CAMBRIDGE CLASSICAL STUDIES

Colour and Meaning in Ancient Rome

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What colour is flauus?

Hippolyte, sic est: Thesei uultus amo illos priores quos tulit quondam puer, cum prima puras barba signaret genas

. .

quis tum ille fulsit! presserant uittae comam et ora flauus tenera tinguebat pudor.

Yes, Hippolytus: Theseus' face I love, those looks he had long ago as a boy, when his first beard signalled his pure cheeks ... Then how he shone! Headbands encircled his hair, and yellow shame (*flauus pudor*) tinged his tender face.

Seneca, *Phaedra* 646–9, 651–2

candida uestis erat, praecincti flore capilli, flaua uerecundus tinxerat ora rubor.

Shining white was your clothing, your locks were bound round with flowers, a modest blush (*rubor*) had tinged your yellow cheeks (*flaua ora*).

Ovid, Heroides 4.71-21

Sixty years ago, Eric Laughton drew attention to a problem that occasionally arose in the translation of the Latin colour term *flauus*.² This is a term that dictionaries conventionally describe as a loose equivalent of our category 'yellow'.³ Laughton however argued that 'yellow' was an altogether unsatisfactory translation for *flauus pudor* and *flaua ora* in the contexts cited above, but instead they referred exclusively and unambiguously to the 'blond'

¹ All translations are my own. As this introduction will demonstrate, the translation of Latin colour terms is far from straightforward; for this reason, all translations of colour offered within the texts I cite should be considered provisional rather than definitive.

² Laughton (1948) and (1950).

³ So the Oxford Latin Dictionary, s.v. flauus, where 'yellow' is its primary meaning. André (1949) 128–9 considers flauus first in his study of 'Le Jaune'.

hair that marked out the cheeks of adolescent boys. 'Blushing modesty' and the like, which had been proposed for *flauus pudor* by various translators, as well as the Thesaurus and Lewis and Short, was incorrect.⁴ The *Thesaurus* had interpreted Ovid's *flaua* ora in the same way, by taking flaua proleptically after tinxerat (so the blush had 'tinged his face yellow'). Laughton's solution was to claim that the *Thesaurus* was wrong to connect *flauus* with the skin, and that the category primarily denoted (or suggested) blond hair.⁵ This object-specific reading was, he argued, sustained by such examples as Virgil's Clytius whose cheeks are sprouting their first blond hairs ('flauentem prima lanugine malas / ... Clytium', Aeneid 10.324-5) and soldiers in Silius Italicus whose cheeks rub against helmets before they are even marked by the first blond down ('galeaque teruntur / nondum signatae flaua lanugine malae', Punica 2.318–19), where the connection with the blond lanugo is explicitly formulated. So deep-seated was this connection that the Thesaurus' other examples of alleged 'vellow skin' (flaua cutis) could not stand: thus, Valerius Maximus' description of uir flaui coloris (1.7.ext.6), Seneca's angry flaui rubentesque (De Ira 2.19.5) and his ethnic group flaui (Epistle 58.12) immediately evoke blond hair. A further example (Ovid, Amores 2.4.39) compares a 'yellow girl' (*flaua puella*) to a 'pale girl' (*candida puella*) and girls who have a 'swarthy colour' (fuscus color): here too flauus must denote the 'blond'. This could be corroborated by various examples of Greek 'yellow' (xanthos) from the Greek Anthology.8 Although Laughton's correction of this linguistic

⁴ Lewis and Short (1879) s.v. flauus; TLL s.v. flauus 889 F 'de cutis humanae colore subrutilo'. For translators, cf. Miller (1917) on Hippolytus (before the play was renamed Phaedra) 652 'blush of modesty'. Racine (1677), perhaps recognising the difficulty, had ignored it altogether (Phèdre 642 'Cette noble pudeur coloroit son visage'); similarly Harris (1904) 195 'the first bloom of youth'.

⁵ So, for example, 'Ganymede flauo' (Hor. Carm. 4.4.4); 'flauis ... Britannis' (Luc. 3.78). Laughton (1950) 88 suggests a similar model for xanthos, although he accepts the dubious LSJ line that xanthos could in later Greek denote complexion.

⁶ So too Claudianus Mamertus, *De Statu Animae* 1.20. At Festus p. 272 M/339.3L, however, *flauus* appears to be used to describe eyes.

⁷ The category, Laughton suggests, was perhaps institutionalised through the use of blond wigs in Roman comedy to mark out barbarian slaves; so Plaut. *Capt.* 648; *Mil.* 792; Ter. *Haut.* 1061. *Candidus* and *fuscus* typically referred to skin colour: further on Ov. *Am.* 2.4.39, see below pp. 138–40.

⁸ Laughton (1950) deals with two epigrams of Strato at 12.5.1–2 and 12.244.

mistake has been – with some exceptions – accepted and reflected in later translations, commentaries and dictionaries,⁹ the important ramifications that his observations hold for the study of colour in Greco-Roman culture still remain, after sixty years, to be fully exploited.

In his 1950 article, Laughton posited that *flauus* should be understood as 'blond' because it (along with the Greek category *xanthos*) was a classic epithet of heroines and goddesses in Greek and Roman verse, as well as freshly bearded adolescent males. This argument that it was the literary context that made *flauus* 'blond' was a diversion from his original, bolder, line that one should position this category linguistically and conceptually as a primary designator of blond hair. That original proposal had big implications: 'blond' should come first in our dictionaries – with 'yellow' as a secondary category whenever *flauus* was used to refer to something that was not hair, such as gold, corn or sand. Laughton had put his finger on an important cultural pattern. With this key semiotic rearrangement (rather than a mere literary conjecture), the Roman reader would have no doubt to what *flauus pudor*, *flaua ora* and *flaua puella* referred.

However, one would be wrong to claim that the simple rule flauus = blond would resolve all the difficulties surrounding this category. Although it seems certain that the *Thesaurus* incorrectly proposed 'skin colour' as one of the semiotic registers for flauus, there is an extensive and diverse list of physical contexts which employ flauus, where 'blond' does not appear to work. The *Thesaurus* finds two main areas for application of flauus: first,

⁹ So Fitch's translation (2002, Loeb) of Sen. *Phaedra* 652 renders *flauus pudor* as 'golden modesty'; Boyle (1987) 83 'golden shame' (although he adds 'suffusing his gentle cheeks', suggesting he has not seen Laughton); *Oxford Latin Dictionary*, s.v. *flauus* cites this passage as an example of *flauus* = blond. André's work on colour (1949 – perhaps just missing Laughton's article) suggested that *flauus* at Ov. *Her.* 4.72 and Ov. *Am.* 2.4.39 refers (as part of its 'nuances brunes') to 'la couleur d'un teint hâlé par le soleil' (he misses the Seneca passage altogether). Giardina's edition (1966) 279 prefers an alternative manuscript edition replacing *flauus* with *flammis*, although he is aware of Laughton's suggestions. This change is unhelpful and should be dismised. The Bristol Classical Press edition (Lawall, Kunkel and Lawall, 1982) copies this alteration. See Bremmer (1973) 180, suggesting *flauus rubor*. Coffey and Mayer (1990) revert to *flauus pudor* and accept Laughton's suggestion (albeit warning that 'behind the unusual phrase lies a complicated process of literary cross-reference').

where it represents the Greek *glaukos* in referring to the sparkle of moving water (*de nitore scintillanti aquae commotae*) or to the underside of olive leaves (*de foliis oliuae a colore partis inferioris*); second, where it imitates Greek *xanthos* or *purros*. This second usage is divided into six subject categories: (1) ash/sand/mud/dust; (2) honey/wax; (3) hair; (4) ripe corn; (5) gold; (6) skin; along with a seventh category for one-offs such as wedding bonds (*uincula*), bile and wine.

The two semantic categories in which *flauus* appears to pick up glaukos are poorly represented, and complicated. The first category, in which flauus describes disturbed water, is surmised from two difficult fragments of early Latin verse, one depicting ships sweeping over the 'yellow marble' (flauum marmor) of the sea, and the other describing a ritual washing in 'yellow water' (flaua lympha). II Both fragments are preserved only because they presented a visual puzzle for Aulus Gellius' imaginative discussion of colour terms at *Noctes Atticae* 2.26 (see below pp. 229–33). The second area where flauus = glaukos – the underside of olive trees – is likewise an individual poetic peculiarity, also debated in the Gellius passage: Virgil Aeneid 5.309 describes Aeneas' promise of an olive wreath to the contest-winners - 'their heads will be crowned by the yellow olive' (flauaque caput nectentur oliua). Several interpretations have been proposed, including 'pale green', allusions to yellow pollen and the reflection of yellow sunlight; a more likely explanation is that Virgil was suggesting a metaphor where olive leaves could be made to resemble hair. 12 The *Thesaurus*' glaukos category, then, is too sparse and too problematic (even for ancient interpreters) to stand as an acceptable register of flauus.

Enn. Ann. 384 and Pacuvius, Tragedies 266. Warmington's Loeb translation (1961) of both is unimaginative ('a sea of yellow marble', 'yellow water'). Harrison (2003) 80 discusses these uses and concludes that they must refer to foaming water.

Fairclough (1932); Williams (1960) 104–5; Henry (1889) 89 had suggested the olive's yellow pollen; Mackail (1930) 181, 'the pale golden-grey of the leavage'. Cf. Edgeworth (1992) 129, who suggests that 'olive leaves are green when first taken from the tree, but quickly turn yellow'. Virgil's epithet picks up xanthēs elaias (Aesch. Pers. 617), but this is the only precedent and refers to the oil rather than the foliage. Broadhead (1960) 161 interprets this reference in the Persians as an example of the imprecision of ancient colour. André (1949) 130–2 suggests instead an imaginative play of sunlight on the leaves. This colour problem has been discussed most recently by Harrison (2003), who suggests replacing flauaque with glaucaque.

The manifold instances where flauus represents the Greek categories *xanthos/purros*, on the other hand, cannot be so easily dismissed. Flaua harena ('yellow sand') was a fairly regular association in Latin verse, ¹³ and Tiber (along with other rivers) earned the epithet *flauus* – although divine personification, with the characteristic blond hair of divinities, may be implied. ¹⁴ Honey is often described as *flauus*. ¹⁵ So too wax (but only in Ovid's Metamorphoses). 16 Corn and cornfields several times take this category - although one detects a poetic allusion to blond hair. 17 Flauum aurum ('yellow gold') was a regular chromatic label: the beautified Aeneas resembles Parian marble set with flauum aurum and Martial could describe gold coins as flaua moneta, and gold dishes as flaua chrysendeta. Is Elsewhere, in a poem packed with material metaphor, he claims true electrum shines less than the 'yellow metal': minus flauo metallo, 8.50.5 – just as fine silver surpasses 'snow-white ivory', niueum ebur. Propertius could describe the unique stone *chrysolithos* as possessing a 'yellow light' (flauum lumen, 2.16.44), and Statius could imaginatively describe Numidian marble quarries as flaua metalla (Siluae 1.5.36).

