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A Study in Red: Erubescence Explored through Achilles Tatius, Longus, and Greek Scientific Literature

ABSTRACT: Approaching erubescence in Longus' and Achilles Tatius' novels as physiological processes, combined with a close reading of scientific authors such as Galen and Aristotle, provides a better understanding of what it meant to have one's skin turn red in the Greek novels. The blusher's awareness in social situations is expressed through the concept of a classic blush, closely tied to Konstan's notion of shame, as seen in Achilles Tatius. Where this awareness is absent, as in Longus, erubescence functions as an involuntary physiological response, reflecting the body's reaction to psychological processes as a natural instinct. Examining ancient scientific terminology of erubescence, re-contextualises these cases, allowing for a deeper understanding of their role in their respective narratives.

In Longus, erubescence reflects how characters' bodies are affected by their emotional experience, while in Achilles Tatius, it highlights social rules in morally ambiguous settings. Achilles Tatius adds irony and realism by focusing on characters' awareness of their *faux pas*, whereas Longus inverts this awareness to emphasise the role of *physis*, building on Zeitlin's seminal work. Both authors use psychological and physiological responses to highlight their themes, showcasing the literary complexity of Second Sophistic prose¹.

KEYWORDS: blush, erubescence, Achilles Tatius, Longus, Galen, Aristotle, shame, desire.

This paper examines the physiology of erubescence (a less emotionally loaded term for reddened skin), a physical symptom of emotional experiences relating to desire and shame. It explores erubescence as a symptom rather than the encompassing emotion, to clarify how bodily and cultural frameworks interact in the novels of Longus and Achilles Tatius. By tracing how terminology of erubescence is used across literary and medical contexts (primarily Galen and Aristotle), I explore how physiological language was employed to articulate emotional experiences and to distinguish instinctive bodily reactions from socially conditioned ones.

In what follows, I use *emotion* to refer to an emotion proper (*pathos*), a clear, named feeling (like shame or anger, as in Aristotle) that characters are aware of and is recognised in social contexts, as explored by Cairns, Konstan, LeVen

¹ Konstan 2003; Zeitlin 1990.

and Daude². The terms *psychological* and *physiological processes* (such as the movement of *pneuma* or blood) are used to refer to the internal mental shifts and bodily mechanisms that occur when a character experiences pre-emotional bodily states (such as desire or agitation), also referred to as *affects*, even before these are recognised as specific emotions. This distinction, drawing on affect theory, is significant to my reading of erubescence: in Longus, the flush marks instinctual, affective experiences before cognition, whereas in Achilles Tatius, the blush coincides with emotional awareness within a social frame. I have used *emotional experience* as an umbrella term in this paper.

Through the application of the embodiment theory, informed by affect theory, this paper approaches the ancient emotional experience as somatic. Embodiment theory suggests that bodily states and psychological processes are deeply intertwined, with physical symptoms serving as meaningful indicators of affective experience³. In this paper, I focus on how the framing of bodily responses indexes and reflects the characters' emotional awareness and shapes its meaning in literary representations. This approach physicalises emotion, allowing bodily responses like erubescence to help distinguish between fully realised emotions that are shaped by their physiological processes and affective processes.

In classical scholarship, the blush has been primarily examined through a psychological lens⁴. Physiologically, erubescence involves increased blood flow and heat in the facial skin, but scientific research on blushing remains limited⁵. While theories differ, blushing is generally triggered by emotional self-awareness in social settings, to (involuntarily) communicate embarrassment, anger, guilt, attraction, or shame to those having witnessed the exposition, distinguishing the blush from other forms of erubescence, such as flushing or rashes. Lateiner has argued that blushes in Achilles Tatius function to «reveal the mind accurately»⁶ and that those in Longus «have action pivot on them»⁷ as they reveal Daphnis and Chloe's sexual awakening. However, this only addresses the psychological aspect of the reddening of the skin, not the physiology. By examining both literary and scientific terminology of erubescence, this paper clarifies what it meant for a Greek to have one's skin turn red. Galen's

² Cairns 2006, p.39. Konstan 2006 Cf. LeVen 2024, p. 317 on stylised emotion vs. affect beyond, before and beneath emotions. Daude 2009.

³ Cf. Cairns 2016. Cf. Konstan 2006.

⁴ Cf. De Temmerman 2007 on the characterisation of Callirhoe through blushing.

⁵ Drummond 2012, p.15, 22. Nikolić et al. 2024. See Leary & Toner 2012 for diachronic theories on why humans blush.

⁶ Lateiner 1998, p. 176.

⁷ Lateiner 1998, p. 177.

discussion of humors, innate heat, and blood flow (founded in the traditions of Hippocrates) provides the most comprehensive scientific framework for understanding ancient ideas about the physiology of erubescence. Other scientific insights founded in the Hippocratic tradition, from for example Aristotle, have also been included to this end.

The language of erubescence in Greek literature is nuanced. The terms ἐρυθρίαω, and ἐρύθημα used in conjunction with πλῆθος, though often both translated simply as *blush*, carry subtle but significant differences in connotation; ἐρυθρίαω typically denotes a blush tied to emotional self-awareness, often involving shame or social recognition, while ἐρύθημα conveys a broader sense of redness, often associated with physiological processes rather than emotional realisation. Achilles Tatius' choice of terminology enhances the presence of social conventions surrounding the Greek emotion of shame in morally promiscuous settings. In situations where this awareness is not as present, as in Longus' novel, erubescence functions as an involuntary physiological response of the body itself. In Longus' novel, the framing of various physical symptoms of desire and instinctive shame shows a deliberate usage of scientific terminology describing the physiological process of humoral imbalance, πλῆθος. Whereas Achilles Tatius uses erubescence to enhance irony and realism through the characters' awareness of their faux pas, Longus inverts this awareness of social rules, instead emphasising the role of *physis*⁸.

1. Erubescence as blushes in Achilles Tatius

Achilles Tatius' narrative in *Leucippe and Clitophon* is structured around social conventions of chastity and moralism, with erubescence demonstrating the interplay between morality and character psychology. The novel is also known for pushing genre boundaries, sometimes interpreted as parodic; Chew, however, argues that despite elements like Leucippe's chastity, pirates, and travel, the work remains firmly within the novelistic tradition⁹. By testing these conventions, Achilles Tatius explores the tension between moralism and realism, as seen when Leucippe's chastity is only asserted after an almost consummated encounter prevented by her mother¹⁰. Reardon further notes that this near abandonment of convention results in a more realistic portrayal of character psychology¹¹. Thus, Achilles Tatius uses these narrative strategies to examine

⁸ I am indebted to previous work done on *physis* vs *techné* by Zeitlin 1990.

⁹ Chew 2014, pp. 97-100.

¹⁰ Chew 2000, p. 58, Chew 2014, p. 103.

¹¹ Reardon 1994, pp. 85-87.

how characters, shaped by their social positions, navigate alternatives to the chastity motif without breaking genre limits. Daude has shown that representations of emotion states in Achilles Tatius draw on Galenic medicine, following in the footsteps of Mcleod's work on Achilles Tatius' deliberate use of medical discourse surrounding humoral imbalances, with medicine embedded into the novel¹². I follow Daude in that bodily signs in Achilles Tatius coincide with recognised emotion, shaping the emotional experience for the purpose of realism, but also literary and moral frameworks to deepen characterisation.

