Looking Both Ways: *Middlemarch*, True Skin, and the Dermatological Gaze

Ariane de Waal
(*MLU Halle-Wittenberg, Germany*)

Abstract
Based on an analysis of a wide range of Victorian dermatology textbooks and previously unexamined articles on the skin in the periodical press, this essay demonstrates George Eliot's implementation of a dermatological gaze in Middlemarch*. The novelty of this gaze lies in a bidirectional movement that combines an optical surface assessment with observations of physiological processes taking place in the inner structures of the skin. The essay argues that this two-fold way of looking emerged in the wake of Victorian dermatology's turn towards morphological classifications and the popularisation of microscopy. At a time when microscopic images of the skin's three layers were widely disseminated, the seat of skin diseases moved from inner organs into the thickened, more complex structure of the skin itself, calling for a gaze that simultaneously looks at and into the skin. Contributing to the sparse scholarship that links dermatological history to literary figurations of skin, the article invokes the new dermatological gaze to arrive at a fuller understanding of how we look at character(s) in realist novels. It first traces Eliot's retreat from physiognomic looking and her introduction of dermatological registers of complexion. Second, it analyses the narrator's use of a two-fold gaze in passages that magnify the physiological (mal)functioning of the characters' skin. Third, it interrogates the novel's shift from visual to tactile impression. The article builds on and extends perspectives on Eliot's materialist characterology by showing how a dermatology-based reading of* Middlemarch *crucially helps to clarify the characters' choices and social behaviours.*

'Come with me, and lovingly study Skin' – is how George Eliot's *Middlemarch* patently does not begin. But resituating the 1871–72 publication of Eliot's text in the burgeoning discursive-scientific fields surrounding microscopic visualisation and the professionalisation of dermatology reveals to what extent *Middlemarch* invites readers (and fellow novelists) to apply a dermatological gaze to characters in realist literature. In this article, I propose a reconsideration of the novel's tendencies towards the visual in light of its interactions with nineteenth-century dermatological discourse. Echoing back with G.H. Lewes's emphatic call to '[…] lovingly study Nature', expressed enthusiastically ten years before in the opening chapter to his *Studies in Animal Life*,[1] Eliot's first sentences in *Middlemarch* instantaneously instruct readers to study the outward appearance of her characters. After classifying Dorothea's 'kind of beauty' as one 'which seems thrown into relief by poor dress', the narrator scrutinises her 'finely formed' hand and wrist,

[1] George Henry Lewes, *Studies in Animal Life* (New York, NY: Harper & Brothers, 1860), p. 9.

visible to narratorial observation and commentary only because they are not covered up by gloves, long sleeves, or trimmings.[2] Like contemporary writings on the natural world, the novel begins with a sweeping view of the surface texture – or 'outside tissues'– of (in)animate objects (p. 9).[3] And yet it increasingly resists and refutes such superficial optical assessments. By introducing a microscopic gaze into the narrator's and, by extension, the reader's toolkit of interpretative instruments, Eliot exposes the materials found on the inside of cutaneous surfaces. The dermatological gaze that I seek to define in this essay does not, however, simply probe beneath deceptive covers in order to unearth a supposedly true core. Its introspective move does not necessarily shift attention 'from the visible to the metaphysical'.[4] Instead, the narratorial gaze reaches underneath the outermost surface of the skin, into the skin's complex layers, in order to detect physiological processes that are described within materialist, rather than metaphysical, registers. Just as the mid-nineteenth-century microscopic cross-sections that became widespread in the periodical press visualised the skin as a surface with a depth of its own, (some of) Eliot's characters pry into one another's depth only to uncover more cutaneous surfaces, for even '[s]ouls have complexions too' (p. 12). A recognition of the layered depth that the skin accrued in dermatological discourse elucidates this paradox: 'There's a skin without and a skin within', as Alfred Power's 1871 sanitary rhyme memorably put it.[5]

The argument that Eliot takes over the trope of microscopy from the physiologists and naturalists (and Lewes, most prominently) and develops it into a key strategy of literary realism is not a new one.[6] What I would like to propose in this article is to refocus the critical lens at the precise materials that come under the microscope of her omniscient narrator. Departing from J. Hillis Miller's influential conclusion that all (optical) routes to knowledge are ultimately destabilised in the novel, existing scholarship has evaluated both the metaphorical and literal valence of the microscope to the text as facilitating an 'observation of female-kind', of 'complex human dynamics', of 'existing structures that before

[2] George Eliot, *Middlemarch* (London: Penguin, 1871–72; repr. 2003), p. 7. Further references to this edition are given after quotations in the text.

[3] Consider, for instance, an exemplary contribution to the *Popular Science Monthly* written by naturalist Hugh Macmillan shortly after the serial release of *Middlemarch*. This guided observation of the natural world characteristically begins with the 'most cursory and superficial glance', registering only those plants that 'meet our eye', before it proceeds to magnify these appearances under a microscopic lens, detecting e.g. the 'spores, or sporules' of moss and lichen; 'Lowly Vegetable Forms', *The Popular Science Monthly*, August 1873, pp. 469–79 (pp. 470–71).

[4] This is how Kate Flint has persuasively described a common Victorian 'slippage from concern with viewing the material world to inner forms of vision', in *The Victorians and the Visual Imagination* (Cambridge: Cambridge University Press, 2000), p. 9.

[5] Alfred Power, *Sanitary Rhymes* (London: T. Richards, 1871), p. 2.

[6] See Meegan Kennedy, 'Technology', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, ed. by John Holmes and Sharon Ruston (Abingdon: Routledge, 2017), pp. 311–28 (p. 319).

were unknown'.[7] Most of these descriptions insert the microscopic mechanism into psychological, humanist, or linguistic frames, eliding the scientific materialism of Eliot's text.[8] Working towards redressing this critical oversight, this article aims to assess the extent to which contemporary dermatological discourses inform the narrative gaze developed to decipher the characters' skin, in particular its outward texture, layered structure, and physiological functions. In so doing, the article makes a substantial contribution to discussions of what Pearl Brilmyer has insightfully described as Eliot's 'materialist characterology'.[9] Where Brilmyer is concerned with the construction of characters as soft matter and thus evokes what she calls a *physics of character*, I interrogate the layered construction of the characters' skin and foreground what could be termed a *physiology* of character. Offering the first dermatology-based reading of *Middlemarch*, I seek to demonstrate how Eliot crafts materially layered characters whose inner molecules, fibres, and tissues interact, through their porous skin boundaries, with the complex cutaneous fabric in which they are 'embroiled' (p. 290).