The *Thesaurus*' one-offs, then, point to the possibility of a more flexible use of *flauus* = 'yellow'. Tibullus describes as *flaua uincula* the durable bonds of marriage (2.2.18); one commentator suggests this might allude to chains of gold, although he ends (as most commentators do) by connecting it to a far more general register

¹³ So Ov. Met. 14.448 (in mare cum flaua prorumpit Thybris harena); 15.722; Valerius Flaccus, Argonautica 1.613 (multa flauus caput Eurus harena – although note the blond hair imagery here); Stat. Theb. 4.737 (flauam Libyem). Cf. also Verg. G. 3.350 (turbidus et torquens flauentis Hister harenas); Ov. Met. 9.36. The manuscript of the only prose example in the Thesaurus (Cato Orig. 114 mulieres nostrae capillum flauo cinere unguitabant ut rutilus esset) is spurious.

¹⁴ For example, Catull. 67.33; Verg. Aen. 7.31; 9.813; Sen. Hercules Oetaeus 591. André (1949) 129 connects flauum marmor and lympha flaua in Ennius and Pacuvius to this usage; Holford-Strevens (2003) 220 n. 120, following André, understands flauus in these contexts (surely wrongly) as 'brightly gleaming'. For a comprehensive catalogue and discussion of flauus describing the blond hair of deities and heroes, see the long note in Pease (1935) 471–3. See also Dana (1919) 22.

¹⁵ Lucr. 1.938 (mellis dulci flauoque liquore); Ov. Met. 1.112; Stat. Theb. 10.578; Columella, Rust. 10.417.

Ov. Met. 3.487; 8.198; 8.670.

¹⁷ So Tibullus 2.1.48 deponit flauas annua terra comas. See also Verg. G. 1.73; 1.316; Valerius Flaccus, Argonautica 1.70.

Verg. Aen. 1.592; Mart. 14.12.1; cf. 12.65.6 where he uses the substantive flaui de moneta Caesaris. For dishes, see 2.43.11. Cf. Apul. Met. 6.13 (flauentis auri mollitie). For André (1949) 130 these are examples of 'nuances rouges'.

of 'yellow' in the Roman wedding ceremony. 19 Ovid mentions flaua pyrethra (chamomile, Ars Amatoria 2.418) and flaua liba (wheatcakes, Fasti 4.476). Columella (4.30.4) talks of the Greek willow as possessing a *flauus color* (other types are *purpureus* and rutilus). Statius connects the category to clothes (flaui amictus, Silvae 2.3.16) and grapes (Thebaid 5.269 – but here as a wreath). 20 These examples demonstrate that flauus could be (with a certain amount of imaginative poetic flair) transferred to objects possessing broadly the same wavelength, where 'yellow' constitutes a more or less satisfactory translation. The same patterns occur with the use of the verbs flaueo and flauesco (particularly the participles flauens and flauescens which denote especially the movement of hair/corn/water). However, the Thesaurus' category de crinibus (referring to hair) accounts for more than half the total references to *flauus* and – particularly when the skin category de cutis humanae colore has been correctly integrated into it contains the large majority of all the direct prosaic uses of *flauus*. ²² This is evidence enough, it seems, both to reinstate 'blond' as the primary meaning of *flauus*, and to recognise that tentative efforts were in place in the educated metropolitan elite literature of the early Empire to extend this *color* beyond the blond. The issue that requires examination by both the philologist and the intellectual historian is the nature of this interface between the object and how it looks, and the question of when, how and why an object's natural color could be transferred to other objects outside the term's semantic range.

Murgatroyd (1994) 77–8. Cf. Maltby (2002) 392 ('the chains are *flaua*, bright yellow or saffron, because this was the colour connected with the wedding ceremony'); Smith (1913) 413–14. The *color nuptialis* specified by Plin. HN 21.46 is in fact *luteum*, and Pliny implies this is reserved for the *flammeum*. It could be that *flaua uincula* is a corruption, and that one should substitute *laeta* (cf. Hor. *Carm*. 1.33.14).

Cf. Columella, Rust. 3.21.3 on grape types 'uel generis albi uel flauentis uel rutili uel purpureo nitore micantis'.
 TLL s.v. flaueo and flauesco. For the various nuances of these verb forms, see André

²¹ TLL s.v. flaueo and flauesco. For the various nuances of these verb forms, see André (1949) 241–6. At 128 he claims that the flauus: flauere: flauescere frequency ratio is 75:13:10.

^{75:13:10.}André (1949) 128–9 recognises this ('L'emploi le plus caractéristique de *flauus* concerne les cheveux, représentant 66% des exemples du terme en prose, 45% des exemples poétiques'). André also points out that *flauus* can be used for the hair of animals, although he slots this under 'nuances brunes'.

Flauus is by no means an isolated case. The adjectives uiridis and *uirens* ('green') most commonly described the healthy crops and shrubs of Roman agriculture and horticulture, or the rich verdure of the Italian countryside.²³ Vitruvius, for example, discussing urban architectural design, advocates 'green spaces' (uiridia) because of the healthy sensation they bestow upon the viewer (5.9.5).²⁴ Viridis, however, is one of those Latin colour terms which stands in our dictionaries somewhat awkwardly on the line between representing our colour 'green' and the quality 'vigorous'. Most dictionaries aim to separate the two loosely: it seems incompatible with our idea of colour, for example, that Gellius could describe a strong and vigorous sound, such as the letter 'H', as uiridis.²⁵ Columella talks about the green taste of olives, and others describe the oil of the freshest varieties as *uiride*. ²⁶ Pliny advises that seeds be sown under a 'green sky' (uiride caelum) – not literally 'green' of course, but clear and fresh and conducive to germination.²⁷ Similarly, it hardly seems plausible that Virgil's Euryalus, cut down in his 'uiridis' youth was in any real sense 'green', nor the cheeks of children in Statius, nor the flame which Horace pictures

Along with the substantives uiridia, uirentia, uirecta, uiriditas and the verbs uireo, uiresco and uirido; see André (1949) 184–94. For example, Cic. Leg. 1.5 uiridis ripa; Verg. G. 2.219 uiride gramen; 3.144; Hor. Carm. 1.25.17 hedera uirens; Columella, Rust. 1.5 uirentia; 12.57 uiridia; Apul. Met. 4.2 uirecta; Cic. Sen. 45 herbescens uiriditas; Verg. Aen. 6.206 fronde uirere noua; Sen. Thyestes 54 uirescunt. In Rome there was even a district called uicus uiridiarius (CIL 6.2225). The associations of ancient 'green' with health and vitality have been very thoroughly explored by Trinquier (2002), with critique by Bradley (2006b).

Vitr. De arch. 5.9.5 'the subtle and rarefied air (subtilis et extenuatus aer) from the uiridia, flowing in on account of the movement of the body, clears the vision (perlimat speciem) and so carrying away the thick moisture (umorem crassum) from the eyes, leaves the gaze defined and the vision sharp (aciem tenuem et acutam speciem relinquit).'

²⁵ Gell. NA 2.3.1 (H litteram ... inserebant ... uocibus uerborum firmandis ... ut sonus earum esset uiridior uegetior; cf. 13.21.13 (uiridior sonus).

Columella, Rust. 12.49.8 (uiridem saporem oliuarum); Suet. Iul. 53; cf. Quint. Inst. 12.6.3 (fructum studiorum uiridem); Cic. Verr. 1.45 on fresh/green firewood (ignem ex lignis uiridibus); Liv. 29.1.14; Ov. Ib. 235. In Columella, 42 out of 51 occurrences of uiridis constitute (in agricultural terms) the opposite of aridus – see André (1949) 187. Ov. Hal. 90 on shallows verdant with submarine plants (num uada subnatis imo uiridentur ab herbis); cf. Calp. Ecl. 2.57–8 describing a fertile river bank, uirides qua gemmeus undas / fons agit. The Oxford Latin Dictionary notes that uses of uiridis to denote the sea and streams 'may refer, in part at least, to the colour of surrounding vegetation'.

²⁷ Plin. HN 17.74; so also Calp. Ecl. 5.21 tunc florent siluae uiridisque renascitur annus.

spouting out of Mount Etna. ²⁸ The blood of Seneca's Tiresias could be (figuratively speaking) *uiridis*, as could the 'ripe' old age of Virgil's Charon. ²⁹ The list goes on, a series of colour puzzles that have caught the interest of generations of scholars. These examples, however, are not just anomalies: *uiridis* was 'verdant'. Just as *flauus* was the property of blond hair, *uiridis* was the property of plants and leaves, and much more than just what colour they were. ³⁰ When Virgil described the growth of trees and grass (*arborei fetus alibi, atque iniussa uirescunt / gramina*), there was no sense in separating the 'green' and the 'grow'. ³¹ To describe, think of, experience *uiridis* for a Roman was to engage in a conceptual world of cultivation and growing. ³²

Like *flauus*, however, *uiridis* could break beyond the semantic range of 'verdant' (and so, in a sense, become a 'colour'). Outside verdure, *uiridis* was most commonly used to denote 'green' rocks, earths and minerals, particularly emeralds – presumably because

Verg. Aen. 5.295; Stat. Silv. 3.3.125 (uirides genae); Hor. Epod. 17.33 (uirens flamma); cf. Manilius 2.941 on the rising sun (uiridis ... Phoebus). Cf. Stat. Theb. 4.98 on a snake emerging fresh in its new skin from hibernation, laetisque minax interuiret herbis.

Sen. Oedipus 297; cf. Manilius 5.212 on the uiridis sanguis of sap. Verg. Aen. 6.304 iam senior [Charon] sed cruda deo uiridisque senectus; Sil. Pun. 5. 569 on the veteran Labicus as uiridissimus irae; Valerius Flaccus, Argonautica 1.77; Sen. Ep. 66.1 senem ... uiridem animo ac uigentem; Liv. 6.22.7 on the aged dictator Camillus in the Volscian wars: sed uegetum ingenium in uiuido pectore uigebat uirebatque integris sensibus; Columella, Rust. 1.pref.12 on the importance to farmhands of maintaining uiridis aetas cum robore corporis. Cf. Cic. Tusc. 3.75 on a prevalent evil possessed of uiriditas; Rep. 6.8 where Scipio advocates as rewards suited to uirtus not statues and triumphs, but uiridiora praemiorum genera.