Erubescence in Achilles Tatius happens in close association with shame due to broken social conventions. After having been exposed to other suitors, Leucippe is given a love potion, causing her to become mad, striking Clitophon and Menelaus in the face and exposing herself¹³. Ultimately, she is administered a drug following a mistaken diagnosis of menstrual imbalance. When she recovers and finds herself chained up, Clitophon tells her what has happened and what she had done, which causes her to turn red: ἡ δὲ ἡσχύνετο ἀκροωμένη καὶ ἡρυθρία¹⁴, «And she became ashamed as she listened, and blushed»¹⁵, after which Clitophon reassures her. Leucippe's skin reddens almost retrospectively whilst being confronted about her behaviour, as she considers her actions (the description coming from Clitophon) and how she would have been perceived whilst exposing herself. She feels shame, an emotion proper; the erubescence betrays her awareness of having behaved in an unchaste way, making the translation of "blush" an apt one¹⁶. To blush is to be aware (at least to a certain extent) of how one has transgressed a social boundary of morality. Konstan's influential study on shame, largely based on Aristotle's understanding of αἰσχύνη, has shown that the emotion of αἰσχύνη encompasses both the English sense of shame (previously argued to be the Greek αἰδώς, as a prospective notion regarding bad behaviour¹⁷) as well as shame as an emotion (as a retrospective sense of guilt), and is thus less complex than the modern-day English concept, being uniform.¹⁸ Shame, then, is a direct response to an action that reveals a personal flaw, which leads to the loss of reputation within society, Konstan

¹² Daude 2009, Mcleod 1969.

¹³ McLeod 1969 has interpreted this madness as a (parodic) case of Erasistratean case of madness, due to the *pneuma* having been cut off, finding links to medical language used by Achilles Tatius to describe the overflowing of veins with blood, showing Achilles Tatius' deliberate use of medical debates in his narrative. Cf Spyridakos 2022, who disagrees with the parody aspect.

¹⁴ Ach. Tat. 4.17.5.

¹⁵ Translations are my own unless otherwise stated.

¹⁶ As translated by Winkler 1989, p. 231, Whitmarsh 2011, p. 74, and Garnaud 1991, p. 74.

¹⁷ Cf. Cairns 1993 on αἰδώς.

¹⁸ Konstan 2003, p. 1041.

explains¹⁹. The erubescence in this passage is a physical manifestation of her self-awareness, resulting in the shame that Leucippe feels upon hearing Clitophon recount her behaviour, going against societal expectations for womanly conduct, making it a blush. However, ἡσχύνετο also functions to index the cause of the redness appearing on her cheeks and the psycho-physiological process happening. The shame and the erubescence both happen in conjunction to shape the emotional experience as a somatic one; together they inform the reader of Leucippe's emotional state.

From a physiological perspective, Aristotle claims that shame causes the skin to turn red using the same terminology (ὁ ἐρυθριῶν διὰ τὸ αἰσχυνθῆναι ἐρυθρίας λέγεται²⁰) with shame as the trigger for the reddening of the skin. Notably, he only uses the term for emotion-induced erubescence, predominantly for shame, but also for fear and anger relating to *thumos*. He explains that this is due to the hot blood humor rushing to the parts of the skin that were most thin and empty of blood (the cheeks and ears), paired with a rush of heat (θερμὸν²¹) as befits the blood humor. Aristotle also claims that in the emotional experience of shame, heat travels away from the eyes, as this is where shame enters, to the ears and sides of the head where the blood then heats and shows²². Shame, then, clearly needs a trigger, something to be perceived or realised, to warrant a blush. Aristotle also posits that external heat and cold can affect the skin tone, but also the accompanying emotion; anger, as Aristotle claimed, causes red skin due to the internal heat, which can be quenched by simply throwing cold water on the angry man, causing the anger to cease²³, in line with the Hippocratic humoral framework in which the internal and external affect each other²⁴. Clitophon's words seem to have a similar effect, but would cold water have calmed Leucippe's shame in the same way?

Galen also claims that changes in skin tone were the result of a change in one's humoral mixture (κρᾶσις) and that the condition of the soul depends on the mixture of the body in *Quod animi mores corporis temperamenta sequantur*, which Evans labelled as «a kind of small handbook on the theories of physiognomists»²⁵. Galen argues that the soul is also made of humors and is affected by the mixture of the body, a connection that goes both ways, as the soul is not

¹⁹ Konstan 2003, p. 1043.

²⁰ Arist. *Cat.* 9b 30.

²¹ Arist. *Pr.* 961a 33. Cf. 905a 7.

²² Arist. *Pr.* 957b 10.

²³ Arist. *Pr.* 889a 20.

²⁴ Cf. Pl. *Symp.* 186b-d.

²⁵ Evans 1945, p. 294.

Table I. Humors

<i>Humor</i>	<i>Qualities</i>	<i>Element</i>	<i>Season</i>	<i>Temperament</i>
Blood	Hot and moist	Air	Summer and spring	Sanguine
Yellow bile	Hot and dry	Fire	Summer and autumn	Choleric
Black bile	Cold and dry	Earth	Autumn	Melancholic
Phlegm	Cold and moist	Water	Winter	Phlegmatic

only affected by the mixtures but can also be the agent in affecting them²⁶. To Galen, the four main humors were blood, yellow bile, black bile, and phlegm, although he also inconsistently states that blood was a mixture of several humors²⁷. These humors were connected to and influenced by seasons, elements, and temperaments, illustrated in table I, and could impact each other similarly to how Aristotle argues the role of cold water in quenching one's anger.

Galen adopted the Platonic idea of the tripartite soul in his treatise *On the Doctrines of Hippocrates and Plato (PHP)*, which consisted of humoral mixtures too, and so humors played a role in generating psychological processes similarly to how one's temperament would be affected by the dominant humors²⁸. The tripartite soul functioned as the basis of physiology, placing three roughly separate elements of the soul in three different organs: the liver controlled the appetitive part, the heart controlled the spirit, the brain one's ability to reason. Galen thought that the heart was the source of the arteries and innate heat, and that it was where the body's blood was contained. Blood was however produced in the liver, until the innate heat, set in motion by the pulse, would carry it through the arteries and veins, throughout the body. The heart also functioned as a focal point for the body's respiration and as Evans rightly points out, also functioned as the seat of the soul because of that very reason²⁹. The air within the body (πνεῦμα) was responsible for controlling the transmission of all physiological and psychological processes and sensations, and steered the innate heat, therefore ensuring the body functioned well. Galen, too, supposes that blood is the cause of erubescence, which in turn was steered by the *pneuma*:

χλωρόν μὲν γὰρ ἡ πελιδνὸν μοχθηρὸν τῇ ποιότητι δηλοῖ τὸν χυμὸν, ἐρυθρὸν δὲ πλῆθος αἵματος ἐνδείκνυται³⁰.

²⁶ Galen *QAM* 5, Kühn 4.785.

²⁷ Galen *De Temp.* 2.3, Kühn 1.603. Cf. Siegel 1968, p. 323.

