA-28> [Last Accessed: 21 July 2022].
- Cooper, E B** 2021 What's Law Got to Do With It? Dignity and Menstruation. *Columbia Journal of Gender and Law*, 41(1): 39–52. DOI: <https://doi.org/10.52214/cjgl.v41i1.8819>
- Crawford, Bridget and Gold Waldman, Emily** 2022 *Menstruation Matters: Challenging the Law's Silence on Periods*. New York: NYU Press.
- Crawford, Bridget, Johnson, Margaret, Karin, Marcy, Strausfeld, Laura, and Gold Waldman, Emily** 2020 The Ground on Which We all Stand: A Conversation About Menstrual Equity Law and Activism. *Michigan Journal of Gender & Law*, 26(2): 341–388. https://scholarworks.law.ubalt.edu/all_fac/1098. [Last Accessed: 21 July 2022]. DOI: <https://doi.org/10.36641/mjgl.26.2.ground>
- Crawford, Bridget J and Spivack, Carla** 2017 Tampon Taxes, Discrimination and Human Rights. *Wisconsin Law Review*, 491–549. <http://digitalcommons.pace.edu/lawfaculty/1070/>. [Last Accessed: 21 July 2022].
- Delaney, J, Lupton, M J and Toth, E** 1987 *The Curse: A Cultural History of Menstruation*. Urbana: University of Illinois Press.
- Fahs, Breanne** 2016 *Out for Blood: Essays and Menstruation and Resistance*. Albany: SUNY Press.
- Fine Fare Superstore** 1971 Fine Fare Superstore Voucher [advertisement]. *Aberdeen Evening Express* [Aberdeen, Scotland], 15 September, p. 4.
- Freidenfelds, Lara** 2009 *The Modern Period: Menstruation in Twentieth-Century America*. Baltimore: Johns Hopkins University Press.
- Ghanoui, S L** 2022 'Responsible Body': Menstrual Education Films and Sex Education in the United States and Scotland, 1970s–1980s. *Open Library of Humanities*, 8(2): pp. 1–21. DOI: <https://doi.org/10.16995/olh.6349>

- Gilbreth, Lillian** 1927 *Report of Gilbreth, Inc. to Johnson and Johnson*. Papers of Frank and Lillian Gilbreth, Special Collections, Purdue University.
- Glabau, Danya** 2019 Food Allergies and the Hygienic Sublime. *Catalyst: Feminism, Theory, Technoscience*, 5(2): 1–26. DOI: <https://doi.org/10.28968/cftt.v5i2.32070>
- Hartmann, Susan** 1982 *The Home Front and Beyond: American Women in the 1940s*. Boston: Twayne Publishers.
- Hawthorne R** 2009 From Rags to Riches. *Journal of the Association of Chartered Physiotherapists in Women's Health*, 104: 34–37.
- Heinrich, Thomas** and **Batchelor, Bob** 2004 *Kotex, Kleenex, and Huggies: Kimberly-Clark and the Consumer revolution in American Business*. Columbus: The Ohio State University Press.
- HM Government** 1973 Your Guide to the VAT Price Changes [announcement]. *Aberdeen Press and Journal* [Aberdeen, Scotland], 20 March, p. 6.
- HM Government** 1973 Your Guide to the VAT Price Changes [announcement]. *Aberdeen Press and Journal* [Aberdeen, Scotland], 3 April, p. 8.
- HM Revenue & Customs** 2011 Women's Sanitary Products (VAT Notice 701/18). <https://www.gov.uk/guidance/vat-on-womens-sanitary-products-notice-70118#para13> [Last Accessed 7 July 2022].
- Houppert, Karen** 1999 *The Curse: Confronting the Last Unmentionable Taboo*. New York: Farrar, Straus & Giroux.
- Johnson, Margaret** 2019 Menstrual Justice. *UC Davis Law Review*, 53(1): 1–79. DOI: <https://doi.org/10.2139/ssrn.3389773>
- Johnston-Robledo, Ingrid** and **Chrisler, Joan C** 2013 The Menstrual Mark: Menstruation as Social Stigma. *Sex Roles*, 68(1–2): 9–18. DOI: <https://doi.org/10.1007/s11199-011-0052-z>
- Kinghorns** 1916 Special Arrangements [advertisement]. *Evening Express* [Aberdeen, Scotland], 8 March, p. 6.