³⁰ Viridis and its cognates may have belonged to a broad Latin semantic field that included such quintessential terms as uir, uirtus and uis – although the etymological relationship between these words is dubious; see Pokorny (1959) 1123–4 and 1133. Cf. also Od. 16.47, where a visitor in a poor man's cottage sleeps on a bed made up of χλωραὶ ρώπαι, boughs that possess a vital freshness and softness; see Clarke (2004) 135. Struycken (2003) 285–6 argues convincingly that uses of χλωρός by Democritus and other philosophers are emphatically phenomenological, evoking 'sprouting plants' and 'sap'.

³¹ Verg. G. 1.55; cf. Ovid's description of Elysium at Am. 2.6.50 (udaque perpetuo gramine terra uiret). Cf. Ecl. 8.59; Columella, Rust. 11.2.67; Varro, Ling. 6.9 (etymologising 'uer'); Apul. Flor. 10.4 (uirores pratorum); Plin. HN 16.88 on the underside of deciduous leaves, pars inferior a terra herbido uiret colore; André (1949) 186 does attempt a figurative – chromatic separation. Clarke (2004) 134–6 makes a similar point about the Greek category χλωρός, which (he argues) evokes 'kinetic' qualities such as 'fecund', 'oozing', 'vitality', and (in some cases) loses 'the chromatic aspect of the prototypical content'.

³² Thus Cic. Verr. 3.47 on the colles nitidissimi uiridissmique of pre-Verrine Sicily; Lucr. 5.783–5 on the origins of the world herbaciously rooted in a uiridis nitor and uiridans color.

they had a similar wavelength.³³ A Roman could describe the parrot – something of a rare visual treat – as *uiridis*.³⁴ This category could also be used, with a certain degree of cultural sneering, to evoke the faces of woad-painted Britons,³⁵ madmen,³⁶ and those who were looking unwell or disorientated.³⁷ *Viridis*, then, could (like *flauus*) be extended beyond the object which it most properly described.

One final example: the category *caeruleus*, which evoked the appearance of deep sea or copious waters. One of Rome's biggest aqueducts, a great Claudian technical feat which brought thousands of gallons of fresh water into the capital from across Italy, brought water to the *fons Caerulea*, a deep reservoir so called (Frontinus tells us) from its *similitudo* – to the sea.³⁸ The *Thesaurus*, however, like other dictionaries, considers *caeruleus* to be derived from *caelum*, and sets 'sky-blue' as its first and primary meaning. Two early Latin verse fragments indeed appear to set this category in the

35 Ov. Am. 2.16.39 (uirides Britanni). On Britons and woad, see Carr (2005) and below pp. 175–6. Caeruleus could also be used to describe woad.

³⁶ Plaut. Men. 828, uiden tu illi oculos uirere? ut uiridis exoritur colos /ex temporibus atque fronte, ut oculi scintillant, /uide. Presumably, a green mask is being worn. The rendering of 'pale' and 'sickly' in the Gratwick commentary does not account for these nuances.

Frontin. Aq. 13–14 (a similitudine appellatus est). Frontinus does not feel the need to spell out the object of this similitudo – commentators have noted 'The Blue' (Bennett) and 'la source bleu' (Grimal), although this is clearly unsatisfactory. Further on the fons Caerulea, see CIL 6.1257; Suet. Claud. 20.1. For a lexicographical synopsis of caeruleus, see André (1949) 162–75. Cf. Christol (2002) on 'Les Couleurs de la mer'.

³³ Lucr. 4.1126 uiridi cum luce zmaragdi; Vitr. De arch. 7.7.4 creta uiridis; Prop. 3.3.27 uirides lapilli; Plin. HN 37.115; Sid. Apoll. Carmina 5.38–9, describing green marmor Lacedaemonium on the shield of Roma, is naturally drawn to the lively appearance of grass 'sprouting' out brightly to meet the gaze: post caute Laconum /marmoris herbosi radians interuiret ordo. For further discussion of emeralds in Pliny, see below pp. 102–3. For a comprehensive study of the therapeutic properties of green stones (especially emeralds) and animals (e.g. lizards and scarabs), situated in Egyptian ritual and iconography, see Trinquier (2002) 98–114.

³⁴ [Ov.] Epistula Sapphus 38.

³⁷ Cf. Plaut. Curc. 22–3. on the sick pimp Cappadox: quis hic est homo / cum collatiuo uentre atque oculis herbeis?; Ciris 225, where the lovesick Scylla is afflicted by uiridis pallor; cf. Celsus, Med. 2.4.7 on green vomit. Faces are of course not usually 'green' by the standards of our colour charts (even though we still use the expression); one might argue that it is an appropriate category for sickness because it is so out-of-place. Artificial uiridiaria could incur the stigma of a natural colour unnaturally achieved – see Sen. Controv. 10.pref.9. Russian (for example) does not recognise the connection of green and sick faces. On χλωρός used for pale faces, see Clarke (2004) 133, 135 (where he curiously considers paleness to be 'chromatically green').

sky, and several later poets follow suit.³⁹ The equation *caeruleus* = 'sky-blue', however, is not correct.⁴⁰ Many of these instances use caeruleus explicitly as the property of a sky raining heavily, or heavens about to open. Others are implicit. In the Georgics, for example, Virgil describes as caeruleus color the colour of the sun when it is about to deliver rain (pluuiam denuntiat). 41 Several references describe stars that herald rain. 42 Caeruleus could denote stormclouds.⁴³ and marked out the most watery parts of the rainbow (see below pp. 40-1). It did not, however, describe the clear blue sky.⁴⁴ Like the 'blond' entry of the *Thesaurus*' 'flauus', the semantic section 'de aqua et eius incolis' (water and those that live in it) forms by far the largest subject category under the entry 'caeruleus'. This was the property of deep, moving water, and all the qualities and associations it evoked.⁴⁵ In Aeneid 8, Tiber introduces himself as caeruleus Thybris (64).46 In a Senecan tragedy, caerula Crete denoted not a blue island, but an island associated with, or surrounded by, deep waters. 47 The substantive *caerula* was regularly used to describe 'the deep', ⁴⁸ and this was what one would expect the sea to look like. ⁴⁹

⁴⁰ Many scholars have reproduced this mistake: see (for example) Baran and Chişleag

(1968) 163, 'bleu comme le ciel'.

⁴² So Cic. Arati Phaenomena 142 'Pistrix'.

⁴⁴ This is recognised by Smyshliaeva [Смышляева] (2002) 290-1.

⁴⁶ Caeruleus also poetically described sea or river deities – particularly their swirling hair, but more generally divinities deeply implicated in water: so Ov. Met. 5.432; Fast. 1.375; Epicedion Drusi 224; Ov. Ars am. 1.224.

⁴⁷ Sen. Hercules Oetaeus 1874. Cf. Stat. Theb. 9.242 caeruleis ... piscibus. Cf. Ov. Met.

14.555 caeruleus, ut fuerat, color est nauium Aeneae; Pers. 6.33 caerulea in tabula (a

⁴⁹ Cf. Ov. Pont. 4.10.59–64, who complains that the sea at Pontus was not 'caeruleus' enough (caeruleus uix est diluiturque color) due to its unusual geography. Cf. Plin. Ep.

³⁹ Enn. Ann. 65 caerulea caeli templa; cf. 9 quae caua corpore caeruleo cortina receptat; Naevius in Varro, Ling. 7.7 hemisphaerium ubi concha caerulea saeptum stat. Cf. also Ov. Fast. 3.449 (caeruleum caelum); Valerius Flaccus, Argonautica 7.378 (caerulei ... Olympi); Verg. G. 1.453 (color solis caeruleus pluuiam denuntiat); cf. Sen. QNat. 1.3.4.

⁴¹ Verg. Aen. 1.453; cf. Veg. Mil. 4.41 lunae color caeruleus indiat pluuias; Aetna 332 caeruleo siccus Ioue fulgeat aether; Ov. Met. 15.789 on the face of caeruleus Lucifer spattered with a rain of blood.

⁴³ Cic. Arati Phaenomena 204; Verg. Aen. 3.194; 5.10; 8.622; Ov. Pont. 7.94; [Quint.] Declamationes 12.16; cf. Homeric κυανέη νεφέλη, Hom. Il. 5.345; 20.418; Od. 12.405.

⁴⁵ The same Latin authors who force us to question this connection nevertheless explicitly place caeruleus in the sea: Enn. Ann. 143 < pont> i caerulea prata; 385 caeruleum sale; Cic. Acad. 2.105 mare modo caeruleum uidebatur.

painting of the sea).

48 As Cic. Carmina fr. 29.3 est transuectus caerula cursu; Verg. Aen. 3.208 caerula uerrunt; Valerius Flaccus, Argonautica 1.460 petit caerula; Sil. Pun. 4.298 diuisaque caerula pulsu.

Again, however, one occasionally finds *caeruleus* describing 'blue' things that have (as far as we are concerned) only the most conjectural connection with water. Perhaps because of their coiling, twirling movements, serpents could be described as *caeruleus*. ⁵⁰ The category could also denote 'blue' gems and pigments. ⁵¹ Blue eyes – something of a curiosity in the Roman world – were *caerulei*. ⁵² Divinities were one thing, but mortals were quite another: humans with 'eyes like the sea' were usually barbarians, or physiologically unstable. ⁵³ This was also a colour that could denote the murky depths of the underworld and death. ⁵⁴ *Caeruleus*, like *flauus* and *uiridis*, evoked a primary object of reference, but (with a certain amount of poetic licence) could be used to describe other phenomena that shared similar wavelengths. ⁵⁵

This introductory section, then, has examined three common Latin categories of colour and established some distinctive patterns in their usage. ⁵⁶ I have argued that our Latin dictionaries, and the *TLL*, offer a misleading set (or at least *order*) of definitions based on the assumption that ancient colour categories functioned in a similar way to modern ones. Dictionaries should establish 'blond', 'verdant' and 'deep (blue)' as the primary meanings of these categories. There is still space for secondary meanings: one finds (normally in verse) *flauus* describing gold, corn, sand etc., and *uiridis*

8.20.4 on an extraordinary lake with *color caeruleo albidior*. On the surface of the sea as a sceptical *locus classicus* for colour discrimination; see below p. 114; cf. Gell. *NA* 2.30.11, quoting Aristotle [*Pr.*] 26.37. Sen. *QNat.* 3.2.2 lists the range of sensible phenomena that different types of water can elicit – taste, touch, weight, *salubritas* and finally *color: deinde coloris: purae sunt, turbidae, caeruleae, luridae.*

⁵⁰ Enn. Scen. 30; Verg. G. 4.482; Ov. Met. 3.38; Sen. Oedipus 729.