²⁸ Galen *De Plac. Hippoc. et Plat.* De Lacy 5. Cf. Kühn 7.192 *Sympt. Diff.*

²⁹ Evans 1945, p. 291. Galen *MM* Kühn 10.635-636.

³⁰ Galen *Hipp. Progn.* 3, Kühn 18b.151.2.

For pallor or livid skin tone indicate a bad state of the quality of the humor, and redness shows an excess of blood.

Galen specifies what both pallor and erubescence can reveal about the state of the humors, noting that unnatural colours (τὰ παρὰ φύσιν χρώματα) are important to examine. Galen claims that the amount of humoral fluids within the mixture could influence one's complexion. Excessive amounts of blood would cause erubescence as a symptom. The term used, *plethos*, which denoted a specific condition of an excess of humors, often blood, is closely linked to the terminology Longus uses for his erubescence, for redness caused by circumstances other than emotional ones (to which I will return). Galen uses ἐρυθρίαω, the term predominantly used for erubescence caused by awareness of one's emotion³¹, or a blush, if you will, only once in his surviving corpus for an explicit case of 'emotional erubescence', as he explains that the whole body is altered because of emotions pertaining to the soul:

παντὸς τοῦ σώματος ἐν τοῖς τῆς ψυχῆς πάθεσιν ἐναργῶς ἀλλοιούμενου καὶ ποτὲ μὲν ὠχρίωντός τε καὶ καταψυχόμενου καὶ τρέμοντος, ὡς ἐν τοῖς φόβοις φαίνεται γιγνόμενον, ἔστιν ὅτε δ' ἐρυθριῶντός τε καὶ θερμαινόμενου καὶ σφοδρῶς ἐντεινόμενου, καθάπερ ἐν τοῖς θυμοῖς³².

The whole body is visibly changed by affections of the soul, sometimes turning pale and cold and trembling, as appears to happen in fear, and at another time becoming red and hot and violently tense, just as in passions.

To Galen, affections of the soul (τοῖς τῆς ψυχῆς πάθεσιν, of which desire, *epithumia*, is one³³) stand in connection with the body itself and thus are embod-

³¹ ἐρυθρίαω is predominantly used to denote erubescence caused by emotions, for example annoyance and agitation: Xen. *Ec.* 8.1.4, Plut. *Quomodo quis suos in virtute sentiat profectus*, Dio Chrys. *Orat.* 4.18.6. Embarrassment & shame: Pl., *Amat.* 134b, Pl. *Euthyd.* 275d, 297a, Pl. *Prot.* 312a, Dem. *Cor.* 18.128, Aeschin. *In Tim.* 1.105, Menander *Hom.* 1.1, *Frag.* 527.1, Chrysippus *Frag. Log. et Phys.* 613.4, *Frag. Mor.* 592a 4, *Septuaginta Tob* 2:14, Phil. *Jud. De Opificio Mundi* 171.2., Plut. *De vitioso pudore* 528f 2, App. *B. Civ.* 4.9.69, Epict. *Dissertationes ab Arriano digestae* 3.7.27.2, Lucian *Cataplus* 4.23. Desire: Pl. *Lys.* 204b-c. These often also function as a judge of character (e.g. Plut. *Quomodo adolescens poetas audire debeat* 29e 6) or happen in response to being called out. All of Aristotle's usage of the term is to denote reddened skin due to emotions relating to *thumos*, mostly shame. Instances of non-emotional erubescence using ἐρυθρίαω are far less common, for example in the *Septuagint* as sign of beauty (*Esther* 15.8) although in conjunction with fear, Lucian *Bis accusatus sive tribunalia* 11.21 due to straining of voice, in conjunction with swelling of throat and veins, and twice in Hippocrates *Epid.* 2.50.7 due to Tuberculosis and 3.16.32. as a side-effect of pleurisy due to humoral imbalance.

³² Galen, *De Plac. Hippoc. et Plat.* Kühn 2.7.16, De Lacy 5.4.1.2.

³³ Galen *Aff. Dig.* 3, Kühn 5.7.10. Cf. Singer 2022, p. 30, for discussion of *pathos* and the soul in Galen.

ied; when the soul is affected by emotions such as fear, the body turns pale and cold; when moved by θυμός (spirited anger or passion, associated with heat), the body becomes red, hot, and tense. The body displays physical signs that correspond to the humoral qualities of each emotion. Ancient medical authors do not explicitly connect blushing or flushing with sexual arousal, but Galen includes desire as an affection of the soul and his (and Aristotle's) account of bodily heat and redness in response to passions implicitly links these symptoms to arousal, since sexual desire is also understood as a passion associated with heat³⁴. Achilles Tatius, too, describes Leucippe and Clitophon's shamelessness gazing at another as a heated and maddened state of desire (*Eros*) and inebriation (*Dionysus*³⁵) and Clitophon's desire for Leucippe is described as a wound and a sickness affecting his soul, characterised by blazing heat³⁶. Galen's and Aristotle's understanding of the physiology of erubescence thus aligns with descriptions found in *Leucippe and Clitophon*; the body shows signs that correspond to the humoral qualities of the emotion in question. Galen specifies that shame, as well as *thumos* (οὕτω δὲ καὶ θυμὸν, αἰδῶ τε καὶ ὅσα τοιαῦτα³⁷), can cause redness (using the more general term ἔρευθος), which happens in the same way it does for external factors, which Galen brands «all signs of a *plethos* of blood» (αἱματικοῦ πλήθους γνῶρισμα) due to heat³⁸. Galen shows that the humoral characteristics of the affection in question will impact the body; the body becomes “inflamed” with a “hot” affection, the innate heat will start to rise, causing more blood to flow to the affected area, which in turn augments visibility of the blood upon one's skin. This process can be caused by affections themselves, or, as Galen states, by the mixtures, which can stimulate the soul to respond with an affection; this process can be set in motion by both internal and external factors, as Galen states that external vapours caused by the heat of the sun have the ability to affect the soul and that the mixtures themselves dominate the state of the soul³⁹. This framework underpins the physiological interpretation of erubescence and so, according to both Aristotle and Galen, Leucippe's internal feelings of shame would have triggered an involuntary rushing of heat and blood, which could have been quenched by an external

³⁴ Cf. Ahonen 2017 p. 450, on sexual regulation due to an excess of heat.

³⁵ Ach. Tat. 2.3.3.

³⁶ Ach. Tat. 1.6.

³⁷ Galen *De Plen.* Kühn 7.571.2.

³⁸ Galen *De Plen.* Kühn 7.571.6. Galen often shows heat is responsible for increased visibility of the blood upon the skin, e.g. in *De differentiis februm libri II*, 7.399. «It has been demonstrated before, that where any type of heat is inflamed or increased (ἀνάπτεται τις ἢ καὶ αὐξάνεται θερμότης), that blood (αἷμα) will flow (ἐπιρρεῖ) to that part, away from the other parts».

³⁹ Galen *QAM* 5, Kühn 4.807, 779.

cooling as well as an internal one, in this case Clitophon's reassurances. The emotional experience, then, as seen in this light, is affected by a bodily experience which betrays the imbalanced state within the body, in turn revealing the corresponding state of Leucippe's psyche.