My reading affiliates itself with the turn towards materiality and object culture in Victorian studies, which can be traced as far back as to Asa Briggs's study of *Victorian Things* (1988). Yet the materialist paradigm did not seem to unfold its full methodological potential until Carolyn Steedman (*Dust*, 2001), Elaine Freedgood (*The Ideas in Things*, 2006), and Isobel Armstrong (*Victorian Glassworlds*, 2008), amongst others, convinced nineteenth-century scholars to take even the most inconspicuous or translucent 'things' seriously. Over the past decade, journals such as *Interdisciplinary Studies in the Long Nineteenth Century* have devoted special issues to the *Material Imagination* (2008), and collections such as the *Oxford Handbook of Victorian Literary Culture* (2014) contain sections on 'Material and Mass Culture' as a matter of course. Arguably, even the issues of *Victorian Network* have consecutively given more prominence to material objects: recent issues have highlighted items of *Production and Consumption* (2012), the commodities inspiring *Victorian Other Worlds* (2013), and, more succinctly still, *The Body* (2015), *Dirt* (2015), and the *Brain* (2016). From current critical vantage points, it seems undeniable that the materialist idiom

[7] J. Hillis Miller, 'Optic and Semiotic in *Middlemarch*', in *New Casebooks:* Middlemarch, ed. by John Peck (New York, NY: St. Martin's Press, 1992), pp. 65–83; Charlotte Sleigh, 'The Novel as Observation and Experiment', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, pp. 71–86 (p. 78); Mark Wormald, 'Microscopy and Semiotic in *Middlemarch*', *Nineteenth-Century Literature*, 50 (1996), 501–24 (p. 501); David Paxman, 'Metaphor and Knowledge in George Eliot's *Middlemarch*', *Metaphor and Symbol*, 18 (2003), 107–23 (p. 113).

[8] This is not to suggest that these critics do not take Eliot's negotiation of (popular) science into account. Yet, even Wormald, who traces the novel's interrelationship with the history of microscopy, does not specify exactly what it is – in a materialist sense – that Eliot's 'magnificent study of provincial life' (p. 524) actually magnifies.

[9] S. Pearl Brilmyer, 'Plasticity, Form, and the Matter of Character in *Middlemarch*', *Representations*, 130 (2015), 60–83 (p. 63).

has suffused Victorian studies. Given the sustained focus on Victorian materialities, and corporealities in particular, it appears all the more surprising that Pamela Gilbert has been the first to devote a book-length study to *Victorian Skin* (2019), not because Gilbert's turn towards the skin is unprecedented within her own research trajectory, but because the skin has attracted much critical attention in cultural studies over the past two decades.[10]

Scholarly interest in the semiotics and semantics of the human skin has flourished since Claudia Benthien's seminal study *Haut* in 1999, prompting Kevin Siena and Jonathan Reinarz to dub this growing area of analysis 'skin studies'.[11] In one of the most significant Anglophone contributions to the field, Steven Connor charts the changing status of skin in the Western world from its classical signification as an invisible screen via its mechanical understanding as a membrane in the eighteenth century to its contemporary depth as a milieu.[12] In their sketches of the medical and cultural history of skin, both Benthien and Connor retrace a relatively neat development in which the permeable skin of the grotesque medieval body is gradually replaced with the impenetrable skin-dress that clothes/closes the bourgeois body. This linear account jars with the conflicting significations of skin that a close study of dermatological, periodical, and literary texts from the nineteenth century reveals. Against Benthien's central claim that, throughout the eighteenth and nineteenth centuries, the skin became an increasingly firm barrier and central metaphor of separation, I would hold that traces of the porous early-modern body persist in the Victorian skin image.[13] As my reading of *Middlemarch* will evince, the text embraces a notion of healthy porosity, which became central to mid-nineteenth-century dermatology. Eliot's characters are constantly prompted to look, grasp, and intuit beyond the 'impenetrable wall of separation' that nineteenth-century skin had ostensibly become.[14] Using *Middlemarch* as my primary literary case study, I would like to

[10] Pamela K. Gilbert, *Victorian Skin: Surface, Self, History* (Ithaca, NY: Cornell University Press, 2019). Gilbert's work has, in fact, carefully and continuously prepared the critical terrain for examining nineteenth-century skin by providing important analyses of the Victorian social body as well as relations between the healthy body and citizenship. After *Mapping the Victorian Social Body* (Albany, NY: State University of New York Press, 2004), *The Citizen's Body: Desire, Health, and the Social in Victorian England* (Columbus, OH: Ohio State University Press, 2007), and *Cholera and Nation: Doctoring the Social Body in Victorian England* (New York, NY: State University of New York Press, 2008), Gilbert first turned more explicitly to literary figurations of Victorian skin in 'The Will to Touch: David Copperfield's Hand', *Interdisciplinary Studies in the Long Nineteenth Century*, 19 (2014), 1–15.

[11] First published in German as *Haut: Literaturgeschichte, Körperbilder, Grenzdiskurse* (Hamburg: Rowohlt Taschenbuch Verlag, 1999), an English translation of Benthien's study appeared as *Skin: On the Cultural Border between Self and the World* in 2002 (New York, NY: Columbia University Press); Kevin Siena and Jonathan Reinarz, 'Scratching the Surface: An Introduction', in *A Medical History of Skin: Scratching the Surface*, ed. by Jonathan Reinarz and Kevin Siena (London: Pickering & Chatto, 2013), pp. 1–15 (p. 1).

[12] Steven Connor, *The Book of Skin* (London: Reaktion Books, 2004), p. 26.

[13] Benthien, p. 1.

[14] Ibid., p. 14.

make the case for reconsidering Victorian skin as a permeable, layered, and physiologically active structure that connects bodies, rather than a firm boundary line between bodies.