⁵¹ Vitr. De arch. 7.11.1; 7.14.2; Plin. HN 33.91, 158, 161–3; 35.47; 37.87.

See Pease (1955) on Cic. Nat. D. 423, who points out that it was customary for Romans to expect Minerva to have caesii oculi and the sea-god Neptune caerulei oculi. Cf. Ov. Met. 1.275 [Jouis] caeruleus frater.

On barbarians, see Plin. HN 6.88; Tac. Ger. 4.2; Juv. 13.164; Hor. Epod. 16.7. On woadpainted barbarians as caerulei, see Caes. BGall. 5.14 omnes uero se Britanni uitro inficiunt, quod caeruleum efficit colorem, atque hoc horridiores sunt in pugna aspectu; Enn. Ann. 509; Verg. Aen. 3.64; Prop. 2.18.31. On the physiology of blue eyes, see Suet. Galb. 21 (caerulei oculi among the emperor's deformities); Celsus, Med. 7.7.14 (a caeruleus color in the eye as a bad medical sign).

⁵⁴ Verg. Aen. 6.410; Ov. Fast. 4.446; Valerius Flaccus, Argonautica 3.400; Epicedion Drusi 93 (Drusus' caerulea lumina swimming in death).

55 Baran (1983) 366-7 attempts to trace an 'évolution sémantique' for caeruleus from a 'sens concret' to a 'sens abstrait'.

 56 I have also examined the semantic range of the adjective *marmoreus* ('marble') in Bradley (2006a) 5–8.

qualifying sick faces, gems, marbles, parrots, dyes and cosmetics, and *caeruleus* describing the underworld, sapphires, woad, barbarian eyes and the like – giving a sense of 'yellow', 'green' and 'blue' that is familiar to modern western sensibilities. However, once one reinstates the significance of the object in ancient colour categories (hair, plant, water, etc.), a whole new playing field of literary and rhetorical allusion is opened up by these categories. The extension of these terms outside their usual range becomes a hallmark of such fundamental classical discourses as poetic metaphor, imperial cornucopia and philosophical epistemology. It is the character of such discourses that will form the subject of this book.

Modern literature

There have been several important efforts to deal with the challenge of understanding difficult Latin colour terms. The most comprehensive of these remains J. André's Étude sur les termes de couleur dans la langue latine (1949). The French philologist, who went on to conduct studies of Latin and Greek botanical categories, as well as Roman cooking and other comparative work, made this his first major attempt to classify and interpret a complex and awkward linguistic system so that it would make sense in the modern West.⁵⁷ The thorough and careful approach undertaken by the Étude was to a large extent undermined by the approach adopted in the first and main section – the 'Étude semantique' – to determine (in our terms) the precise shades denoted by individual Latin colour categories. Here, André forces the terms to match their closest modern equivalents, starting with what he considered to be the most important – le blanc, le noir, le gris, le rouge, le brun, le jaune, le bleu, le vert, le violet. Within each of these boxes, André oversimplifies the semantic range of the categories by insisting on sub-categories of shade (so, typically, flauus could denote 'nuances de jaune simple', 'nuances brunes' or 'nuances rouges' (129-30) or (at 101) purpureus used of the surface of the sea evoked 'un éclat, rose peut-être, effet d'un jeu de

⁵⁷ André (1955); (1956); (1958); (1967).

lumière'). A second section (an 'Étude Lexicologique') is concerned with the morphology and formation of various colour words (various adjectival usages, substantives and verb forms). Finally, in an 'Étude stylistique', he attempts to deal with broader topics such as basic colour symbolism, colour usages peculiar to each literary genre, differences between prosaic and verse uses of colour, epithets and formulae, as well as inter-textual imitation and idiosyncracy. This work elicited mixed responses from critics,⁵⁸ but it remains the only detailed sourcebook for Latin colour usage and is still widely cited. André reached some important conclusions: for example, some terms (such as aerius) may have emerged out of the specialist repertoires of 'les teinturiers' (182) and 'les produits de beauté' (292-3). His reliance on colour etymologies allowed for only a very superficial treatment of the literary contexts in which his colour terms occur - for example, his many verse examples are usually taken prima facie as evidence for colour meaning without considering the role of poetic creativity or literary context. Above all, André's bold attempt to catalogue both the differences and similarities of the Latin colour system was hamstrung by his failure to consider the important conceptual and philosophical principles at work in Greek and Roman theories of vision, and the position of colour within this system.

Less well known is N. Baran's ambitious and wide-ranging essay on 'Les Caractéristiques essentielles du vocabulaire chromatique latin' (1983) which explores cultural and stylistic trends and developments in Roman literature, art and society. Baran provides a comprehensive *état de recherche* on the subject, and makes some useful observations about developments in colour usage from Homeric to Classical Greek through to various Latin literary and historical contexts, and draws some interesting comparative connections with Baran's native tongue, Romanian. In particular, Baran endorses the idea of the gradual enrichment of colour vocabulary over time, and identifies (p. 325) a development from 'sens matériel-concret' to 'sens figuré-abstrait' in patterns of colour

⁵⁸ The most visceral response came from Laughton (1951). For a more favourable review, see Messing (1955).

⁵⁹ This study expanded out of Baran's earlier article (with M. Chişleag, 1968) on the sophistication of colour terminology in Lucretian verse.

usage. Baran offers a much more sensitive treatment than André of different genres and registers in which colour is employed, although some of his literary and historical conclusions are optimistic and over-generalised (for example, that Augustan literature represented a 'peak' in Latin colour terminology or that Latin colour vocabulary was 'richer' than Greek). More recently, these detailed treatments of Latin colours have been complemented by C. Abellàn's more focused *Estructura semàntica de los adjetivos de color en los tratadistas Latinos de Agricultura y parte de la Enciclopedia de Plinio* (1994) which reaches similar conclusions to those of André but which explores in detail the thematic position of colour categories in Latin agricultural texts.

Greek colour usage has generated the greatest difficulties for translators and visual historians, and has consequently offered the most fertile ground for study. Interest in the nature of Greek colour vision first attracted serious scholarly attention with Goethe's theory of defective colour vision among the Greeks, an idea that was famously promoted in the wake of Darwinian theory by the British prime minister and Homeric scholar W.E. Gladstone. Gladstone claimed that the Homeric colour system was founded upon light and darkness, and that the organ of vision 'was but partially developed among Greeks of his age' and had not developed much further by the time of Aristotle. 62 This was connected to the material poverty of colour in their natural environment, the paucity of dyes, paints and flower varieties and the relative uniformity of somatic colours. More detailed research into Greek colour terminology supported Gladstone's claim, its arguments focusing in particular on the linguistic ignorance of a green-yellow distinction, and the newly investigated phenomenon of colourblindness was famously invoked to explain this cultural deficiency. ⁶³

⁶⁰ He also draws (and overstates) a sharp contrast between modern and ancient colour usage (p. 404): 'Notre système chromatique (très riche et nuance) est axé sur l'interprétation des couleurs du spectre solaire, tandis que celuis des Anciens avait une base essentiellement naturiste'.

⁶¹ Baran (1983) 350; cf. 365 'ils étaient plutôt des gens pratiques, poursuivant les avantages immédiats'.

⁶² Gladstone (1858) 488 'Homer's perceptions and uses of colour', expanded in Gladstone (1877). Gladstone's claim is discussed by Irwin (1974) 6–7.

⁶³ Esp. Schultz (1904) 187–8.

Another solution (which became a premise for Berlin and Kay's *Basic color terms* (1969)) was to propose a biological evolutionary view of colour designation.⁶⁴ Others, led by K. Müller-Boré (1922), argued on the other hand that the lack of emphasis on colour was characteristic of epic style.⁶⁵

Studies of Greek colour across the next hundred years or so were dominated, on the whole, by efforts to demonstrate that (contrary to Gladstone *et al.*) the Greeks employed a highly sophisticated and subtle colour system. ⁶⁶ Prominent in these studies was the notion that Greek colour terms denoted more than simply (in our terms) 'colour': luminosity, saturation, texture, smell and even things that had nothing to do with colour such as 'agitation' and 'liquidity' were highlighted and explored by these surveys. ⁶⁷ Much was made of the central position of *leukos* and *melas* as expressions of brightness and darkness, and other 'intermediate' colours as subtle configurations of these two. This revision of ancient colour perception even found some space for the contemplation of colours as objects. ⁶⁸

⁶⁴ This line was later applied to Hebrew and Norse – see Brenner (1982) esp. ch. 1.

⁶⁵ Müller-Boré (1922) esp. 43–4. Rowe (1972) 330–1 prefers to envisage Homeric colour vocabulary as representative of contemporary colour perception. Smyshliaeva [Смышляева] (2002) constructs a similar argument about the paucity of 'blue' in Latin elegy which (she argues) is due to the influence of epic which favours a 'red-white-yellow' triad.

For opposition to Gladstone's view, see Hochegger (1884) esp. 38–41; Veckenstedt (1888); Platnauer (1921) 162 (Platnauer, in spite of his impressive demonstration of the subtelties of colour-categories, finishes by endorsing the notion of Greek colour-blindness); Müller-Boré (1922); Wallace (1927); Kober (1932); André (1949) 12; Gernot (1957); Mugler (1960); Reiter (1962); Young (1964); Osborne (1968); Dürbeck (1977). Kranz (1912) aimed to connect the interest in luminosity with Greek theories of colour. For a reasonably up-to-date survey of the question, see Grossman (1988). For a synopsis of the problems from a linguistic point of view, see Lyons (1999). According to Pollitt (2002) 8, recent studies of Greek colour have preserved an assumption about primitive ancient colour vision. For an approach to Greek colour terminology within the framework laid down by Berlin and Kay, see Moonwomon (1994).

Suggestions persisted that one could restore hue as a primary quality of Greek and (particularly) Latin colour terms; for example, Rowe (1972) suggested that even in Homer one could detect up to thirty hue-words. However (p. 329), luminosity was prominent: 'Homer's world is a world of brightness and darkness, of the gleam of weapons and the dark lustre of a swelling sea ... a different kind of sensitivity to visual stimuli'. More recently, Dowden (2005) has attempted to embed Heliodorus' Aethiopica in a literary and cultural tradition that privileges light and luminosity over colour.