The use of ἐρυθρίαω by Achilles Tatius adds depth to Leucippe's internal feelings of shame and the psychological realism of the character, put in the imperfect to highlight her growing realisation⁴⁰. It is not her becoming red that should be the takeaway from these lines, but *why* she is becoming red. Clitophon, as the narrator, describes her emotional experience in a way that has Leucippe embody her shame, with the intention to establish Leucippe's *polis*-approved behaviour in response to her display of madness. Her blush, as marker of an emotion proper, demonstrates her knowledge of the social values and behavioural codes that of someone of her station should adhere to. Leucippe has embodied those expectations, with her body and mind united in a way that reinforces them.

A further example of erubescence revolves heavily around the chastity expected from maidens like Leucippe. The naïve and slightly self-centred Clitophon is asking advice from his more experienced cousin, Clinias, as to how to court Leucippe whilst being betrothed to another. This showcases Clitophon's impulsiveness as Clinias warns him against acting without discretion:

ἐὰν δὲ αἰτήσης τὸ ἔργον προσελθὼν, ἐκπλήξεις αὐτῆς τὰ ὅτα τῇ φωνῇ, καὶ ἐρυθρίῃ καὶ μισεῖ τὸ ῥῆμα καὶ λοιδορεῖσθαι δοκεῖ ἂν ὑποσχέσθαι θέλῃ τὴν χάριν, αἰσχύνεται⁴¹.

But if you approach her and ask her for the physical deed, you will disturb her ears with your proposition, and she will blush and regard your words with hatred and she will think that she is being disrespected, and even if she wants to express her delight, she is ashamed to do so.

And so, in Clinias' perspective, when a maiden's honour (as a social construct of chastity) is being challenged, her response will be negative and will cause her to feel embarrassed. It is not necessarily the erotic circumstances that cause her behaviour, as she could be willing to engage (and Leucippe does

⁴⁰ Achilles Tatius occasionally uses forms of φοινίσσω for redness upon the skin to highlight the contrast between reddish and pale/white colour (τὸ λευκὸν εἰς μέσον ἐφοινίσσετο in 1.4 and ὠχρίασά τε ἰδὼν ἐξαίφνης, εἴτ' ἐφοινίχθη in 2.6). The case in 2.6 does have a trigger, where Clitophon reddens upon seeing Leucippe, who unbeknownst to him witnessed Clitophon contemplating his feelings of desire for her. The constraints of this article prevent me from further exploring the use of φοινίσσω

⁴¹ Ach. Tat. 1.10.4.

flirt), but the impropriety of such a blunt proposition, which is not suitable for a chaste maiden to respond to in the eyes of society. The verb ἐρυθρίαω is intended to demonstrate the maiden's expected physical response triggered by shame (αἰσχύνεται) at the proposition, showing Clinias' expectation of evidence of her modesty, in line with how he explains social conventions to function. It betrays the girl's supposed inner agitation, showing harmony between the physical and psychological, similarly to how Daude has shown emotions and bodily symptoms to coincide. With the situation being erotic in nature and the blunt proposal threatening to make a dent in the image of her chastity, this response befits someone belonging to the social elite. The interpretation of the erubescence as a blush signalling emotional awareness, then, is suitable⁴². Lateiner notes this, too, stating that the maiden's honour is being threatened and concludes that generally blushes function to disclose «sudden embarrassments» to those around them, adding that that Achilles Tatius is aware of his characters' psychology, with the face functioning as the mirror of the mind⁴³. Lateiner concludes that blushes are part of a social narrative, demonstrating that the blusher has broken a social rule, but also that the act of blushing itself can act to «restore social respect»⁴⁴. The erubescence demonstrates that very notion, showing how erubescence works within the novel itself, and within society. In this way, Achilles Tatius plays with irony as Clinias expects Leucippe to still be willing to break conventions of chastity, as long as Clitophon does not outright ask her to do so. Physically speaking, the erubescence reveals the internal disorder due to the shame that overcomes a maiden being propositioned, and the thoroughness with which social expectations have been impressed upon Leucippe, in Clinias' expectation. Perhaps we can go even further and claim that the blush reveals the maiden's embodied awareness of her own willingness, which would clash with the bounds of chastity imposed on her. This is to be expected within the setting, as throughout the first two books of the novel the narrative rarely leaves the house of Clitophon's father, Hippias. Whitmarsh has convincingly argued for Hippias' house as a space of patriarchal power, in which women are segregated from men and in which social rules and conventions need to be followed, making it difficult for the two lovers to consummate⁴⁵.

A gendered inversion of Leucippe's shame can be found in Achilles Tatius 5.19.6, where Clitophon becomes red at reading a letter by Leucippe, accusing

⁴² Followed by Winkler 1989, p. 184, Whitmarsh 2011, p. 13, and Garnaud 1991, p. 18.

⁴³ Lateiner 1998, pp. 176, 183.

⁴⁴ Lateiner 1998, p. 185.

⁴⁵ Whitmarsh, 2010.

him of having been unfaithful with Melite (although this has not taken place yet, society think Melite and Clitophon have married) and having caused her much suffering: πάνυ δὲ ἡρυθρίων ἐφ' οἷς μοι τὸν γάμον ὠνειδίζεν, ὥσπερ ἐπ' αὐτοφώρῳ μοιχὸς κατελιημένος. Οὕτως ἡσχυνόμην καὶ τὰ γράμματα. «I began to blush deeply at the words with which she chided my union, just as if I had been caught in the act of being an adulterer. So ashamed did I become at her letter.» As King rightly points out, Leucippe's letter causes emotional turmoil for Clitophon, and she is able to control Clitophon's emotions «like a good rhetor», when her account of the suffering, which she rightfully lays at his feet, makes him weep⁴⁶. The reason Clitophon becomes red is because Leucippe's confrontation is making him feel ashamed (ἡσχυνόμην), not because he has violated a social convention (on the contrary, Clitophon points out earlier the double standard in morality, as men are not bound to the expectations of virginity that apply to women), but because he has violated the expectations of his love-interest. The letter makes Clitophon aware how he is perceived by Leucippe, a classic case of self-consciousness, and the inception of that growing realisation is highlighted by Achilles' use of ἡρυθρίων. The physical letter functions as a visual trigger for his shame, or guilt, making Clitophon face the disapproval. A few lines earlier, immediately after reading the letter, Clitophon is described to both burn up and pale at the letter (ἀνεφλεγόμην, ὠχρίων⁴⁷), suggesting the involvement of heat in the blushing process. The quick change from burning red (implied) and pallor suggest inner imbalance and thus turmoil. However, Clitophon does not sleep with Melite until *after* he has read the letter, and so the blush is partly anticipatory; Clitophon's blush exposes his anticipatory guilt for what he is about to do, not because society deems it as morally promiscuous, but because Leucippe has perceived him that way. While Clitophon himself does not subscribe to the moral expectations of chastity, the societal assumption of his union with Melite adds pressure to his emotional turmoil, making Leucippe's perception all the more potent. This is why the conventional translation of “blush” (as given by Gaselee, Lateiner and Garnaud⁴⁸) in these instances is the correct one. Whitmarsh's translation of «I burned» and Winkler's translation of «flushed» are less apt, as they not fully underpin the emotional turmoil causing the erubescence⁴⁹. The translation of

⁴⁶ King 2012, p. 151. Papadimitropoulos 2015, argues how Clitophon's sexual transgressions lead to several instances of *scheintod* for Leucippe, furthering along the plot each time. Clitophon's behaviour also functions to demonstrate the tension between Aphrodite and Artemis within the novel.