Microscopy and Vision in Victorian Dermatology

Victorian knowledge of the physiological functions and anatomical structure of the human skin had extended far beyond the walls of the first specialised skin hospitals and far beyond the pages of the first professional dermatological journals by the time Eliot began her work on *Middlemarch*. While Jonathan Green, in 1835, had still bemoaned the lack of systematic knowledge and dermatological education, scientific and popular interest in skin diseases reached an unprecedented peak only ten years later.[15] This was partly due to the instant success of Erasmus Wilson's *Practical Treatise on Healthy Skin*, first published in 1845, which was re-issued several times and was still in print when *Middlemarch* went into serial publication. The popularity of Wilson's textbook supported a professional reorientation towards disseminating practical knowledge on how to obtain and preserve a healthy skin. His instructions on correct washing, clothing, diet, and exercise find an echo in numerous subsequent treatises, such as Walter Cooper Dendy's *Hints on the Health and Disease of the Skin* (1846) or Thomas Innis's *The Skin, in Health and Disease: A Concise Manual* (1849). All these works offer 'concise' advice to the practitioner as well as to the reading public on how to maintain a clean, unblemished, supposedly 'natural' skin. Their amenability to and direct support of sanitary reform might go some way towards explaining the steep increase in writings on the skin in the periodical press around mid-century. Particularly relevant to my analysis is their popularisation of a layered, microscopic model of the skin.

Microscopy had played a significant role in making a connection between skin anatomy and skin cleanliness, especially since Gilbert Breschet and Augustin Roussel's determination of the sweat ducts in 1835.[16] Wilson not only adopted an anatomical vocabulary, but he also included in his 1845 treatise a standard microscopic image of a cross-section of the skin, which made scientific visualisations of the cutaneous layers available to a wider readership for the first time. The fact that Wilson's cut continued to be reproduced across the periodical press over the following years indicates that, by mid-nineteenth century, most literate Victorians would have been familiar with the image of a magnified cut through the skin's layers, which – in a slightly updated, multi-coloured, and three-dimensional version – is still the iconic way to illustrate medical explications of the skin today. In one of the innumerable articles that copied Wilson's microscopic image, in an 1847 issue of *Reynolds's Miscellany of Romance,*

[15] Jonathan Green, *A Practical Compendium of the Diseases of the Skin, with Cases* (London: Whittaker, 1835), p. 2.

[16] Mieneke te Hennepe, '"To Preserve the Skin in Health": Drainage, Bodily Control and the Visual Definition of Healthy Skin', *Medical History*, 58 (2014), 397–421 (p. 400).

General Literature, Science, and Art, physician James Johnson emphasised the importance of understanding the microscopic cross-section of the skin to the end of appreciating 'the necessity of taking due care of so useful a structure'.[17] Dermatology's ascent to a broad popularity is thus inextricably linked to the dissemination of visual materials. The model of the skin's three layers that became part of general knowledge through the initiatives of Wilson, Johnson, and their contemporaries can briefly be summarised as follows. The cross-section starts out at the external layer of the skin, which was labelled the scarf-skin, or *epidermis*. This thin layer, then thought to be insensible to pain and an indispensable protective coat, is perforated by four tubes in the standard image. These spiral their way through the second layer, called the second skin, or *rete mucosum*. Although the subject of controversies and disagreement among dermatologists, most articles in the popular press accompanying the microscopic model describe the mucous network as the seat of skin colour. The tubes originate in the innermost layer, which was – tellingly – called the true skin, or *cutis vera*. This thickest and most delicate part of the skin was defined as the seat of the perspiratory glands, the nerves, and the sense of touch.

The consequences that the wide distribution of this three-layered model might have had for Victorian images and literary figurations of corporeality has not yet been the subject of sufficient scholarly scrutiny.[18] According to Mieneke te Hennepe, who assesses the medical, rather than the broader cultural relevance of microscopic depictions of the skin,

> the microscopical exploration of the anatomical structure of the skin had put an end to the skin as open cover of the body. […] In the early nineteenth century the skin, with the help of the microscope, was visually articulated as a functionally active, thick organ.[19]

In the following sections, I approach *Middlemarch* from the hypothesis that the dermatological image of a thick, functionally active, and layered skin informs the literary construction of characters. As I will show in a close reading of selected passages, the cutaneous layers of Eliot's characters are engaged in a constant physiological-affective interchange that connects (and, just as often, fails to connect) the interior and exterior parts of their bodies through the skin. If te Hennepe is right in claiming that 'microscopic pictures defined a new idea of the relationship between the inner body and the outer milieu', then this relationship

[17] James Johnson, 'The Anatomy and Physiology of Ourselves Popularly Considered', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 2 October 1847, pp. 329–30 (p. 330).

[18] Although Gilbert's study on *Victorian Skin* encompasses a wide range of materials, including dermatological sources, the model of the three layers is not of primary interest to her.

[19] Mieneke te Hennepe, 'Depicting Skin: Microscopy and the Visual Articulation of Skin Interior 1820–1850', in *The Body Within: Art, Medicine and Visualization*, ed. by Renée van de Vall and Robert Zwijnenberg (Leiden: Brill, 2009), pp. 51–65 (p. 55).

might also have been reconfigured in – or, more interestingly perhaps, *by* – Victorian literature.[20] This avenue of linking dermatological history to literary representations of skin, and particularly ways of looking at the skin, has not yet been explored.

One final aspect of Victorian dermatology has to be clarified before attempting such a reading, namely the extent to which the iconic visualisation of the skin through microscopic imagery promoted what I define as the new dermatological gaze. Due to dermatology's turn to precise morphological description from the start of the nineteenth century onwards, the unaided physician's eye would no longer suffice to recognise the signs of illness on the skin. Since the skin had significantly expanded in structure and depth in the new visual-anatomical understanding, diseases that were formerly located in the inner organs moved into the thick layers of the skin. The new complexity of the skin, which was no longer seen as a 'flat screen' that simply displayed organic diseases, called for new methods of clinical observation.[21] This is why Victorian dermatology, with the help of microscopy, directed its gaze *into* the skin's layers. The dermatological gaze became two-directional, no longer deciphering the outward indices of hidden malaise (thus travelling from the outside to the inside of the body), but making sense of outward manifestations that simultaneously reach within (thus gazing back and forth between an interrelated exterior and interior). When nineteenth-century dermatologists 'pretended simply to write down [their] sensory impressions', as Anne Kveim Lie explains, they were in fact seeing through the scarf-skin, taking into account the interaction between external and inner tissues, between internal blood vessels, glands, and nerves and the epidermis.[22] As Lie elaborates,