Rowe (1972) 333–5 considers leukos and melas (along with eruthros) as the first of antiquity's 'abstract' colours (so following the research of Berlin and Kay (1969): 'the process of abstraction, of the grouping of the infinitely varied colours of the environment under a limited number of general terms, had as yet only begun'). He argues that other early Greek colour terms were principally associative (for example p. 343 on phaios as a

The most thorough considerations of Greek colour, however, resisted this interpretation: P.G. Maxwell-Stuart's exhaustive two-volume Studies in Greek colour terminology (1981), dealing first with the term *glaukos* and then with *charopos*, systematically listed the occurrences of each category first by prose authors (including medical and scientific writers) and then by verse writers. His uncompromising positivist objective was to find the 'normal' meaning of the word (so creating a troublesome dichotomy that prioritised prose over verse); where such a meaning was not evident in verse, Maxwell-Stuart put it down to metaphor. To attain these objectives he pooled and compared material as far back as Homer all the way through to the fifth century AD and beyond. Maxwell-Stuart boldly dismissed sense perception and colour theory as irrelevant factors in the analysis of Greek colour, and his stubborn conclusion that *glaukos* = blue and *charopos* = light brown/amber, with any other nuance of light, texture etc. as a secondary and subsidiary effect, leaves the careful reader of Greek literature unsatisfied and ill-equipped to tackle the textual subtleties of these colour terms. ⁶⁹ One of the most sensitive and successful recent studies of Greek colour terminology, an article by M. Clarke (2004) on 'The semantics of colour in the early Greek word-hoard', lays emphasis instead on a linguistic prototype at the centre of colour words, pivots or 'cognitive reference points' around which various Greek experiences of colour fluctuated in concentric circles.⁷⁰ This study, which focuses on the complex terms *chlōros* ('green'/'fecund'/'oozing'), argos ('gleaming white'/'nimble'), porphureos ('purple'/'heaving') and oinops ('wine-dark'), 71 provides a

technical category of woollen clothes; 'the standard Greek way of expressing colours seems to be by reference to particular objects; to the green of the leek, or to the blue-grey of eyes').

More recently some philologists have explored the perceptual subtlety that lay at the edges of 'basic colour terms' in classical Greek: see for example Blanc (2002), who discusses the significance of prefixation in Greek colour terms. For a more sensitive and concise study of γλαυκός, in the cultural and literary context of descriptions of Athena, see Deacy and Villing (2004) esp. 88, 'Like all colour terms and representations, glaukos should not be reduced to a strict chromatic meaning, but regarded in the context of discourse between artists and their audience, as a symbol and signifier'.

Olarke also (p. 134) makes an important point about the misuse of the term 'metaphor' in evaluations of colour categories used outside their cognitive reference points.

⁷¹ Clarke offers within this theoretical framework (p. 136) a persuasive interpretation of the classic colour puzzle of the 'wine-dark sea': 'danger, frenzy, the whole range of qualities associated with Dionysos': cf. Maxwell-Stuart (1981) 6–11.

sophisticated intellectual framework at the cutting edge of modern linguistics within which to interpret ancient colour usage (and indeed provides a workable theoretical model for what I have done with *flauus*, *uiridis* and *caeruleus* above). The idea that ancient colour 'prototypes' were often at 'the meeting point of several cognitive domains' – colour, light, movement, mental states, etc. – which English usually keeps distinct, offers perhaps the most persuasive solution yet to understanding some of the most trouble-some colour categories of antiquity. However, taken on its own, this model is disengaged from the complex and interactive registers, genres and contexts of colour negotiation that make the use of colour in ancient literature such a fertile field for study.⁷²

There has been a spate, particularly in recent years, of treatments of colour terms in Roman literature, focusing on late Republican and early imperial poetry. To some extent, these helped to resolve an imbalance with the Greek material, which had been considered by E. Irwin's important Colour terms in Greek poetry (1974). Irwin's examination of the terms chloros, kuaneos and leirioeis / leirios (within the green-blue range where the Greeks might seem 'deficient') corroborated the now familiar notion that Greek colour terms were more about luminosity, texture and contrast than about hue.⁷³ Studies of Roman poetry have generally been concerned with the exploitation of colour as a literary tool in Latin verse rather than with cultural conceptions of colour as a whole, but have made some important observations on the adaptation and exploitation of colours as information systems in individual texts and genres. R. J. Edgeworth's The colors of the Aeneid (1992) identified six patterns in Virgil's colour usage - formulaic (Homeric-type repetition); functional (supplying an idea essential to the narrative); allusive (picking up usages in other texts); decorative; cumulative

⁷² The significance of literature for both utilising and establishing/shaping the meaning of colour terms is neatly summarised by L. Cleland in Cleland and Stears (2004) 143–4.

This was also the argument sustained by Scranton (1964) esp. 282–3 in his study of the aesthetic aspects of ancient art, where he also examines parallels in Latin poetry. Irwin also included a useful chapter on the nature of colour and various attempts since Goethe to explain the notorious difficulties of Greek colour terminology. Goethe had first treated the problem of Greek colour vision in *Zur Farbenlehre* (1810), and his ideas were also discussed by Reiter (1962). Cf. Handschur (1970), who catalogues Greek colour terms and their semantic ranges.

(clusters of colour for dramatic purposes); and associative (linking one scene with another). Edgeworth emphasised the importance of individual subtlety and stylistic and functional fluctuation, although the connections he makes sometimes seem a little contrived (so purpureus = Roman death-rites, pp. 29, 53) and his recourse to psychological interpretation (particularly at pp. 43–52 – e.g. green + white = release of tension) can seem somewhat tenuous. Edgeworth also seems uninterested in the use of verb forms as expressions of colour. The alphabetical catalogue of seventy-eight colour terms in the Aeneid (pp. 65–168) alerts the reader to the blur between conventional colour terms and objects (e.g. lilium, nix, trabea, uiola), but the implications at work here are not developed. The colors of the Aeneid usefully appended Edgeworth's earlier articles on Latin colour, the most important of which ('Does purpureus mean "bright"?') aimed methodically to demonstrate that all the difficult uses of this term can be explained away as Homeric formulae or allusions, and that it always approached something akin to 'red'.74

This interest in the stylistic 'mood' and emotion of poetic colour usage has fuelled, most recently, the work of J. Clarke (2002) Imagery of colour and shining in Catullus, Propertius and Horace, which explores the role of colour as part of the enargeia and ekphrasis in selected passages of Latin verse. This monograph grew out of Clarke's earlier article 'Colours in conflict: Catullus' use of colour imagery in c. 63' (2001), where she offered an acute analysis of colour usage in Catullus 63.75 Clarke's work is an important contribution to literary criticism, but the ease with which she translates Latin colour terms into modern abstract colours (red, white, green), her simple schemes for colour contrast (dark-light, white-red etc.), her indulgence in abstract qualities of colour symbolism (madness, death, beauty, softness), and the casual employment of such difficult terms as 'synaesthesia' reflect a number of methodological shortcomings for this study of colour, and Clarke's project makes little headway in resolving the

⁷⁴ For an early study of light symbolism and colours in the *Aeneid*, see Schulbaum (1930–1). Cf. Baran and Chişleag (1968) for a philological survey of chromatic aesthetics and colour symbolism in Lucretius (with an emphasis on luminosity).

⁷⁵ Cf. also Clarke (2004) on colour sequences in Catullus' long poems, reaching similar conclusions.

traditional difficulties of translating and understanding ancient colour usage. Other literary studies have also tended to skate around the importance of basic cultural and conceptual differences in perception and categorisation. P. Barolsky's 'Ovid's colors' (2003), for example, is more concerned with demonstrating that Ovid's *Metamorphoses* exploited rich and diverse colour motifs and contrasts than exploring the broader cultural patterns or ramifications of the connections Ovid draws between colours and objects.⁷⁶ The use of colour in later Latin literature has received some attention, stressing particularly the flexibility of categories, although this material can be misleading for the interpretation of earlier literature where (I will argue) significant conceptual changes in the use of colour were taking place.⁷⁷

The most difficult colour of all, *porphura/purpura*, has received attention from a number of directions. M. Reinhold's *The history of* purple as a status symbol in antiquity (1976) is a useful account of the exploitation of sea-purple dye (and imitation purples) from the Assyrians through to the late Roman Empire, but although it draws attention to the political, social and economic dimensions of the actual dye and its manufacture, it is only superficially concerned with the semiotics of purple as a colour.⁷⁸ Some gaps in Reinhold's work are partially filled by H. Stulz's thorough Die Farbe Purpur im frühen Griechentum (1990) which catalogues Greek terms for 'purple' and 'red' in great detail and offers a more sensitive analysis than did Edgeworth's 'Does purpureus mean "bright"?'. More recently, O. Longo (1998a) edited a collection of short essays on the literature, art and science of purple from antiquity through to the early modern period, opening some important windows onto the cultural and technological evolution of the dye as a status symbol in the Mediterranean world, as well as literary and artistic associations of 'purple' as a category of colour. There have also been several significant discussions of the social relationship

⁷⁶ This preoccupation with 'colour symbolism' also dominates Thomas (1979); cf. also Grant (2004) on colour and characterisation in Petronius.

⁷⁷ For example, Newbold (1981–2); Roberts (1989) 72, 76, 78 on the diverse nature of colour terms in late antique poetry.

Note that the standard of t

between material colours (particularly purple and gold) and Roman *luxuria*, and of attempts by the state to police and control them.⁷⁹

Running parallel to the developing linguistic and literary analyses of Greco-Roman colour terms was a rich scholarly interest in the use of colour in classical art. This emerged in the late eighteenth century, when it became clear that a significant proportion of Greek and Roman sculpture and architectural elements was richly coloured. This proposal goaded proponents of a pure, ideologically and physically monochrome antiquity into a sometimes fiery debate (particularly over the Parthenon frieze) that lasted throughout the nineteenth century and well into the twentieth. 80 This debate intersected only superficially with the ongoing linguisticliterary debate, although the notion of a rich polychrome material world was occasionally invoked by those who wished to restore colour sensitivity to the ancients.⁸¹ Even more so than the linguistic material, this research focused predominantly on the art of Classical Greece, with only a few important treatments of the Roman material. The fullest and most up-to-date consideration of polychromy in early Greek sculpture is V. Brinkmann's Die Polychromie der archaischen und frühklassischen Skulpturen (2003a) which relays and interprets the latest findings of scientific research into pigments on marble statuary. Both this and V. Manzelli's La policromia nella statuaria greca arcaica (1994) work on the principle that ideas of monochrome white marble sculpture should be regarded as a neo-classical dogma. 82

The most comprehensive study of colour in Roman sculpture remains P. Reuterswärd's thorough *Studien zur Polychromie der Plastik: Griechenland und Rom* (1960).⁸³ Reuterswärd laid

⁷⁹ For example, Culham (1986) on the *lex Oppia*; cf. Barker (1996) on the ethical ambiguities of gold and goldenness in Augustan Rome; Jones (1999) on Greco-Roman processional colours, 200 BC-AD 200.