⁴⁷ Ach. Tat 5.19.

⁴⁸ Gaselee 1969. Lateiner, 1998. Garnaud 1991, p. 89, uses «rougissais».

⁴⁹ Whitmarsh 2001, p. 89. Winkler 1989, p. 243.

blush more suitably supports the structure of the plot as well as the emotional realism of the characters; Leucippe only blushed due to circumstances outside of her control, Clitophon does so because of his own choices. His blush reflects his own internal conflict. Furthermore, for the upcoming romantic resolution (as a convention of the novel) to take place, Clitophon does not have to adhere to social rules of fidelity, but he does need to re-align himself with Leucippe as his (future) wife. His demonstration of guilt restores the balance in the narrative as the story prepares for the upcoming reconciliation of the two lovers through (embodied) emotional harmony between them.

2. Erubescence in Longus as physiological responses

Where Achilles Tatius' characters blush due to the realisation of their *faux pas* within the setting of the *polis*, Longus' characters lack the social skills or *techné* to realise the exact nature of their suffering due to *eros*⁵⁰. This is due to Longus' narrative setting in the bucolic environment; Daphnis and Chloe grow up on the island of Lesbos, both having been exposed there as infants and respectively found by a goatherd and shepherd. The children, yet unaware of their heritage, show signs of being of a higher station than the rustic families that have taken them in, especially through their beauty⁵¹. *Eros* takes charge of Daphnis and Chloe's fate and ensures that they receive a rural education (*paideia*), from which the pair learns through imitating the world around them (*mimesis*). As previously argued by both Hunter and Zeitlin, the concept of *mimesis* of nature is an integral part of Daphnis and Chloe's *paideia*, which teaches them everything except art of love⁵².

The relationship between *techné* (the skill associated with urban education) and *physis* (instinct) is dominant in bucolic literature, seeing as the bucolic landscape is artificially created, yet natural in its subject matter, and is omnipresent throughout Longus' narrative, also shown by Effe⁵³. Winkler has analysed this tension in Longus on a cultural level, where nature and its teachings clash with social conventions, deeming the novel a «serious intellectual play with social reality»⁵⁴; instinct's eventual failure to teach the youngsters how to copulate, gives way to the (sexually) violent ways of society, resulting in Daph-

⁵⁰ Cf. Zeitlin 1990.

⁵¹ Long. 1.7.

⁵² Hunter 1983, pp. 40-52. Zeitlin 1990, pp. 417-425.

⁵³ Effe 1999, pp. 189-209.

⁵⁴ Winkler 1990, p. 103.

nis and Chloe's attainment of the cultural and social objective of marriage, the epitome of relationships within the confines of city-conventions⁵⁵. At the end of the novel, *physis* has been influenced by socio-cultural convention to such a degree, that Daphnis and Chloe have reached a conventional kind of maturation despite their *paideia*. Zeitlin follows this notion as she explores the youngsters' growth to maturity through their *paideia* in *eros*⁵⁶. Longus' portrayal of Daphnis and Chloe's behaviour, thoughts and actions at the start of the novel are meant to be "convention-free". Longus purposely sets up Daphnis and Chloe's affective episodes to lack the influence of social norms and values, something which his readers would have easily caught on to (as part of the elite who did adhere to these conventions and recognised them as literary conventions, too), undoubtedly resulting in the reader's understanding of Daphnis and Chloe's psyche as humorously rural and uncultured. The erubescence functions to reveal the characters lack of knowledge of social conventions. Thus, the main two cases erubescence in *Daphnis and Chloe* should be interpreted as a flush, rather than a blush.

The initiation of Daphnis and Chloe's journey towards sexual maturity is marked in the imperfect tense by the onset of Chloe's feelings of desire, after Chloe has watched Daphnis bathe. It results in a range of bodily responses: ὥχρια τὸ πρόσωπον, ἐρυθήματι αὐθις ἐφλέγετο, «Her face would pale, and the next moment it would blaze with redness»⁵⁷. The scientific notion of redness as a sign of excess blood is mirrored in Chloe's fiery blush, where Longus focuses on the physical manifestation of her unarticulated feelings of desire. The poor girl has no idea what is happening to her (Ὅ τι μὲν οὖν ἔπασχεν οὐκ ᾔδει) as she had never even heard of love (νέα κόρη καὶ ἐν ἀγροικίᾳ τεθραμμένη καὶ οὐδὲ ἄλλου λέγοντος ἀκούσασα τὸ τοῦ ἔρωτος ὄνομα) because of the type of *paideia* she has received⁵⁸. This notion recalls the pastoral theme of peasants as uncultured and shameless beings, invoking a sense of irony for the reader. However, Longus takes the motif further, through his constant reminders that Daphnis and Chloe are in fact not peasants. The lack of proper *paideia* causes *physis* to take control, leaving Chloe vulnerable, unable to interpret *physis*' not so subtle hints. Her emotional distress (ἄση δὲ αὐτῆς εἶχε τὴν ψυχὴν) causes her to suffer from several symptoms, ranging from not being able to sit still and to take her eyes off Daphnis, to forgetting to eat and suffering from insomnia,

⁵⁵ Winkler 1990, pp. 101-126. See Whitmarsh 2011, pp. 73-74 for devaluation of the polis in Longus.

⁵⁶ Zeitlin 1990, pp. 417-425.

⁵⁷ Long. 1.13.6, This translation of the erubescence is a literal one.

⁵⁸ Long. 1.13.5.

traditional signs of lovesickness within the erotic tradition⁵⁹. The erubescence is placed in an asyndeton, as the climax of the enumeration of these symptoms, contrasting with her pallor (ὥχρία), focusing on the dark and red colours of her cheeks. The alternating pallor and erubescence align closely with Galen's understanding of an imbalance in humors due to fluctuations of the innate heat. The use of ἐφλέγετο (to blaze) underscores this notion, suggesting the influence of the heat of the blood humor. We must also be reminded of the fact that Longus' narrative is set in a *locus amoenus*⁶⁰ in which the environment stimulates and facilitates the beauty and feelings of *eros* that the characters are subjected to, similarly to how the elements function in alignment with Galen's humors. The blazing clearly also doubles as a description of the fiery desire (which Galen identifies as consisting of a heat) that is overtaking Chloe's body. Longus' description of Chloe's emotional experience shows a deliberate focus on the physiological processes taking place inside her body, which heavily shapes the way Chloe experiences her embodied desire.

The term used by Longus, ἐρυθίμα, is also widely used by (scientific) authors, conveying a more general sense of reddening. A noun rather than a verb, like ἐρυθριᾶω, ἐρυθίμα focalises the redness as a physical attribute, where the verbal form might draw more attention to the realisation of the characters. Hippocrates uses ἐρυθίμα for reddened cheeks as a side-effect of various afflictions, such as *empyema* (infection in the chest area⁶¹), but also to describe redness inside the body (where ἐρυθριᾶω is only used for redness upon the skin), such as redness caused by ulcerations in one's throat⁶², although the term is used within the same passage to denote redness on the skin of the neck, too⁶³. A similar notion can be found in Thucydides, who uses the term for redness in the eyes due to inflammation⁶⁴. Aristotle uses the term to describe a change in skin tone due to a change within the humoral balance, in both animals and humans, and in physical as well as psychological settings⁶⁵. There are 22 uses of the term ἐρυθίμα within the Galenic corpus, in 16 of these, erubescence functions as a side effect of certain conditions affecting the body, ranging from fever, to swelling, to more specific diseases causing the body to suffer from a

⁵⁹ cf. Eur. Hipp 181-5, Sappho's fever fr.31.9 for mood swings and restlessness.