> Pathological-anatomical changes in the skin are not immediately given to the observer. They demand an interpreter who reads the outer manifestations of the skin with a gaze that knows the structure within and has learned a particular way to interpret that which is visible.[23]

This art of double observation, of seeing outer manifestations while simultaneously drawing on visualisations of the structure within, characterises the dermatological gaze that left its imprint on Victorian realist fiction, as my analysis of *Middlemarch* will demonstrate. Corresponding to the three layers of the skin, my reading will proceed in three stages, each of which accentuates a specific focal point of the dermatological gaze. The first part, "Looking At: Physiognomy", analyses the narrator's and characters' gaze at and interpretation of the skin's

[20] Ibid., p. 52.
[21] Anne Kveim Lie, 'Abominable Ulcers, Open Pores and a New Tissue: Transforming the Skin in the Norwegian Countryside, 1750–1850', in *A Medical History of Skin: Scratching the Surface*, pp. 31–42 (p. 32).
[22] Ibid., p. 38.
[23] Ibid.

outer layer, and traces a shift from physiognomic to dermatological interpretations of complexion. The focus of this section will be on (mis)interpretations of Casaubon's facial skin. The second part, "Looking Inside: Physiology", examines passages that apply the new dermatological gaze to physiological processes taking place inside the skin's layers. This section confronts the depiction of Casaubon's and Dorothea's skin-care routines, arguing that the former fails to clear his pores, whereas the latter succeeds in enabling her skin to breathe and cleanse the body of toxins. The third part, "Reaching Within: Impression", complements the analysis of scenes of visual observation of the skin with a consideration of the novel's insistence on tactile impression, here defined as reaching the characters' seat of touch, i.e., the true skin. After analysing the narrator's microscopic dissection of Will Ladislaw's layered skin, this section examines the male characters' violent fantasies and attempts to reach Rosamond's true skin by harming her studied skin barrier. Throughout the analysis, I will read passages from *Middlemarch* in conjunction with contemporary medical and popular writings on the skin, thus teasing out the profound connections between literary and dermatological representations.

Looking At: Physiognomy

The historical dermatological development that replaced visual-diagnostic routes leading from the exterior to the interior with a two-fold gaze can be connected to the retreat from physiognomy in Eliot's novels. In this context, Kate Flint has highlighted a crucial passage in *Adam Bede* (1859), a novel written in the wake of the large-scale popular dissemination of dermatological knowledge. Observing Adam's (mis)interpretation of Hetty's beauty, the narrator asks readers not to 'despise Adam as deficient in penetration'.[24] In a material sense, Adam's gaze is unable to penetrate Hetty's scarf-skin, that outward layer of the skin which displays 'exquisite lines of cheek and lip and chin, […] eyelids delicate as petals' (p. 131). Leaning on the pseudo-science of physiognomy, Adam is prone to infer from the softness, suppleness, and delicacy of Hetty's facial skin a pliable character. This is exposed as an error of judgment. Conceding that 'Nature has her language, and she is not unveracious', the narrator somewhat prosaically notes that 'we don't know all the intricacies of her syntax just yet, and in a hasty reading we may happen to extract the very opposite of her real meaning' (p. 132). The narrator's comment on Adam's misreading of Hetty's complexion calls the older dermatological model of inferring a hidden seat of malaise from outward manifestations of signs into question. Problematising the notion of a straightforward correspondence between interior and exterior, the narrator refutes the endeavour to discover 'some depth of soul behind a deep grey eye with a long dark eyelash' (p. 132). In line with the dawning obsolescence of 'the idea that character can be discerned in the shape and features of the face' around mid-

[24] George Eliot, *Novels of George Eliot: Vol. 1. Adam Bede* (Edinburgh: William Blackwood, 1880), p. 132. Further references are given after quotations in the text.

century, Eliot's early novel gestures towards the necessity of developing new optical tools to interpret character.[25] Adam's insufficiently penetrative gaze holds – as an obverse ideal – the potential for a gaze that does perforate the exterior, not to unearth 'some depth of soul' within, but to scrutinise the depth of surfaces without.

Middlemarch similarly evokes the practice of physiognomy only to reveal its fallacies. At the outset, the text toys with the false certainties of physiognomy and the by now outdated dermatological concept of a neat correspondence between interior (malaise) and exterior (eruption). The novel introduces Casaubon and Sir James Chettam in the idiom of physiognomy, or humoral theory:

> He [Casaubon] had the spare form and the pale complexion which became a student; as different as possible from the blooming Englishman of the red-whiskered type represented by Sir James Chettam. (p. 16)

The narrator's juxtaposition of characters is based on stereotyped complexions: the pale student versus the blooming red-whiskered Englishman. At the same time, these clichés are openly negotiated as representative 'types', which calls their validity into question. It is noteworthy that this passage prefers physiognomic typecasting to medico-scientific assessments. Casaubon's pale complexion is not (yet) evaluated for its dermatological meaning; instead, it signals the prototype of the studious intellectual. Similarly, the description of Sir James borders on the satirical; his rosy hue is not of interest for its dermatological value to a healthy skin, but merely lends itself to his personification of a national cliché. It becomes evident that the narrator here assumes Dorothea's perspective on her suitors when the latter compares her reading with Celia's:

> 'How very ugly Mr Casaubon is!'
> 'Celia! He is one of the most distinguished-looking men I ever saw. He is remarkably like the portrait of Locke. He has the same deep eye-sockets.'
> 'Had Locke those two white moles with hairs on them? […] Mr Casaubon is so sallow.'
> 'All the better. I suppose you admire a man with the complexion of a *cochon de lait*.' (p. 20)

Echoing Adam's misreading of Hetty's 'deep grey eye' as indicating 'some depth of soul', Dorothea (mis)takes Casaubon's deep-set facial features as indicating hidden spiritual and intellectual treasures. Celia, in contrast, refuses to look beneath Casaubon's scarf-skin and dryly provides an optical surface assessment, taking note of two hairy white moles and a sallow hue. Her implicit corrective to the narrator's description of Casaubon's *pale* complexion as *sallow* is significant. Nineteenth-century dermatology drew fine distinctions between different kinds of

[25] Suzy Anger, 'Sciences of the Mind', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, pp. 386–407 (p. 389).