For some aspects of responses to colour on sculpture over the last two centuries (particularly in reconstructions), see Kader (2003); Prater (2003); on the reconstruction of the Cambridge Peplos Kore, see Cook (1978).

⁸¹ For details, see Gage (1993) 11; Bruno (1977) esp. 47–51.

⁸² Cf. also Brinkmann (1987); (1994) on the Siphnian treasury. For a full bibliography, see Brinkmann and Wünsche (2003) 268–71. Some important recent work has been done on the chromatic effects of bronze sculpture, as well as the description of different types of bronze alloys in literary ekphrasis: see in particular Descamps-Lequime (2006) and esp. Muller-Dufeu (2006), complemented by Dubel's 2006 study of the relationship between materiality and colour in ancient descriptions of metal artefacts.

⁸³ For an earlier account, see Phelps (1930).

emphasis on the diversity and sophistication of patterns of polychromy across Greco-Roman antiquity and across artistic genres, and argued for a general evolution towards lighter colour-schemes in finer portraits and reliefs particularly later in the Empire, suggesting an increasing artistic concern for 'naturalism'. He drew together all the available archaeological evidence for colour traces to demonstrate that the original sculptural material (marble or bronze, for example) played a more or less central visual role in the finished product (with any pigments/patinas/glazes often discreetly enhancing the underlying colour rather than simply creating a new one). This draws the art historian's attention to the essential interaction of colour and form in classical art (rather than systems of colour qua colour). Since 2003, Brinkmann and other archaeologists and art historians around Europe have put together exhibitions of painted Greek and Roman casts at more than ten international venues, and an exhibition at the J. Paul Getty Museum in Malibu in 2008 (The color of life: polychromy in sculpture from antiquity to the present) integrated the work on ancient sculptural polychromy with current research into polychrome sculpture in medieval and modern western art, with some highly significant findings. Aspects of the history, archaeology, literature and science of colour and pigmentation on Greco-Roman sculpture have been discussed in detail in my article 'The importance of colour on ancient marble sculpture' (2009a). 84 The art-historical study of pigments on Roman sculpture is less advanced than that of its archaic and early classical Greek counterparts, although J. S. Østergaard (Curator of Ancient Art, Ny Carlsberg Glyptotek) has established the interdisciplinary 'Copenhagen Polychromy Network Project' (2008–10) in order to analyse a representative selection of classical sculptures in the Glyptotek with a view to redressing this imbalance. Studies of the relationship between sculptural/architectural material and colour in Rome, on the other hand, are well represented: in particular, R. Schneider's seminal Bunte Barbaren (1986) on coloured marbles, M. De Nuccio and L. Ungaro's

⁸⁴ For details about these exhibitions, and their accompanying catalogues, see Bradley (2009a) 427. For a review of R. Panzanelli's accompanying catalogue to *The color of life* (2008), see Bradley (2009b).

exhibition catalogue *I marmi colorati nella Roma imperiale* (2002), and my own article 'Colour and marble in early imperial Rome' (2006a), which focuses on the relationship between colour and stone in ancient ekphrasis. Important research has also been conducted on Pompeian paints as well as polychromy in ancient art and restoration techniques.⁸⁵

The ramifications of such research in ancient art for the study of ancient colour systems have been acutely demonstrated by E. James' Light and colour in Byzantine art (1995), which explored the rich extant material of Byzantine church art against the background of Greco-Roman theories of colour.⁸⁶ This work is one of the clearest and most important contributions in recent years to the study of classical colour theory. James' subtle art-historical account of light and colour in several important Byzantine mosaics is qualified and enriched by a synopsis of modern approaches to colour perception in various disciplines.⁸⁷ James decided to exclude Latin linguistics and theory from her work on the grounds that the Byzantines used Greek and not Latin (p. 47), a reminder that important work on the contribution of Roman/Latin colour theory to the study of ancient perception still remains to be done. Her glossary of fifteen Greek colour terms, a judicious summary of their nuances and uses, claims to avoid offering English hue-equivalents (p. 49) but still subscribes to abstract parallels (e.g. $\bar{o}chros$ = 'another of the less than precise shades of the green-vellow band'). Furthermore, James extracts terms and ideas from Platonic and Aristotelian discussions of colour in order to enrich her interpretation of Byzantine art without full consideration of the cultural changes that took place in the intervening period, or the generic differences between classical philosophy and early Christian art. James' principal conclusion (corroborated by her discussion of pigments and the four-colour palette in ancient art) that Greek colour words were principally concerned with darklight opposition is important for her evaluation of Byzantine art,

⁸⁵ See Augusti (1967); Béarat et al. (1997); Brinkmann (2003a); Jenkins and Middleton (1988); Jenkins (2001). Important work has been conducted on Egyptian pigments and colour-schemes – in particular, see Baines (1985) and (2001).

And more recently, see James (2003).

⁸⁷ See esp. Chapter I. Cf. Schwarzenberg (2000).

but its prominence obscures other significant patterns that emerge from her work, such as the connection between artistic mimesis and philosophical epistemology. Nevertheless, her treatment of colour in Byzantine art and literature (chapter 4) demonstrates that light and luminosity, as well as ontology (i.e. colour as an inherent property of an object; 'definition of being', p. 80) were still high on the artistic agenda. Through a study of the rainbow, James demonstrates that an organised system of colour (hue) 'symbolism' appears not to have existed in the Classical and Byzantine world. Her chapter on 'The rhetoric of colour' then underlines the fundamental imagination and flexibility of Byzantine colours in both literature and art, although this flexibility sits uneasily with the conclusion of her final chapter that colour defined form and therefore reality, a 'true' property of the object or phenomenon it represented (p. 138). James' Light and colour is a highly successful and carefully formed thesis on the role of colour in antiquity and its expression in art, and offers one of the most promising methodologies in the pursuit of ancient colour theory. Colour and meaning in ancient Rome aims to fill the scholarly blind spot towards Roman ideas about colour, which will help to create a bridge between studies of classical Greek colour vision and James' Byzantine material and will also develop a more sophisticated interpretation of the ethical and philosophical debates about colour, perception and knowledge that dominated intellectual discussions of the subject in antiquity.

The twenty-first century has thus far seen a spate of interdisciplinary conferences and edited volumes dedicated to demonstrating the richness of Greco-Roman colour discrimination, the cultural specificity of ancient colour, and the complexity of literary and artistic engagement with vision and visual categories. One of the first, and most successful, of these is L. Villard's *Couleurs et vision dans l'antiquité* (2002), a collection of ten short essays by French philologists representing a wide range of expertise in (mainly Greek) linguistics and literature from the Hippocratic corpus through to Lucian. Willard's volume lays particular focus on ancient medical texts and Greek literature of the second century AD and

⁸⁸ For a detailed review, see Bradley (2006b).

contains some important new observations about the deployment of colour as an epistemological tool in medical texts, as well as exploring the relationship between the ancient philosophy of perception and the formulation of colour experiences in Greek literature. While Villard's volume concentrated primarily on Greek linguistics and literature, A. Rouveret, S. Dubel and V. Naas' Couleurs et matières dans l'antiquité (2006) takes as its main focus material culture and ancient literary ekphrasis, and deals predominantly with Rome. 89 This volume lays emphasis on the importance of exploring material culture from the perspective of artistic ekphrasis, and underlines the significance of evaluating ancient art through its contemporary literary and linguistic culture. Its contributors are committed to the idea that it is in the field of art that we can find some of the most sensitive and sophisticated ancient approaches to colour, and of particular importance is the volume's emphasis on associating colours with particular materials or phenomena rather than simply (as philologists such as André or Maxwell-Stuart have done) a set of abstract lightwaves. Rouveret et al. also do a commendable job of reinstating the significance of colour in moral and philosophical debates about artistic mimesis and the function of art. Much more ambitious (and so less coherent as a whole than the volumes mentioned above) is L. Cleland and K. Stears' edited conference volume Colour in the ancient Mediterranean world (2004), a collection of twenty-five essays on wideranging themes and periods by philologists, archaeologists, art historians and literature scholars which delve into anthropology and sociology, as well as Egyptology and Biblical Studies, among other things. 90 These interdisciplinary approaches to colour in the ancient world, although sometimes a little fragmentary, nevertheless draw attention to important overlaps and continuities between different literary and artistic registers that have previously, on the whole, been considered in isolation. Others have also undertaken

⁸⁹ For a review of Rouveret et al. (2006), see Bradley (2007). This volume also complements Tiverios and Tsiafikis' conference volume (2002) on the role of colour in Greek art and architecture.

⁹⁰ Developed out of a conference held in Edinburgh in 2001 ('Colours in Antiquity'). For a review, see Arkins (2005), who simplifies his analysis by considering what papers can tell us about 'white', 'red', 'black', brown' and 'violet/purple'.

mμ	Average English	Latin	Hanunóo level 1		Hanunóo level 2
800–650	Red	Fulvus	Marara (dry) $\widehat{\overline{\xi}}$	1	~~~~~
640–590	Orange	Flavus	l ij	<u>©</u>	·····
580-550	Yellow		Malatuy Walacti	(indelible)	~~~~~~
540-490	Green		Malatuy (fresh) ✓✓✓✓	ara (in agti (v	·····
480–460	Blue	Glaucus		Mar	·····
450–440	Indigo		1 1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
430–390	Violet	Caerullus (sic)		Mabi:ru Malatuy	·····

Fig. 1. A comparative diagram of colour categories in English, Latin and Hanunóo, with lightwave estimates, after U. Eco (1985) fig. 8.

important interdisciplinary studies of the subject: in particular, M. M. Sassi has made a valuable and wide-ranging contribution to the understanding of the symbolic role of colour in ancient thought and culture. 91

The general treatments of colour not restricted to antiquity are too extensive to mention in full here, save to say that the following have been important for the development of my ideas about colour in ancient Rome. Newton's *Opticks* (1704) set the agenda (as well as the terminology) for most modern studies of colour, as well as sparking adversarial responses from the likes of Goethe (*Zur Farbenlehre*, 1810), who redirected the study of colour away from the purely physical towards the mechanics of human perception and artistic aesthetics.⁹² This latter position (which was primarily concerned with colour *categories*) in the psychology of colour perception was developed in the twentieth century most

⁹¹ See esp. the conference volume *I colori nel mondo antico: esperienze linguistiche e quadri simbolici* edited by S. Beta and M. Sassi (2003) and Sassi's monograph *The science of man in ancient Greece* (tr. Chicago University Press, 2001) which begins with the vocabulary of skin colours to explore a chain of arguments about ancient physiognomy, medicine and ethnography; Sassi (1993) on Greek physiognomics; Sassi (1994) on the question of imperfect Greek colour vision; most recently, Sassi (2005). Cf. also the Laurence Seminar 'Sensory Perceptions' held at the Faculty of Classics, Cambridge in May 2003 (co-organised by M. Bradley and A. Clements) with a similarly ambitious disciplinary and chronological scope.