⁶⁰ See also Zeitlin 1990, pp. 425-6.

⁶¹ Hippoc. *Prog.* 17.6., see also Hippoc. *Aph.* 7.49.1.

⁶² Hippoc. *Prog.* 23., also for blisters Hippoc. *Acut.* 10.30.

⁶³ Some other instances of ἐρυθίμα describing redness upon the skin; Hippoc. *Epid.* 4.7, 7.1, 7.5, 10.30, *Acut.* 1.13.6. *Coac.* 63.2, 138.2.

⁶⁴ Thuc. 2.49.2 Cf. Xen. *Cyn.* 5.18 where the term is used for the red coat of hares. Ach. Tat. 1.1 to denote beauty of a red rose.

⁶⁵ Arist. *MA* 701b 31, *Pr.* 889b 30, 947b 26.

range of side effects like pain or throbbing, growth of tumours, nausea and sluggishness⁶⁶. In further cases, there is redness as a direct result of inflammation, often of the throat, but also due to physical blows to the body, and chafing, and lastly, for menstrual blood⁶⁷. Galen also does not differentiate between redness on the actual skin, and redness within the body (often indicating inflammation of organs or other internal body parts) and opts to use ἐρύθημα in either situation. However, this is not to say that the term is solely used to describe a general sense of redness, as Euripides uses the term to convey a sense of blushing, as do Plutarch and Lucian⁶⁸, although these uses are less prevalent. Nonetheless, ἐρύθημα is a term highly favoured by scientific authors to describe symptoms and side-effects of other ailments and predominantly conveys a general sense of redness, not necessarily burdened by the emotional constraints of a blush.

At this point in the narrative the erubescence, caused by embodied desire, functions as a side-effect of an illness, not as resulting from an emotional awareness as happens in Achilles Tatius' framework, highlighting the role of *physis* and the lack of *paideia*. Chloe is unaware of love and just knows that she is suffering and concludes that she must be sick, although she does not know why: Νῦν ἐγὼ νοσῶ μὲν, τί δὲ ἡ νόσος ἄγνοῶ⁶⁹. The erubescence is framed not as instinctive modesty but as physiological disturbance due to classic signs of lovesickness, aligning closely with Galenic models of heat and blood. It is not an emotional realisation that causes her face to redden, but rather a pre-emotional physiological process involving heat set in motion by the affection of desire. Chloe does not possess the necessary social knowledge that has someone blush when becoming aware of something "blush-worthy". One might object that this reading risks being reductive, since shame was also conceptualised in antiquity as an instinct rather than purely a social construct⁷⁰. However, at

⁶⁶ Fever: Kühn 10.238, 15.835.

Swelling: Kühn 7.707, 15.778, 17a.923, 18b.268.

Diseases: Kühn 15.778, 17a.301, 15.837, 18b.201, 18b.266, 18b.270, 18b.270, 18a.154, 17a.921, 18b.269.

⁶⁷ Throat: Kühn 8.248, 18b.265.

Physical blows: Kühn 12.662.

Chafing: Kühn 10.481.

Menstrual blood: Kühn 19.81.

⁶⁸ Eur. *Phoen*, 1488. Sim. in Plutarch CSS 154b 8, *De Fort. Rom.* 317d 1, *Animine an corp.* 501b 1 and in the *Anacreontea* 17.20. Lucian *Anacharsis* 20.27. Also found in Erasistratus, *Fr.* 27c 10, where Erasistratus has diagnosed lovesickness by observing redness in Perdiccas' complexion when his beloved entered, paired with other symptoms of illness (difficulty breathing, increased heart rate), although this arguably could be interpreted as a flush of desire rather than a blush. A similar anecdote exists about Hippocrates without explicit mention of redness.

⁶⁹ Long. 1.14.1.

⁷⁰ Cf. Duerr 1988, pp. 13-23.

this stage, the characters show no signs of shame. One needs only to look at the usage of the word, where ἐρυθρία indeed conveys a general sense of reddening, emphasising its physiological origin, whereas the more psychologically grounded ἐρυθρία tends to denote the conscious involvement of the relevant emotion. Bowie notes that «blushes usually mark awareness that one's feelings are of love»⁷¹, but nonetheless labels it a blush, just as Lowe and Gill⁷². It is only McCail who correctly opts for «flushed fiery red»⁷³. Erubescence as a result from such a realisation requires the relevant education on those feelings. The characters are unaware of what exactly is ailing them, assuming they are suffering from a sickness, and have not been taught in the ways and conventions of love, as in the “civilised” environment of the elite. The reader would have recognised *eros* due to the literary conventions, and so Longus invites his readers to view Chloe's struggles with humor; the characters have not yet heard of the name of *eros* whereas the reader has the necessary *technē* to understand the (*polis*-approved) conventions in such situations and does know the name of the allusive «beautiful young boy with wings, bow and arrows»⁷⁴. This adds irony to the characters' ignorance, whilst at the same time appealing to the reader's own knowledge and status, as is befitting of pastoral storytelling.

Parallel to Chloe's experience, is Daphnis' first step towards sexual maturity, as he realises that Chloe is beautiful after she rewards him with a kiss as a price for winning a beauty-contest against his rival Dorkon (with a similar construction using the imperfect tense): βλέπειν μὲν ἤθελε τὴν Χλόην, βλέπων δ' ἐρυθρήματος ἐνεπίμπλατο⁷⁵, «He wanted to look at Chloe, but when he did look at her, he was filled with redness». Daphnis is «filled with redness» (ἐρυθρήματος ἐνεπίμπλατο) when looking at Chloe, using the same general term for redness as a symptom, preceded by heart palpitations and sudden drops in his body temperature (πολλάκις ἐνύχετο καὶ τὴν καρδίαν παλλομένην εἶχε⁷⁶). His ill-understood yearning for Chloe due to her kiss, is what causes these symptoms, but when Daphnis gives in to this embodied desire, he is «filled with redness». Daphnis' erubescence is part of a whole range of physical symptoms, as with Chloe, set in motion by his unknown desire, and provides an even more extensive list of side-effects than the one pertaining to Chloe⁷⁷. Daphnis is inexperi-

⁷¹ Bowie 2019, p. 123.

⁷² Lowe 1908, p. 25, Gill 1989, p. 294.

⁷³ McCail 2002, p. 11.

⁷⁴ Long. 1.17.2.

⁷⁵ Long. 1.17.2.

⁷⁶ Long. 1.17.2.