- Kissling, Elizabeth** 2006 *Capitalizing the Curse: The Business of Menstruation*. Boulder: Lynne Rienner. DOI: <https://doi.org/10.1515/9781588269225>
- Kline, Wendy** 2010 *Bodies of Knowledge: Sexuality, Reproduction, and Women's Health in the Second Wave*. Chicago: University of Chicago Press. DOI: <https://doi.org/10.7208/chicago/9780226443072.001.0001>
- Koskenniemi, Aino** 2021 'Say no to shame, waste, inequality—and leaks!' Menstrual activism in the market for alternative period products. *Feminist Media Studies*. DOI: <https://doi.org/10.1080/14680777.2021.1948885>
- Kotex Limited** 1928 Free Sample of Kotex [advertisement]. *The Evening Telegraph* [Dundee, Scotland], 16 April, p. 6.
- Lahiri-Dutt, Kuntala** 2015 Medicalising menstruation: a feminist critique of the political economy of menstrual hygiene management in South Asia. *Gender, Place & Culture*, 22(8): 1158–1176. DOI: <https://doi.org/10.1080/0966369X.2014.939156>
- Lord & Thomas Ltd** 1927 Situations, Agencies &c., Vacant [advertisement]. *The Scotsman* [Edinburgh, Scotland], 2 December, p. 1.

- Mandziuk, Roseann M** 2010 'Ending Women's Greatest Hygienic Mistake': Modernity and the Mortification of Menstruation in Kotex Advertising, 1921–1926. *Women's Studies Quarterly*, 38(3): 42–62. DOI: <https://doi.org/10.1353/wsqr.2010.0015>
- McKay, Fiona** 2021 Scotland and Period Poverty: A Case Study of Activists' Media and Political Agenda Setting. In: Morrison, James, Birks, Jen, Berry, Mike (eds.) *The Routledge Companion to Political Journalism*. London: Routledge. DOI: <https://doi.org/10.4324/9780429284571-38>
- Merskin, D** 1999 Adolescence, advertising, and the idea of menstruation. *Sex Roles*. 40: 941–957. DOI: <https://doi.org/10.1023/A:1018881206965>
- North Lanarkshire Council** n.d. Secret Health: The Hushed History of Women's Extra Expense. CultureNL Museum. <https://www.culturenlmuseums.co.uk/story/secret-health-the-hushed-history-of-womens-extra-expense/> [Last Accessed: 21 July 2022].
- Oxley, T** 1998 Menstrual Management: An Exploratory Study. *Feminism & Psychology*, 8: 185–191. DOI: <https://doi.org/10.1177/095935359800800205>
- Parliament** 1946 *Trade and Navigation* (HC 1945–1946 63). London: House of Commons. pp. 121–122.
- Persdotter, Josefin** 2022 Menstrual Dirt: An Exploration of Contemporary Menstrual Hygiene Practices in Sweden. Lund: Arkiv Förlag. DOI: <https://doi.org/10.13068/9789179243685>
- Przybylo, Ela and Fahs, Breanne** 2020 Empowered Bleeders and Cranky Menstruators: Menstrual Positivity and the 'Liberated' Era of New Menstrual Product Advertisements. In: Bobel, C, Winkler, I T, Fahs, B, Hasson, K A, Kissling, E A, Roberts, T A (eds.) *The Palgrave Handbook of Critical Menstruation Studies* (Singapore: Palgrave Macmillan). DOI: https://doi.org/10.1007/978-981-15-0614-7_30
- Robert Thomson & Co** 1886 Daily Wants and Where to Buy Them [advertisement]. *The Aberdeen Journal* [Aberdeen, Scotland] 11 November, p. 8.
- Roberts, H R** 1928 Ladies! In the Interests of Comfort [advertisement]. *The Chronicle* [Liverpool, England], 24 November.
- Robinson, W B** 1887 (Assignor to Southall Bros. & Barclay of Birmingham, England) Catamenial Bandage. US Patent 370,415, September 27.
- Røstvik, Camilla Mørk** 2018 Blood in the Shower: A Visual History of Menstruation and Clean Bodies. *Visual Culture & Gender*, 13: 52–63. <http://vcg.emitto.net/index.php/vcg/article/view/114> [Last Accessed: 21 July 2022].