⁹² On Goethe's theory of colours, see Schindler (1964).

coherently by L. Wittgenstein (Bemerkungen über die Farben, published 1977). This worked hand-in-hand with studies of basic/ primary colour categories, of which the most influential had been that of the physiologist E. Hering (*Zur Lehre vom Lichtsinn*, 1878). J. Itten's *Kunst der Farbe* (1961) – attempting to forestall criticism about the difficulties of defining colour - drew an important distinction between pigments as chromatic reality and our perceptual response as chromatic effect. Thinkers from many different disciplines have recognised that colour is no easy matter: one critic argued that 'the meaning of the term colour is one of the worst muddles in the history of science'. 93 These difficulties are extensively represented by anthropological studies of colour usage: the Hanunóo, the Dani of Papua New Guinea, the Irish and Russian are just a few well-documented examples of cultures which use colours in ways that to us are strange or incongruous.⁹⁴ Others, such as S. Pinker, have adopted a squarely universalist paradigm of colour usage.95 U. Eco's 'How culture conditions the colours we see' (1985) clearly articulates many of the linguistic and conceptual issues at stake in the process of colour perception, and relates this process both to cultural pertinence or functionality (a skier can recognise different qualities of snow etc.) and the relative position of a colour within the system. 96 His comparative table (fig. 1) of colour categories in English, Latin and Hanunóo alongside lightwaves demonstrates some of the possible differences in systems of

⁹³ Gibson (1968); cf. Sahlins (1976) 1, 22 which asserts that colour is a cultural matter, and remarks that every test of colour discrimination is rooted in a sort of referential fallacy.

⁹⁴ The most widely cited example of chromatic difference is the Hanunóo, who appear to have a subtle vocabulary for colour contrasts but no distinct categories for absolute values of hue; for a first-hand report, see Conklin (1955). Another is that of the Dani of Papua New Guinea, who use terms for 'cool' (mola) and 'warm' (mili), but have no other colour words at all: see Heider (1972), simplified by Berlin et al. (1997) 21. On distinct categories for 'green' in Irish, see Clarke (2004) 131. For Russian 'light blue' (goluboj) and 'dark blue' (sinij) as distinct categories, see Corbett and Davies (1997) 205–7.

⁹⁵ Pinker (1994) 62–3, 'Humans the world over colour their perceptual worlds using the same palette, and this constrains the vocabularies they develop ... The way we see colours determines the way we learn words for them, and not vice versa'. This idea is copied by Duranti (1997) 65–7. *Contra*, see Lucy (1992) 127–87; Lucy (1997).

⁹⁶ Eco (1985). This article considers Gell. NA 2.26 as part of his material for colours as semiotic codes in systems of communication. Eco distinguishes 'elaborated codes' (e.g. heraldic colours, recognised by a cultivated minority) and 'restricted codes' (a simpler universal system, such as 'red = blood', 'white = peace').

classification (as well as the shortcomings of such linear measures of perception: *flauus* and *caeruleus*, as we have seen, can hardly be made to fit such a model). There are several important works on colours as semiotic codes or informational systems. The standard structuralist approach (proposed Lévi-Strauss and Turner, among others) holds that colours are signifiers and are closely associated with the object or idea that is signified. ⁹⁷ Others have offered more flexible models of improvisation and contextualisation. ⁹⁸ Both approaches have informed my ideas about colour in the Roman world.

No study of colour would be complete without mention of J. Gage's seminal Colour and culture (1993) and the shorter Colour and meaning (1999) which chart (from a principally arthistorical perspective) the history of colour from Classical Greece through to the twentieth century. Colour and culture, particularly the sections 'Classical inheritance', 'Unweaving the rainbow' and the chapters on Newton and Goethe, have proven an invaluable source of ideas and references in the initial stages of my research. Essential reading also includes Berlin and Kay's hugely influential – and now universally criticised – Basic color terms (1969), which argued for an evolutionary system of colour discrimination based on cultural advancement (evidence included that of Homeric Greece). 99 There have been various attempts to bridge the disciplinary crevices between scientific, anthropological, linguistic, psychological and scientific treatments of colour, but these studies have drawn attention to the differences, rather than the common ground between these accounts (see, for example, T. Lamb and J. Bourriau, Colour: art and science, 1995 or C. Riley, Color

97 Lévi-Strauss (1970) 322–5; Turner (1967) 59–91; cf. also Sahlins (1976).

⁹⁸ For example, Sperber (1975) chapter 5 on smells (with colours as parallels); Linksz (1952) 52–178 considers the flexibility of semiotic codes for colour-blind individuals; Gombrich and Riley (1994) considers the versatility of colour perception in artistic experience.

On the current state of the debate about basic colour terms, see Berlin et al. (1997). Kay and McDaniel (1978) reformulated the basic colour term as a 'fuzzy set' rather than a distinctive category of colour, with the result that colour has become a key example for prototype theorists: see Lakoff (1987) 26–30; Wierzbicka (1990); MacLaury (1991). For a critique of Berlin and Kay, see Clarke (2004) 132–3.

codes: modern theories of color in philosophy, painting and architecture, literature, music, and psychology, 1996). 100

Recent years have produced several important works on the archaeology of colour, particularly elements of the 1998 volume on The archaeology of perception and the senses (Archaeological Review from Cambridge 15:1), and A. Jones and G. MacGregor, (2002) Colouring the past: the significance of colour in archaeological research, which direct attention to the importance of colour as an expression of materiality in historical landscapes. The archaeology of the senses has been principally concerned with the relationship between the perceiver and the environment. Some have adopted a *phenomenological* view of the world – where perception is the act of receiving stimuli through the senses, from a world outside the body, and where the perceiver is the passive recipient;101 others have claimed that perception is the result of an attempt to impose ideas on the external world which began as concepts in the individual's mind – a 'mental map' or 'mental template'. 102 Recently, archaeologists have favoured a middle line, a 'perceptual framework', which mediates between the individual and the environment and is influenced by memories, foreknowledge and preconceptions. 103

The nature and history of colour have in recent years received extensive treatment in more popular academic literature. F. Delamare and B. Guineau's New Horizons publication *Colour: making and using dyes and pigments* (1999), for example, is an excellent and

For a more recent set of papers on the philosophy and psychobiology of colour (from a conference held in 1996), see Mausfield and Heyer (2005).

So Tilley (1994), who takes the world as real, natural, material; a 'given', existing outside of history. For a critique of Tilley's approach, see Brück (1998) 34 'perception is not simply a physical process but is a deeply cultural phenomenon'. Also taking the phenomenological approach, see Tuan (1977); cf. Ingold (1992) 46 'the structures and meanings that we find in the world are *already there* in the information that we extract in the act of perception; their source lies in the objects we perceive, they are not added on by the perceiver'.

For example, Renfrew (1987). Cf. Appleton (1980) 9.

For a useful summary of the issues of 'perceptual framework', see Jones (1998) esp. 8. Useful for this approach is Bourdieu's (1977) concept of a cultural 'habitus' in perception. Warburton (2004) discusses the complex technological, intellectual, economic and political influences on the development of colour categories, in a concise study of the Egyptian colour system. On various aspects of chromatic developments in the Mediterranean World, see the edited volume by Borg (1999).

well-illustrated account of the history of paints, dyes, inks, earths and coloured materials, and brings out some important themes for the evolution of colour concepts over time. ¹⁰⁴ S. Garfield's *Mauve* (2000) gives a more focused account of the invention of synthetic chemical dyes in the nineteenth century, and the impact this innovation had for the distribution and diversity of colour in the modern West. 105 Targeted at a more popular readership, D. Batchelor's Chromophobia (2000) adapts Pastoureau's more scholarly Figures et couleurs (1986) - a work that tabulated colour references in Western literature with virtues and vices) and argued that one can identify a universal binary interpretation (positive and negative) of colour across different cultures. Furthermore, D. Jarman's Chroma (1995) provides a moving account of the subjectivities of colour in the face of a rigid and institutionalised colour system. In recent years, this flexible approach to colour aesthetics has found a rich home in scientific research concerned with the challenges of developing a world scale of colour measurement for purposes of global marketing and e-commerce. Its results have been disappointing. 106

Finally, it remains to mention that there have been several important anthropological studies of colour and modes of perception, and since one objective of this book is to situate ancient Rome within the anthropology of perception, it is necessary to say a few words about the methodological contribution of this discipline to the present study. One study in particular that can help shape our understanding of the relationship between colour and culture is that of the nomadic Dinka tribe of the Southern Sudan. This primitive community used to be credited (rather like the eskimoes with their plethora of snowflakes) with distinguishing dozens of colour terms within the yellow-brown range. It was this rich deployment of perceptual categories that led Berlin and Kay to elevate the Dinka to the dizzy heights of stage VII of their evolutionary colour chart

On some aspects of ancient pigments and their application, see Salvetti (1998); Brinkmann (2003b).

¹⁰⁵ See also Chenciner (2000); Butler Greenfield (2005).

These efforts were usefully summarised by Sebba in The Times Higher Education Supplement, 27 October 2000: 18–19.

¹⁰⁷ For this myth, see Lienhardt (1960) 12–16; Beard (2002) 47.

alongside English, Russian and Japanese. 108 More recently, however, anthropologists have observed that many of these categories allude to the colours of their cows. 109 Dinka 'blue', for example, has been identified as the category *majok*, a notable pattern of bovine marking which was reproduced locally on painted branches, pots and other artefacts. Another highly prized category is marial, possessed by Dinka 'personality cows', animals that are ritually castrated to preserve their exclusiveness (and make them bigger and glossier), then richly fed, groomed, sharpened, trained, decorated and paraded endlessly around the community. A marial cow is a work of art, its appearance idolized by the tribal song, and its owners sounding more like art critics than stockbreeders. For the Dinka, then, the visual patterns and categories of their cattle are embedded in the society's memory, experiences and mode of communication. The Dinka provide a useful example of how comparative anthropology can elucidate cultural patterns in colour usage: they help us to understand the relationship between a community's colour categories and its value systems, and they also highlight the importance of the various types of discourse in which these categories are deployed.