⁷⁷ Long. 17.1-18.2.

enced in love (οἷα πρῶτον γεγόμενος τῶν ἔρωτος ἔργων καὶ λόγων) and suffers because of his inability to do something about it (Δάφνις ἔπασχε). He comes a little further than Chloe in his analysis of his symptoms, reasoning that it must be Chloe's kiss that has caused him to feel this way (whereas Chloe seeks the cause of Daphnis' beauty first in the bath he takes, and later due to the music he plays) but still concludes he must be suffering from an illness of which he does not know the name (ὦ νόσου καινῆς, ἥς οὐδὲ εἰπεῖν οἶδα τοῦνομα⁷⁸).

The grammatical construction of πίμπλημι (literally: filling something) combined with ἐρύθημα is an interesting one. The majority of uses of the word πίμπλημι throughout antiquity show that something X takes a place in something Y, in which Y tends to be empty, and is being filled by the movement of X towards Y. This seems to give the impression that Longus, when using πίμπλημι and ἐρύθημα, where ἐρύθημα is X and Daphnis is Y (Daphnis is syntactically implied as Y), had the idea that erubescence was an experience during which redness moved towards the object Y. There is a striking similarity in scientific texts where blood flows towards the face, as Galen claims: Τῶν ἐξαίφνης συμπιπτόντων τὰ προγεγραμμένα προσώπου μόνα ἐρυθήματα πλῆθος αἱματικὸν ἐνδείκνυται⁷⁹, «Of these sudden occurrences, only the aforementioned redness of the skin indicates an excess of blood». In this passage, Galen specifies that the redness is caused by blood, and not just blood, but a πλῆθος (from πλήθω, intransitive of πίμπλημι) αἱματικὸν, an *excess* of blood. A *plethos*, also known as *plethora*, was a specific condition which physicians before Galen had labelled as an abundance in humors⁸⁰. Galen argues for an understanding of *plethos* as an excessive amount of blood only (within the vessels in the body). The other humors by themselves could exist in abundance too, but in those cases, Galen would label them as *dyskrasia*, where the humors would not be in balance⁸¹. However, Galen's most used understanding of blood, as highlighted by Siegel⁸², was as a mixture of several humors and so, *plethos* then, would either be an increased amount of humors resulting in an abundance of blood, or an abundance of blood by itself. Galen explicitly mentions heat as a side-effect of redness (ἐρύθημα) due to *plethos*, it is however important to note that there can be different causes:

⁷⁸ Note the literary motif of *eros* as a disease (as in Sappho, who is later also referenced in the apple scene and by the fact that the pair lives on Lesbos), without either Daphnis or Chloe having been educated in it, once again appealing to the reader's knowledge. Long. 1.18.

⁷⁹ Kühn 15.778.

⁸⁰ Arist. GA 766B 22, Erasistratus Fr. 111.4, 141.3, 153.4, Hippoc. Epid. 6.6.1.3, Flat. 8.12.

⁸¹ Siegel 1968, p. 214. Kühn 9.244-5.

⁸² Siegel 1968, p. 323.

Τὸ δὲ ἔρευθος, οὗ καὶ αὐτοῦ μνημονεύουσιν, οὐ πλήθους μὲν ἀπλῶς, ἀλλ' αἱμα-
τικοῦ πλήθους γνῶρισμα. δεήσεται δὲ καὶ αὐτὸ τῶν διορισμῶν, ὧν περ ὁ ὄγκος· εἰ
γὰρ διὰ τι τῶν ἔξωθεν, οἷον ἥλιον, ἢ λουτρὸν, ἢ γυμνάσιον, ἢ πορείαν, ἢ ἀπλῶς
εἰπεῖν θερμασίαν, οὕτω δὲ καὶ θυμὸν, αἰδῶ τε καὶ ὅσα τοιαῦτα, καὶ ὅξεῖς δὲ πυ-
ρετοὶ τοῦτου τοῦ γένους εἰσὶν⁸³.

But redness, that same redness which they also mention, is not simply a sign of *plethos*, but a sign of a *plethos* of blood; But there is a distinction that will also need to be made, just like for swelling. For, if [redness occurs] due to external factors, like the sun, or a bath, exercise, running, or simply speaking heat, then so too desire, shame and other such things, high fevers too, are also of that same type. Thus, whenever the state of the whole body may be in balance, and none of the aforementioned things are present, then redness will be a sign of a *plethos* of blood throughout whole body.

In this passage from *De Plenitudine* (on the condition of *plethos*), Galen sets out several causes of erubescence that are *not* caused by his specific understanding of *plethos*. Interestingly, the element that conjoins the two types of non-*plethos* related causes, is heat (ἢ ἀπλῶς εἰπεῖν θερμασίαν), both internal (the body's innate heat) and external forms of it. So, external factors that would cause the body's temperature to rise, like physical exertion, the sun's heat, and hot water, would result in the same side-effect of erubescence on the body as internal factors like desire, shame, inflammation, and fever. The nature of the cause does not seem to matter, only the rising temperature does. If none of these causes are in play, it is simply *plethos* that will cause one's complexion to redden.

As it has been established that redness is caused by blood rushing towards the affected area, it is not strange that Longus opts for the use of ἐρύθημα, the word that Galen, too, uses for the physical condition of redness, as opposed to the more emotionally loaded ἐρυθρίαω. Longus frames erubescence as an instinctive physical reponse, reinforcing the dominance of *physis*, contrasting with Achilles Tatius' blushes that reveal emotional self-awareness. The fact that Daphnis' condition is still unexplored and unknown to him, adds to the notion that he is becoming overwhelmed (πίμπλημι) not just by the blood rushing to the cheeks, but also by the yet unrecognised affection of desire that is confusing him. The language has a sense of naivety, parallel to the characters' understanding of their ailment.

What Longus is making his readers focus on is the role of *physis*, nature, or *eros* even, that causes both Daphnis and Chloe to fall in love without un-

⁸³ Galen *De plen.* Kühn 7.571.2.

derstanding it. The socio-cultural conventions adhering to “blushing” do not impact these characters, as they have never been educated in it. This is a bodily response as a side-effect of *eros*, caused by an imbalance within the body, resulting in them feeling physically sick, inverting the customary role of blushing in literature and society. It enhances the omnipresent theme of *physis*, which is why I propose an alternative translation than those given by Morgan, Henderson, and Lateiner. They all opt for the translation and therefore interpretation of «blushing», with Henderson giving «to blush red» and «to blush all over» respectively, Morgan «to blush burning red» and «to blush bright red», and Lateiner, who chooses to focus on the action centred around the blushes (Chloe seeing Daphnis strip and bathe, and Daphnis thinking of Chloe’s kiss) also opting to label it a blush.⁸⁴ Even though Lateiner states that the blushes arise from the pair’s inexperience in «social mores and gender codes», his translation of “blush” is not the most fitting. Longus uses these cases to demonstrate the pair’s own psychological inexperience of *eros*, resulting in a bodily response that they mistake for that belonging to an illness. McCail’s translation as «he flushed crimson»⁸⁵ is apt, with Bowie, Lowe, and Gill once again opting for *blush*, which, in my opinion, truly is not the correct term to use here⁸⁶. The more appropriate translation is thus the more physiologically orientated “flush”, resulting in: «One moment her face would pale, and the next it would flush red» and «He wanted to look at Chloe, but when he did look at her, he flushed deeply»⁸⁷. This translation conveys the bodily response as the focal point, with the underlying understanding that it is their embodied desire that causes this response, although they themselves are not fully aware of it. The erubescence is not a response coming from a realisation, but from instinctual desire, causing the innate heat to rise. The erubescence thus functions to make the desire visible, framing it as a bodily response rather than the underlying and ill-understood affect.