white skin to indicate age-, class-, and race-specific deviations from the postulated ideal of a 'white skin, slightly tinged with carnation'.[26] Firstly, ageing skin was generally described as turning 'worn and sallow, wrinkled and furrowed'.[27] Secondly, 'sallow complexions' were associated with those parts of the working classes that were confined to manufacturing, distinguishing them from 'tanned' agricultural labourers and the 'fair' middle and upper classes.[28] Thirdly, sallowness was associated with racial deviations from 'pure white circles' – even though there was no agreement on whether distinct complexions were caused by essential differences in the colouring matter attributed to the second skin or subject to change given exposure to different climates.[29] For instance, as one article in *Reynolds's Miscellany* from 1866 claimed, moving Caucasians from their climatic homes might lead to 'the whitest people in the world, when transferred to Constantinople becom[ing] sallow'.[30] Celia's categorisation of Casaubon's complexion as sallow thus implicitly devalues his white English upper-class credentials. Reassessing his pallor as sickly, Celia precipitates a reading that other characters in the novel will pick up on. After their return from Rome, Mr Brooke describes Casaubon's complexion to Dorothea as follows: 'Casaubon is a little pale […] – a little pale you know' (p. 276). He emphatically repeats his diagnosis of pallor a third time over the course of their short conversation, as if to amplify his otherwise carefully voiced criticism. The proto-dermatological assessment of Casaubon's skin as unhealthy, which gains traction in the novel at large, evokes the popular knowledge that Victorian readers could draw from numerous magazine articles published on the skin from around mid-nineteenth century onwards, which regularly warned against the 'pallid and discoloured skin' that comes with a 'sedentary life'.[31]

While Celia's scrutiny of the skin stops at the surface, Dorothea merely scans Casaubon's exterior for traces that confirm her preconceived notion of a valuable interior. In this context, Miller has affirmed that 'for George Eliot seeing is never just optical. […] Seeing is always interpretation'.[32] Dorothea, however, interprets rather than sees Casaubon; or, in other words, her seeing relies more on inward vision than on optical observation. In their opposing readings of Casaubon's skin, Celia represents the more modern viewpoint that associates

[26] This type of skin is 'what we commonly call a fine skin', as an early nineteenth-century article in a women's magazine explains; 'On the Beauty of the Skin', *The Ladies' Toilette*, October 1807, pp. 205–07 (p. 205).
[27] Thomas Innis, *The Skin, in Health and Disease: A Concise Manual* (London: Whittaker, 1849), p. 23.
[28] 'Varieties of Colour among Mankind', *Chambers Edinburgh Journal*, 5 December 1835, p. 354.
[29] Ibid.
[30] 'Curiosities of the Skin', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 3 November 1866, p. 309.
[31] 'The Human Skin', *Chambers Edinburgh Journal*, 25 April 1846, pp. 258–261 (p. 258).
[32] J. Hillis Miller, *Reading for Our Time:* Adam Bede *and* Middlemarch *Revisited* (Edinburgh: Edinburgh University Press, 2012), p. 69.

complexion with 'the colour, texture or condition of the skin', whereas Dorothea subscribes to an antiquated understanding of complexion as signifying inner nature or temperament.[33] Yet her judgment is wavering. Encoded in her previous rebuke to Celia that 'Souls have complexions too' is not only the predominance she assigns to inner truths and values but the paradoxical finding that even these are enclosed in a visible cutaneous surface (p. 12). Her urge to judge inner complexions rather than outward appearances gives way when she ridicules Celia's preference for Sir James's 'complexion of a *cochon de lait*'. While her gaze is fully drawn into Casaubon's interior, Sir James's exterior surface repels her scrutiny, replicating the response that Celia gave in relation to Casaubon. Interestingly, Dorothea here adopts Celia's idiom, betraying her own knowledge of dermatological classifications. Sir James's 'blooming' complexion, before associated with jovial sanguinity, is now retranslated from the humoral realm to the dermatological, which firmly associates 'bloom' with 'the brief season of youth'.[34] Although intended for offense, the suckling pig to which Dorothea likens Sir James stands not only for young age but also signals the robust health attributed to a 'blooming tint' in popular skin treatises.[35] Hence, Dorothea inadvertently confirms Celia's diagnosis of Casaubon's sickly skin by embracing the contrast that exists, per definition, between blooming and sallow complexions. At this stage, none of the characters has learned how to apply the new dermatological gaze, which observes the skin not just for its surface appearance, nor merely for signs of deeper meanings, but complexifies these readings in a layered assessment. This is the subject of the next section.

Looking Inside: Physiology

It becomes clear as the novel progresses that the dermatological gaze requires not only an expert observer but also a compliant object. It is no coincidence that the two characters that give rise to the most fatal misinterpretations of their complexion are Casaubon and Rosamond. The latter thwarts an assessment of her character through the skin by artfully deploying studied blushes and dimples. Casaubon, in turn, prevents successful readings of his skin by impeding its healthy physiological functioning. The key to Dorothea's initial inability to correctly decipher Casaubon's complexion is disclosed only in Chapter 42, when the narrator notes in passing how Lydgate tries 'to help forward Mr Casaubon's purpose, which seemed to be clogged by some hesitation' (p. 423). I would argue that the choice of the adjective *clogged* is not coincidental. As te Hennepe summarises a commonplace in Victorian dermatology: 'clogged skin pores caused diseases and disaster'.[36] At a time when countless articles in popular magazines continuously pressed home the 'importance of a free action of the

[33] See Connor, pp. 19–20.
[34] Innis, p. 23.
[35] 'On the Beauty of the Skin', p. 205.
[36] Te Hennepe, 'To Preserve the Skin in Health', p. 407.

pores at all times', hardly any Victorian reader would have been unaware of the vital role played by their pores in the excretion of dirt and toxins.[37]