- Røstvik, Camilla Mørk** 2022 *Cash Flow: The Business of Menstruation*. London: UCL Press. DOI: <https://doi.org/10.14324/111.9781787355385>
- Scottish Parliament** 2021 Period Products (Free Provision) (Scotland) Act 2021. <https://www.legislation.gov.uk/asp/2021/1/contents> [Last Accessed: 30 November 2021].
- Simes, Mika R and Berg, D H** 2001 Surreptitious Learning: Menarche and Menstrual Product Advertisements. *Health Care for Women International*, 22(5): 455–69. DOI: <https://doi.org/10.1080/073993301317094281>
- Smitley, Megan** 2009 *The Feminine Public Sphere: Middle-Class Women and Civic Life in Scotland, c. 1870–1914*. Manchester: Manchester University Press. DOI: <https://doi.org/10.7228/manchester/9780719079665.001.0001>

- Southalls** 1892 Southall's [sic] Sanitary Towels [advertisement]. *Harper's Bazaar*, 14 May. Museum of Menstruation. <http://www.mum.org/southall2.htm> [Last Accessed: 7 July 2022].
- Southalls** 1898 Southalls' 'Sanitary Towels' [advertisement]. *Illustrated London News* [London, England] 13 June, p. 37. The Illustrated London News Historical Archive, 1842–2003 [Last Accessed: 25 August 2020].
- Spencer, N E** 2022 Access to Menstrual Resources as a Public Health Issue in the US and Scotland: A Narrative Review. *Open Library of Humanities*, 8(2): pp. 1–30. DOI: <https://doi.org/10.16995/olh.6342>
- Steele, Linda and Goldblatt, Beth** 2020 Engaging with Law's Menstrual Moment. *Australian Feminist Law Journal*, 46(1): 83–113. DOI: <https://doi.org/10.1080/13200968.2020.1822609>
- Tampax Ltd** 1943 The Sign of a Good Chemist or Draper [advertisement]. *Airdrie & Coatbridge Advertiser* [Airdrie & Coatbridge, Scotland], 27 March, p. 12.
- Tampax Ltd** 1943 The Sign of a Good Chemist or Draper [advertisement] *West Lothian Courier* [West Lothian, Scotland], 26 March, p. 3.
- Tampax Ltd** 1946 Freedom at All Times [advertisement]. *The Motherwell Times* [Motherwell, Scotland], 13 September, p. 5.
- Tomlinson, Maria Kathryn** 2021 Moody and monstrous menstruators: the semiotics of the menstrual meme on social media. *Social Semiotics*, 31(3): 421–439. DOI: <https://doi.org/10.1080/10350330.2021.1930858>
- University of Dundee** 2017 *Women Workers* [podcast]. 1 September. <https://www.dundee.ac.uk/50/podcasts/womenworkers/> [Last Accessed: 21 July 2022].
- Vostral, Sharra L** 2008 *Under Wraps: A History of Menstrual Hygiene Technology*. Lanham: Lexington Press.
- W Lawson [purveyor]** 1928 When the Sun Shines You Feel Happy [advertisement]. *Dalkeith Advertiser* [Dalkeith, Scotland], no. 4418, 26 April, p. 1.
- Wainwright, Emma** 2003 'Constant Medical Supervision': Locating Reproductive Bodies in Victorian and Edwardian Dundee. *Health & Place*, 9: 163–174. DOI: [https://doi.org/10.1016/S1353-8292\(03\)00012-1](https://doi.org/10.1016/S1353-8292(03)00012-1)
- Watt & Grant** 1887 Outfitting Specialities [advertisement] *The Aberdeen Journal* [Aberdeen, Scotland], 20 May, p. 8.
- Weiss-Wolf, Jennifer** 2017 *Periods Gone Public: Taking A Stand for Menstrual Equity* (New York: Simon & Schuster).
- Winkler, Inga and Bobel, Chris** 2021 'Bizarre' and 'Backward': Saviorism and Modernity in Representations of Menstrual Beliefs and Practices in the Poplar Media. *Feminist Formations*, 33(2): 313–339. DOI: <https://doi.org/10.1353/ff.2021.0016>
- Zivi, Karen** 2020 Hiding in Public or Going with the Flow: Human Rights, Human Dignity, and the Movement for Menstrual Equity. *Human Rights Quarterly*, 4(2): 119–144. DOI: <https://doi.org/10.1353/hrq.2020.0003>