Once Daphnis and Chloe have slowly begun to be educated in the ways of society, we find Daphnis, bearing gifts, standing in front of his master Dionysophanes (later revealed to be Daphnis’ birth-father): Αὐτὸς μὲν οὖν εἶπεν οὐδέν, ἀλλὰ ἐρυθθήματος πλησθεὶς ἔνευσε κάτω, προτείνας τὰ δῶρα, «He did not say anything, but filled with redness and looked down, as he presented the gifts»⁸⁸. The reddening of Daphnis’ skin is again described using *πίμπλημι*,

⁸⁴ Henderson 2009, pp. 31,37. Morgan 2004, pp. 33,37, Lateiner 1998, p. 177.

⁸⁵ McCail 2002, p. 13.

⁸⁶ Bowie 2019, p. 134, Lowe 1908, p. 31, Gill 1989, p. 296.

⁸⁷ Long. 1.13.6, 1.17.2.

⁸⁸ Long. 4.14.2.

however Lateiner's translation of «blushing» could be used here⁸⁹, as he argues that Daphnis' blush demonstrates his confusion over the urban social etiquette. Daphnis has now somewhat learned about social behaviour from the city, however the reason he turns red is because he still is at a loss as to what to do, becoming aware that he does not know how to adhere to their rules. The description of Daphnis «filled with redness» (ἐρυθήματος πλησθεὶς) is accompanied by his silence and downward glance. Shame, too, can be instinctual, and so these gestures are strongly suggestive of αἰδώς, an instinctive modesty or shame that does not require full cultural training to be legible, but highlight Daphnis' tenuous evolution into the ways of the *polis*. Bowie notes that the blush here marks Daphnis' «extreme awareness of inferiority»⁹⁰. Shame itself could be regarded as a natural instinct rather than purely a social construct, and so, Daphnis' confusion about urban etiquette blends with this more instinctive response, so that his erubescence oscillates between physiological reaction and the emergence of modesty. The use of ἐρύθημα once again stresses the redness as a physical attribute, but the narrative context allows the reader to perceive an element of shame as well. Longus now permits shame to surface as Daphnis is gradually drawn into the social sphere of the *polis*. However, the use of the participle draws our attention to the fact that the erubescence is essentially functioning as a physical attribute. Immediately preceding this passage, we find a comparison between Daphnis and Apollo. Morgan notes that this passage alludes to Homer's *Iliad* 21.444, where Apollo's servitude to Laomedon is described⁹¹. Apollo is described as a handsome young cowherd, comparing Daphnis to Apollo, which, according to Morgan, foreshadows the revelation of Daphnis' good station, almost like an apotheosis. Besides the sign of inner confusion that Daphnis' red skin portrays, the erubescence is also a sign of his godlike beauty, which has been foreshadowing his good station throughout the entire novel. The erubescence does not solely convey inner confusion, but also functions as a physical characteristic, caused by an excess of blood in his cheeks, hence the use of ἐρύθημα once again, to denote a more general sense of redness⁹².

⁸⁹ As can translation by Bowie 2019, p. 277, McCail 2002, p. 72, Lowe 1908, p. 163 and Gill 1989, p. 338.

⁹⁰ Bowie 20019, p. 277.

⁹¹ Morgan 2004, pp. 232-3.

⁹² A similar notion is found in 4.17.5 using μεστόν (full/sated): Καὶ τὸ μὲν πρόσωπον ἐρυθήματος μεστόν, τὸ δὲ στόμα λευκῶν ὀδόντων ὥσπερ ἐλέφαντος, «And his [Daphnis] face is filled with redness, and his mouth is full with white teeth, like ivory». Here, “ruddy” is an apt translation with the erubescence functioning to demonstrate Daphnis' beauty in the perspective of the pederast Gnathon. Morgan 2004, p. 125 and Henderson 2009, p. 171 use “to flush” in this instance.

Unlike Achilles Tatius' focus on psychological realism, Longus centres the erubescence in his novel around *physis* using terminology to denote general redness, focusing on physiology rather than recognised emotions, and so provides a different narrative for erubescence exposing the characters' lack of knowledge of social conventions. Longus uses erubescence as a marker of physiological responses to embodied desire, aligned with Galen's understanding of the physiology of erubescence, unaffected by social and cultural norms and values, and demonstrate how the characters' bodies are affected by their ill-understood desire, whereas Achilles Tatius' blushes function to enhance the presence of these expectations in their morally promiscuous settings. Through his play with morals, Achilles adds a sense of irony and realism, with the characters' awareness of their *faux pas* being the focal point, while Longus inverts this notion; by removing this sense of awareness of social rules, enhancing the role of *physis* in the pastoral setting, Longus also invokes a sense of irony for the reader by amplifying the characters' naivety whilst also highlighting the readers' literary knowledge as was befitting for an audience in the era of the Second Sophistic.

3. Conclusion

By approaching erubescence from a physiological perspective, erubescence must be understood to be caused by innate heat, driving blood to the surface of the skin. Aristotle links erubescence predominantly to shame, revealing the blusher's emotional awareness of having committed a *faux pas* resulting in the emotion of shame, aligned with the Hippocratic humoral framework in which emotions are tied to the body's humors. Galen's usage of the terminology of erubescence provides a clear distinction between the emotionally driven blush (ἐρυθρία), and the more physically orientated interpretation of flushing (ἐρύθημα).

When applied to the novels, a more refined understanding of the characters' psychological states arises; blushes in Achilles Tatius function to reveal the character's awareness of their shame over having broken a social expectation, as a symptom of an embodied emotion. These moments function to contribute to the psychological realism of the characters, betraying their understanding of social convention and how they have broken it, as well as the irony stemming from the fact that Leucippe, and Clitophon even more so, despite being aware of social conventions of chastity and morality, are to an extent willing to commit a *faux pas* by breaking these conventions. Achilles Tatius exploits the blush's cultural value to add to the interplay between du-

bious morality and realism, based on society's conventions for the elite. This results in an ironic tone throughout the novel, where the characters' psychology has been put under a magnifying glass, and their inappropriate behaviour becomes a focal point.

Erubescence in Longus is primarily used to emphasise the embodied psychological processes of desire, unburdened by social or emotional awareness and understanding. Longus cleverly uses terminology that reframes erubescence as a pre-emotive physiological process inverting the classic blush, by removing the framework of social rules, through which his characters now respond in accordance with their *physis*. This results in comedic moments for the reader, as the characters' naivety is highlighted. Longus, too, plays with his characters' psychology but chooses to focus on the physiology of their psychological state, to create tension between *physis* and *techne*, in which the slowly growing involvement of the *polis* will ultimately take over, leading to the pair's union. By distinguishing between socially conditioned blushes and instinctive physiological flushing, this approach clarifies how Greek novels represent embodied emotional experiences through bodily symptoms and contributes to debates on the somatic dimensions of emotion in antiquity, demonstrating how embodiment and affect theory illuminate the intersection of body and emotion in narrative.

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