There are numerous hints at Casaubon's failure to keep his pores open and functioning in this way. The chapter that contains the reference to his 'clogged' purpose is replete with signifiers of obstruction. The narrator begins by noting Casaubon's 'passionate resistance to the confession that he had achieved nothing' (p. 417), proceeds by attesting that his 'intellectual ambition […] seemed to others to have absorbed and dried him' (p. 418); he is, furthermore, suffering from 'an impression which no tenderness and submission [of his wife] could remove', yet 'hid[ing] this inward drama' (p. 418). As the semantic field forming around notions of resistance, absorption, drying up, and lingering impressions suggests, Casaubon's clogged pores seem to lock toxic materials into his body. The built-up matter that has accumulated inside his body cannot be expelled through his skin, as any effort 'to expound his discontents' (p. 419) is blocked by his obstinate will and obstructed pores. Lydgate attempts to come to his aid by venturing the diagnosis that Casaubon might be 'suffering from what is called fatty degeneration of the heart' (p. 423). Notably, Lydgate derives his medical authority from citing not only his knowledge of 'anatomical or medical details' relating to the condition but also the fact that it was first explored by René Laënnec, 'who gave us the stethoscope' (p. 423) – i.e., one of the first medical instruments that allowed for an exploration of the body's interior. The close proximity to medical terms and technologies in which the adjective *clogged* first appears lends more weight to a medico-dermatological interpretation. Even if it does not explicitly inform Lydgate's diagnosis, Victorian readers might have recognised the language of dermatology in the narrator's description of Casaubon. After all, they were the recipients of an abundance of skin care advice, which regularly reminded them of their responsibility to keep their pores open – sometimes in rather drastic terms. In 1856, a piece published in the *Belfast News-Letter*, quoting from *Hall's Journal of Health*, insisted on the dangers of 'Checked Perspiration' as follows:

> There are seven millions of tubes or pores on the surface of the body, which in health are constantly open, conveying from the system, by what is called insensible perspiration, […] internal heat […]. [W]hen the pores are closed, the skin feels harsh, and hot, and dry. But another result follows […]; a main outlet for the waste of the body is closed; it re-mingles with the blood, which in a few hours becomes impure, and begins to generate disease in every fibre of the system – the whole machinery of the man becomes at once disordered.[38]

Familiarity with these common case narratives might have enabled contemporary readers to identify obstructed pores as another contributing factor leading to the quick decline in Casaubon's health. It is worth scrutinising the interaction

[37] 'Skin Deep', *All the Year Round*, 21 February 1863, pp. 562–564 (p. 563).
[38] 'Checked Perspiration', *The Belfast News-Letter*, 10 September 1856, p. 4.

between Casaubon and Dorothea that takes place just after his exchange with Lydgate. Dorothea meets her husband in the garden and, despite his 'chill' glance, builds up the courage to 'pass[…] her hand through his arm', in response to which 'Mr Casaubon kept his hands behind him and allowed her pliant arm to cling with difficulty against his rigid arm' (p. 425). Their awkward skin contact results, for Dorothea, in a 'horrible […] sensation, which this unresponsive hardness inflicted on her' (p. 425). A common symptom of so-called checked respiration, Casaubon's skin appears rigid and harsh to the touch. The different epidermal texture implied by this encounter is indicative of Casaubon's and Dorothea's larger dermatological profiles, which are encapsulated in a difference in toilette. Casaubon's skin-care routine is mentioned only once:

> Having made his clerical toilet with due care in the morning, he was prepared only for those amenities of life which were suited to the well-adjusted stiff cravat of the period, and to a mind weighted with unpublished matter. (p. 198)

When read in conjunction with the passages above, the references to the 'stiff cravat' and the weighty 'unpublished matter' once more connote obstructed pores. Despite duly attending to his toilette, Casaubon does not seem to succeed in opening up his pores and expelling built-up matter. This becomes even more apparent when we contrast his clerical routine to a later, rather lengthy passage detailing Dorothea's appearance after having carried out her morning toilette upon their return from Rome:

> She was glowing from her morning toilette as only healthful youth can glow; there was gem-like brightness on her coiled hair and in her hazel eyes; there was warm red life in her lips; her throat had a breathing whiteness above the differing white of the fur which itself seemed to wind about her neck and cling down her blue-grey pelisse with a tenderness gathered from her own […]. (p. 273)

This passage exemplifies, perhaps for the first time in the novel, the narrator's application of a two-fold dermatological gaze. Starting out at the surface, the narrator's look scrutinises every particle of Dorothea's complexion, moving vertically downward from the hair to the lips to the throat. This movement of the gaze clearly recalls the standard outline of popular dermatology textbooks. One could point here, by way of example, to R. Jones Owen's *Treatise on the Toilet and Cosmetic Arts*, published a year before *Middlemarch* appeared in serial form.[39] Owen's treatise offers *Chapters on the Management of the Hair, Skin, and Teeth*, as its subtitle reveals. It is evident that Dorothea has been successful in the

[39] R. Jones Owen, *The Practice of Perfumery: A Treatise on the Toilet and Cosmetic Arts. Historical, Scientific, and Practical; With Chapters on the Management of the Hair, Skin, and Teeth* (London: Houlston, 1870).

management of all of these components of and addendums to skin care. In contrast to her husband, she has attended to the unclogging of her pores, as reading the passage against popular recommendations of ablution to 'relieve the skin […] of effete matter' shows, which were geared towards a 'purified, renewed, and oxygenated' appearance.[40] Indeed, the cleansed facial skin that Dorothea reveals is *glowing*, *bright*, and *breathing*. Her skin is also – and this is the only time in the novel that the adjective appears – *healthful*. It abounds in the racialised, age- and class-specific properties of whiteness and purity. The traditional dermatological gaze, or the practice of physiognomy, would infer from this glowing appearance inward values and virtues – which are, of course, inevitably conjured up with the choice of descriptors. A superficial dermatological gaze would stop at this outward assessment of the epidermis, whose texture is ascertained to be intact and unblemished, and whose complexion is registered as white yet not too pale, when assessed against the 'differing white of the fur'.

Yet the narrator goes tacitly further in this dermatological observation. Underneath Dorothea's beguiling scarf-skin one can detect – surprisingly, perhaps – a 'stifling oppression' (p. 274). Although Dorothea has done her part to guarantee the smooth exchange of materials that are supposed to travel through the pores and back into the body, she seems to be sending out matter without receiving it in equal returns:

> [Dorothea was] immediately absorbed in looking out on the still, white enclosure which made her visible world […] – there was the stifling oppression of that gentlewoman's world, where everything was done for her and none asked for her aid – where the sense of connection with a manifold pregnant existence had to be kept up painfully as an inward vision, instead of coming from without in claims that would have shaped her energies. (p. 274)

As energy cannot be transported back into Dorothea's cutaneous system 'from without', it fully has to be generated within, by mobilising 'an inward vision'. The language Eliot uses in this passage ('absorbed', 'enclosure', 'connection') adapts dermatological conceptions of the skin's ability to 'absorb […] small particles from the air or any other substance in contact with it', giving these a wider social significance.[41] As outlined above, the new dermatological gaze involved an external assessment that simultaneously draws on the 'inward vision' of the structures underneath. This seems to be the case here, as the narrator contrasts a preliminary diagnosis of an intact, healthy, youthful skin with the later discovery of an oppression uncovered by looking into the skin's layers. In this case, obstruction is caused by the lack of stimulants brought to the skin from without:

[40] 'Skin Deep', p. 562.
[41] 'The Structure of the Skin', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 7 August 1852, p. 24.