Colour and meaning in ancient Rome: objectives and methods

Colour and meaning in ancient Rome attempts to understand how Romans of the early Empire categorised, organised and applied colours, and outlines the differences and similarities between ancient and modern concepts of colour. By drawing together evidence and ideas floated by contemporary philosophers, elegists, epic writers, historians and satirists, this research reinstates colour as an essential informative unit for the classification and evaluation of the Roman world. It also demonstrates that the questions of what

Although Berlin and Kay normally marginalised any terms seen to be derived from other vocabulary items; see Clarke (2004) 132.

On this famous anthropological puzzle, see Coote (1992) 250, following Deng (1972) and (1973). This prompted a critical response from Gell (1995), who situates the aesthetic of the ox in the competitive discourse of the Dinka poet.

colour is and how it functions – as well as how it could abuse the senses – were high on the Roman intellectual agenda. It sets out to offer strategies for understanding and translating Roman expressions of colour in Latin texts, and to suggest new models for understanding fabrics and materials in Roman visual culture. For the cultural historian, it highlights the central role that colour – the concept of *color* and all the categories that constituted it – performed in the realms of communication and information, the intellectual currency that was attached to maintaining solid ties between colour and object, as well as the ethical and philosophical problems generated by the use of what one might term 'abstract' colours.

By focusing primarily on early imperial Rome, this book engages with a period that has received little attention in studies of ancient perception. In doing so, it aims to connect research by M. Clarke, E. Irwin, P.G. Maxwell-Stuart and others on Greek colour perception to James' work on Byzantine colours, as well as to integrate a number of disparate studies of colour in Roman literary and artistic culture. It explores discourses and debates about the role of colour and perception in Rome under the early Empire, and at the same time offers a critical response to various modern theories about ancient perception by suggesting a number of alternative approaches to understanding colour in antiquity. Colour and meaning in ancient Rome develops two central arguments: (1) that a prevailing concern in Roman treatments of colour was the capacity (or incapacity) of the senses to derive knowledge about the world; (2) that the moral, ethical and philosophical dangers of using colour in a misleading or abstract way dominated Roman discussion and debate about perception.

This book is structured into seven chapters, each dealing with a specific aspect or register of colour-use which feeds into an overall argument about the dialogic relationship between perception and knowledge. It is a recurring temptation when undertaking a study of the relationship between colour and culture to seek a generalised or structuralist interpretation, and to pay too little attention to the semiotic and discursive differences that exist between different genres of thought, different areas of life, and different historical contexts. *Colour and meaning in ancient Rome* will attempt both to identify distinct ways of formulating and intepreting colour in a

range of Roman discourses and contexts, and to observe patterns that cut across all these contexts. By doing so, this book aims to write a cultural history of Roman colour that is sensitive to the different registers and nuances of perception that were formulated in the highly educated male elite metropolitan discourses of early imperial Rome.

Chapter I examines discussions by Seneca and other Latin writers of the *locus classicus* of colour discrimination, the rainbow. The rainbow is one phenomenon that looked the same in the ancient Mediterranean as it does in the modern West, and yet strategies for classifying and understanding it differ widely not only between cultures but also significantly from viewer to viewer. The rainbow was a giant problem for ancient perception, and this chapter studies the Roman contributions to this perceptual debate, as well as setting them against the background of Greek accounts of the rainbow. This chapter introduces the idea that Roman thinkers, in contexts that to us invite abstract uses of colour, could go to great lengths to establish connections between the colour perceived and the phenomenon that was thought to be responsible for that colour. The chapter closes by examining Newton's efforts to resolve these difficulties, and modern resistance to Newton's ideas of a tidy spectrum, and so illustrates some of the differences between modern and ancient approaches to colour (as well as the continuity of some of the key debates).

The second chapter situates the questions, debates and problems concerning the rainbow within a larger philosophical debate about the epistemology of vision. It first assesses the role of colour and perception in various strands of classical Greek and Hellenistic philosophy and explores differences and debates between these schools concerning the formulation, function and evaluation of colour. It also highlights the importance of the hotly contested relationship between perception and knowledge in philosophical discussions of colour. Against this background, this chapter revisits Lucretius' detailed discussion of colour in *De Rerum Natura* book 2, and explores how Lucretius related colour to the ethics and morals of perception in attempting to teach the correct way to 'view and understand'.

Chapter 3, on the 'unnatural history' of color, engages in a detailed study of the role of color in key sections of Pliny's

Natural History, situating his commentaries against the background of his bigger moral and philosophical project about the values of the early Empire. Pliny has always been a rich source for the use and interpretation of Latin categories of colour in Roman material culture; this chapter argues that he too was participating in the traditional moral and philosophical debates about the relationship between perception and knowledge. It explores the use of color as a tool of classification and evaluation in Pliny's discussion of three key elements of Roman material culture: marbles (book 36), pigments (book 35) and gems (book 37). This chapter examines the troublesome relationship between the identity/provenance of these materials, and the categories of colour with which they were described. It argues that one can detect a great deal of philosophical frustration underlying the text concerning the misuse of colour as a tool of classification in contemporary material culture. In doing so, the chapter offers an original interpretation of the relationship between early imperial aesthetics and *luxuria*, a theme that is now well established in Plinian studies.

Chapter 4, 'Color and rhetoric', studies the development of the category color in Latin rhetorical circles, its relationship to physical and material color, and the ethical values and ambiguities implicated in the exercise of color in oratory. The same questions about appearance, nature and classification that so bothered Pliny in his account of color also underpinned Roman debates about the color of oratory, and the relationship of that color to the character of the speaker. This chapter examines sections of Cicero's rhetorical works, as well as discussions of color in the works of the Elder Seneca and Quintilian, and also explores the role of rhetorical color in Roman drama. It also studies similarities and differences in uses of the Greek chroma, and considers how and why color became such a key category of rhetorical personality in the late Republic and early Empire. This chapter, then, sets the scene for a detailed study of the description and evaluation of color on the Roman body.

Chapter 5 forms the first of two chapters on the classification and evaluation of colour on the body, and complements the previous chapter's focus on rhetorical *color* and personality by studying the range of natural skin, hair and eye colours that were connected to an individual's ethnicity, profession and behaviour, both in medical

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and physiognomic texts, and in a broader range of Latin literature concerned with personal appearance. In these contexts, *color* was a basic index of information about the individual's character and background. This chapter also examines interpretations of blushing and blanching, and considers how these spontaneous changes in colour were connected to morals, behaviour and character. This study draws upon a range of elite texts (especially Latin elegy) which derive social, cultural and political meaning from natural bodily appearances and insert that meaning into the centre of contemporary racial, economic and ethical debates. In particular, it draws attention to the emphasis on colour *change* in these debates, and the ramifications that such change held for visual cognition and social understanding.

Chapter 6 pursues the study of colour manipulation to its next logical stage by examining the interpretation and evaluation of artificial and cosmetic schemes of colour on the Roman body. In particular, it demonstrates that the manipulation of those colours explored in Chapter 5 was a subject high on the moral agenda of the Roman literary elite, and that what was at stake was precisely this relationship between perception and knowledge. The bestdocumented area of study is the use of make-up by Roman ladies, which several of Ovid's poems make one of their central themes. By endowing the wearer with different/unnatural colores, cosmetics interfered with the correct understanding of the individual's personality and character, and were therefore a long-standing site for ambiguity and controversy, linked to traditional discourses of feminine deceit and entrapment. This chapter will also consider, to similar ends, accounts of the use of hair dyes and wigs, and the impact of diverse and exotic cloth-dyes on the understanding and interpretation of the Roman body.

The final chapter concentrates on the most controversial and well-studied of Roman colours: *purpura* (the 'murex snail' aka 'sea-purple dye' aka 'purple'). As the most historically significant of the artificial colours discussed in Chapter 6, *purpura* developed the most complex and multifarious set of meanings and associations, and its role on the body was a popular topic of social, political and moral debate. This chapter considers the position of *purpura* in the context of ideas raised by earlier chapters

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(particularly Chapter 3 on the classification of material culture and Chapter 6 on colour/identity manipulation). It argues that seapurple, with its flexible and negotiable associations with luxury, autocracy and decadence, was a paradigm for the development of abstract colours in antiquity (that is, colours that lose their association with the objects to which they properly belong). This chapter also represents the book's boldest attempt to historicise Roman colour, by exploring shifts in the categorisation and evaluation of *purpura* from the mid Republic through to the late Empire.

The conclusion identifies cultural patterns in colour usage that cut across the various genres and contexts examined within the book. In particular, it returns to the ancient preoccupation with the relationship between perception and knowledge, and considers Rome's historical contribution to this trend as part of a broader history of ideas. In addition, it identifies the major differences and similarities between modern and ancient Roman systems of colour, and suggests ways that an appreciation of these differences can aid textual interpretation and artistic ekphrasis. As a concluding motif, the book compares descriptions of Queen Elizabeth II's Coronation with ancient descriptions of the Roman triumph, and, by examining these two distinctive spectacles side-by-side, highlights some of the key differences between modern and ancient uses of colour.

One of the most extensively cited, and least understood, ancient discussions of colour is Aulus Gellius' *Attic Nights* 2.26, a debate about the relative richness of Greek and Latin colour terms produced within the bilingual elite culture of second-century Rome. The book closes with an *Envoi* that applies some of the approaches, ideas and patterns observed in other contexts of Roman colour usage as a test-case for reinterpreting this difficult text. In doing so, it is hoped that the final section can operate as a pilot for the practical application of findings from this research to reach a greater understanding of the role of colour within Roman literature.

INDEX OF ANCIENT PASSAGES DISCUSSED

This index is not a definitive list of ancient references within this book. I have selected references to passages which are discussed in some detail, or which have particular significance for the argument presented.

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This is a selective index of themes, phenomena, persons and categories that are discussed in detail in the book. One of the book's critical arguments is that it is misleading to separate colour categories from the objects they describe, and so it diverges from previous discussions of colour in antiquity in not attempting to draw up a glossary of ancient colour terms. The key categories addressed by this book (which are by no means definitive) are listed below under 'colours, key categories discussed'.

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