> Her blooming full-pulsed youth stood there in a moral imprisonment which made itself one with the chill, colourless, narrowed landscape, with the shrunken furniture, the never-read books, and the ghostly stag in a pale fantastic world that seemed to be vanishing from the daylight. (p. 274)

This stark description of the arrest of Dorothea's energies within the intact cover of a 'blooming' complexion blends the structure of her skin with that of her environment, at first sight so strikingly opposite. If Brilmyer is correct in claiming that 'Eliot's character descriptions […] assume no ontological difference between the "stuff" of human character and that of other nonhuman substances',[42] then I would add that this is especially true of skin representations in the novel. The narrator's vision seems to blur, as Dorothea's skin becomes 'one' with the detritus and waste matter that has accumulated in Casaubon's household.[43] While the novel establishes the maintenance of open pores as an imperative, it also hints at the dangers that come with a physiologically healthy skin in terms of its vulnerability to contamination from without.

Reaching Within: Impression

This danger notwithstanding, the dermatological gaze favours characters that allow for a fluid interaction between their skin's layers and the environment. The most exemplary case in this regard is Will Ladislaw's 'transparent complexion' (p. 204), which seems to invite microscopic inspection of the skin's layers above all other characters. Pitted against Casaubon's 'dried-up' (p. 205) exterior, Will's transparent scarf-skin allows for a facile observation of the matter travelling through it. This is why his interaction with Dorothea is free from the harshness, resistance, and obstructions that characterise her marriage. Will's smile, for instance, likened to 'a gush of inward light illuminating the transparent skin', is 'irresistible' to Dorothea, 'and shone back from her face too' (p. 205). A dermatological angle here adds to the critical observation that Eliot's characters are 'tightly interwoven into a single fabric, always in process, endlessly subdividable down to invisible minutiae',[44] as it calls attention to the materiality of the characters' connections, which depend on matter travelling through the layers of their skin. Will's smile can shine back from Dorothea's face because they have both prepared their skin for an outward orientation, enabling them to feel the 'sense of connection' that Dorothea finds to be lacking in her stifling 'gentlewoman's world' (see above). I would thus suggest reconsidering the frequently foregrounded fabric into which Eliot weaves her characters as a collective texture composed of cutaneous tissue, a material web within which

[42] Brilmyer, p. 61.
[43] Similarly, Summer J. Star argues that perception in *Middlemarch* 'draws us to the object world and substantiates our belonging to it as fellow, bodily, objects'; see 'Feeling Real in *Middlemarch*', *ELH*, 80 (2013), 839–69 (p. 842).
[44] Miller, *Reading for Our Time*, p. 61.

Eliot's characters have divergent options and skills to make visual and tactile impressions on one another through their skin.

When tracing the occurrences of the term *impression* over the course of *Middlemarch*, it is noteworthy to what extent visual impressions are increasingly complemented or even substituted by other sensory impressions, particularly tactile ones. This corresponds to Gilbert's finding that 'touch emerged as a central and privileged sense' around mid-nineteenth century, displacing the previous primacy of sight.[45] The sense of touch is accentuated in a passage where Will hears the announcement of Dorothea's visit and the narrator closely inspects his reaction, applying microscopic lenses to the various layers of his skin:

> he started up as from an electric shock, and felt a tingling at his finger-ends. Any one observing him would have seen a change in his complexion, […] which might have made them imagine that every molecule in his body had passed the message of a magic touch. And so it had. For effective magic is transcendent in nature; and who shall measure the subtlety of those touches which convey the quality of the soul as well as body […]? Will, too, was made of very impressible stuff. (p. 388)

This passage exposes once more the material makeup, or 'stuff', that Eliot's characters are made of. As has to be reiterated here – and this is where my reading differs from previous accounts of the medical and cultural history of skin – Victorian skin as exemplified by Eliot's novel is no two-dimensional surface, nor is it a rigid boundary. Instead, close observation as practised in the passage above reveals the skin's function as a deep, multi-dimensional structure, which connects the outer layer of the body with 'every molecule' within it. The narrator imparts the skill of the new dermatological gaze to the reader by starting from an unaided surface observation of a change in complexion and gently leading the gaze into the skin's layers. Even though a lay observer might not be able to dissect or magnify the skin, the narrator insists that they can yet 'imagine' the transport of matter and sense impressions from the true skin, seat of the sense of touch, to the cutaneous surface, where it finds expression in a change in complexion.[46]

Only the healthy, unobstructed, or even transparent skin of characters like Will and Dorothea allows for this direct correspondence between the character's innermost cutaneous layer, the so-called true skin, and the outermost layer, their complexion. By relaying to readers the physiological processes that regulate this correspondence, Eliot enables them to also reassess the shallow reach of visual impression, such as Dorothea's 'first impressions' (p. 32) of Casaubon, or the 'impression of refined manners' that exudes from Rosamond's 'small feet', 'perfectly turned shoulders' and 'exquisite curves of lips and eyelid' (pp. 158–

[45] Gilbert, 'The Will to Touch', p. 4.

[46] My reading here has points of connection with Richard Menke's discussion of Eliot's representational realism in terms of vivisection, in 'Fiction as Vivisection: G. H. Lewes and George Eliot', *ELH*, 67 (2000), 617–53.

59). The reason behind Dorothea's faulty assessment of Casaubon's character and Lydgate's deception in Rosamond's lies in the disturbed skin physiology that characterises Casaubon's/Rosamond's material makeup, which prevents a deep dermatological gaze. In the case of Rosamond, it is the full control she exerts over her cutaneous surface that intercedes in the natural flow of matter between the inside and the outside. While the signs displayed on the scarf-skin, most prominently the blush, are involuntary in Dorothea and thus reveal a glimpse of her true skin/character, Rosamond cannot, as Mary Ann O'Farrell has established, 'blush this blush', i.e., a sign that suggests 'a one-to-one correspondence between blush and character'.[47] Rosamond expertly displays 'a complexion beyond anything', a cutaneous surface so flawless that 'only a subtle observation' could possibly penetrate it (p. 642). As a result, Lydgate's attempts to read her remain irrevocably superficial. Even though he is the only character equipped with both a stethoscope and a microscope to cross the skin barrier and magnify the materials underneath, he is unable to catch the smallest glimpse of Rosamond's true skin, the seat of authentic inward sensations. This is why his frustration towards the end of the novel culminates in the substitute fantasy 'to smash and grind some object on which he could at least produce an impression' as he despairs over his inability to indent, mark, or impress upon Rosamond's skin (p. 660).

Will becomes the most likely candidate to act out on the exigence that all members of Middlemarch society allow for inspection of their true skin. His violent outbreak towards Rosamond at the end of the novel is provoked by her inability to imagine 'other people's states of mind except as a material cut into shape by her own wishes' (p. 777). When it comes to Will, her failure to look inside appears all the more inept, given the narrator's previous, precise dissection of his material makeup. Will is not exactly hard to read, yet Rosamond proves incapable of applying the two-fold gaze required to assess the complex structures of the skin. Rosamond's fantasy of control over her own skin physiology and that of others eludes her in the precise moment when she seeks cutaneous contact with Will. After she has 'put out her arm and laid the tips of her fingers on Will's coat-sleeve', he bursts out:

> 'Don't touch me!' he said, with an utterance like the cut of a lash, darting from her, and changing from pink to white and back again, as if his whole frame were tingling with the pain of the sting. (p. 777)

As the direct correspondence between the seat of touch and the epidermis is completely free from obstructions in Will's case, the unwanted tactile impression finds an unmediated expression in Will's change in complexion. Notably, he proceeds to retaliate the 'sting' he received in the form of a language that manages, in turn, to get underneath Rosamond's skin: his utterance has the impact of 'the cut of a lash', connoting a verbal propensity to violently tear Rosamond's

[47] Mary Ann O'Farrell, *Telling Complexions: The Nineteenth-Century English Novel and the Blush* (Durham, NC: Duke University Press, 1997), p. 121.

studied skin-screen. Paradoxically, Rosamond, in response, lowers her defences by shedding part of the textile layers that protect her scarf-skin, as she proceeds with 'untying her hanging bonnet and laying it down with her shawl' (p. 777). Giving in to a 'horrible inclination to stay and shatter Rosamond', Will continues to give his voice a 'sharp edge' (p. 778). He realises the effect of this spontaneous strategy almost instantly: 'Will stopped as if he had found himself grasping something that must not be thrown and shattered' (p. 778). Unlike Lydgate, whose wish to harm Rosamond's intact cutaneous cover remains confined to the subconscious, Will successfully manages to pierce the fortified outward layer of Rosamond's skin; his words work upon her like 'a lash never experienced before' (p. 779). The language of skin injury persists in a later chapter that revisits the residual effects on Rosamond's true skin: when Dorothea touches her hand, Rosamond feels 'as if a wound within her had been probed' (p. 795). The narrative implicitly sanctions Will's onslaught on her protective skin barrier, as it becomes clear that Rosamond, as a result, has finally become able to make and receive an authentic impression, especially the 'impression that Mrs Casaubon's state of mind must be something quite different from what she had imagined' (p. 793). This is not to support masculinist readings such as the one proposed by F.R. Leavis, who infamously claimed that 'the reader certainly catches himself, from time to time, wanting to break that graceful neck'.[48] Yet the outcome of Will's verbal violence is clearly – and, I would add, problematically – evaluated positively, given Rosamond's honest communion with Dorothea in the following chapter. After having been violently opened, Rosamond's scarf-skin no longer serves as an impenetrable cover, but the sensitive tissue of her true skin has become accessible to lasting impressions. This prompts Rosamond's first altruistic act of imparting her insight into Will's feelings to Dorothea because the violent opening of her skin barrier has given her – for the first time – the capacity to empathise.

In conclusion, a materialist approach to character in *Middlemarch* that pays attention to the interpretations and interactions of each cutaneous layer – especially the epidermis and the true skin, as well as the matter travelling between and outward from these layers – crucially helps to clarify the characters' choices and social behaviours. A misreading of complexion and a disturbed skin physiology is both behind Dorothea's fatal decision to marry Casaubon and explains Lydgate's frustration at not being able to make an impression on Rosamond. Conversely, those characters that allow for inspection of their true skin by assisting the transport of matter through a cleansed (or even transparent) scarf-skin are enabled to experience a real sense of connection and develop empathetic relations towards one another. The dermatological gaze also has a significant function within representational realism. By implementing scientific developments in the fields of microscopy and dermatology, Eliot arrives at a finer vision of the material makeup of character. Implicitly teaching readers how to

[48] *The Great Tradition: George Eliot, Henry James, Joseph Conrad* (London: Penguin, 1986), p. 84.

look at character(s), the novel's retreat from physiognomy paves the way for a more complex and often contradictory ontological relationship between depth and surface: it is neither the case that cutaneous surfaces are simply misleading – Casaubon's pallor and obstructed pores, for instance, are visible on his epidermis – nor does complexion work like an immediate index of underlying health or virtues – as characters like Rosamond are able to manipulate the signs displayed on their skin. The dermatological gaze that both the narrator and (some of) the characters learn to apply looks both ways, taking into account both surface complexion and cutaneous depth. G.H. Lewes partly anticipated Eliot's monumental contribution to literary realism when he mused in his *Sea-Side Studies* that '[h]ere one might write epics finer than the *Odyssey*, had one but genius packed up in one's carpet-bag', adding as an important afterthought: 'if the genius had been forgotten […], at any rate there was the microscope and scalpel'.[49] Applying both the microscope and the scalpel, Eliot magnifies and dissects the material makeup of her characters, whose layered skin is in a constant, if often disturbed, physiological interchange with the collective cutaneous fabric in which they are 'embroiled'.

[49] George Henry Lewes, *Sea-Side Studies at Ilfracombe, Tenby, the Scilly Isles, & Jersey* (Edinburgh and London: William Blackwood and Sons, 1858), p. 188.

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