Zeitschrift: Entretiens sur l'Antiquité classique

Herausgeber: Fondation Hardt pour l'étude de l'Antiquité classique

Band: 66 (2020)

Artikel: The indiscreet charm of brightness: from early Greek thought to Plato

Autor: Sassi, Maria Michela

DOI: https://doi.org/10.5169/seals-1055044

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Siehe Rechtliche Hinweise.

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. <u>Voir Informations légales.</u>

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. See Legal notice.

Download PDF: 16.05.2025

ETH-Bibliothek Zürich, E-Periodica, https://www.e-periodica.ch

Maria Michela Sassi

THE INDISCREET CHARM OF BRIGHTNESS: FROM EARLY GREEK THOUGHT TO PLATO

ABSTRACT

In the surviving fragments of the early Greek philosophers we find evidence both of the awareness of the emotional impact of colours on the observer depending on their luminosity (or the lack thereof) and of the suspicion that colours may constitute or, worse, be exploited as a deceitful covering of the truth (cf. Parmenides, Fragment 8, 39-41 DK; Empedocles, Fragment 23 DK; Gorgias, Fragment 11, 17-18 DK). This judgment about the 'ambivalence' of colours is clearly shared by Plato, as shown by his criticism of painting, and particularly of the technique of σχιαγραφία, in the broader framework of his discussion on mimesis. However, Plato is far from being immune to the charm of colours in nature as well as in painting. As a matter of fact, as I argue in this paper, it can be shown that Plato conceived the luminosity of certain colours (esp. 'white' and the colours of precious metals) as the sensible medium through which intelligible Beauty makes itself visible to the human eye.

In this paper I will elaborate on the basic observation that the issue of how and to what extent colours are related to the truth of things was crucial to Greek philosophers from Parmenides to Plato. These figures variously reflected on the divide between the knowledge afforded by the senses (among which vision was of course paradigmatic) and the need to trace basic principles underlying the variety of sensible experience. I will observe that the chromatic phenomenon was particularly intriguing to them owing to its ingrained ambivalence. In fact, on one hand, colour remains a

major factor for our identification of items in the world, and is thus our most helpful navigator in interacting with our surroundings; on the other hand, the information conveyed by colours properly concerns just the *surface* of an object, which in certain (not necessarily philosophical) situations may raise the question of whether colour conceals rather than reveals the *true* nature of an object. Furthermore, colour does not come alone, as it were, to the eye: that is to say, colour not only lends itself to the maximum subjective variability among the sensible qualities, but it is also the one most exposed (followed only by sound) to being charged with symbolic associations and emotional meanings. As to the latter, I will point out a few philosophical contexts in which the vision of certain colours (normally the brighter ones) is more or less explicitly linked to a typical aesthetic emotion, *pleasure*, which is likely to trigger ethical concerns — as I will occasionally note for Plato.¹

This paper is divided into three sections. First, I will preliminarily recall a few assumptions that Greek theories about colours shared with what I call the chromatic 'experience' of the Greeks. Section 2 will be devoted to texts (by Parmenides, Empedocles, Gorgias, and Democritus) in which a notion of the possible deceptiveness of colour starts to emerge significantly. In the last section I will examine the question of Plato's take on colours within the larger and even more controversial framework of his aesthetic stance. In this connection, I will suggest that the philosopher's evaluation of colours, both in nature and in painting practice, was more positive than it has usually been assumed in scholarship.

1. The twilight zone

Let us start from a well-known linguistic fact. The Greek term most often used to designate colour from the 5th century onwards, $\chi \rho \tilde{\omega} \mu \alpha$, is derived from $\chi \rho \delta \alpha / \chi \rho o \iota \dot{\alpha}$, which can indicate both a

¹ This issue is specifically addressed for Aristotle by Elena Cagnoli Fiecconi in this volume.

coloured surface and the colour itself and is directly connected to χρώς, a Homeric word meaning human "skin" but also "complexion". Remarkably, in the Homeric poems, the colour of χρώς is mostly mentioned to emphasize an aesthetic and simultaneous moral dimension (for instance, the association of λευκός to a hero's skin evokes his beauty as well as his κλέος) or a particular emotional state (for instance, the complexion of the valiant warrior, unlike the coward, never changes).² As a matter of fact, the Homeric γρώς is not just a mere envelope of the body, nor a barrier between the 'outer' and the 'inner'. On the contrary, it is one with the body, as shown by the usage of such different terms as δέρμα and δινός for the animal skin (which can be separated from the animal body), whereas γρώς is interchangeable with $\sigma \acute{\alpha} \rho \xi$ (in opposition to the bones) in the frequent descriptions of the body either pierced by spears in battle or liquified and softened by strong emotions. One may even say that in Homer "there is no body (χρώς) until it is penetrated, cut, dismembered, dried out, wasted away, mutilated, and so forth".3 In particular, it is easy to notice that the epithets of skin — including καλός, τέρην, and, more importantly to us, λευχός — are usually aimed to emphasize its delicacy and thus the penetrability and vulnerability of the living heroic body. ⁴ The expression χρόα λειριόεντα threateningly used by Hector for Ajax's body (Il. 13, 830) deserves special mention, owing to its synaesthetic effect: for λειριόεις, "lily-like", connotes the delicate texture of the warrior's body by evoking both the colour and the softness of the flower.⁵

In sum, an analysis of the Homeric language shows that adjectives of skin colour were not just apt to inform about the

² CARASTRO (2009).

 $^{^3}$ Gavrilenko (2012) 290. This essay is a significant contribution to the discussion on the Homeric concept of body.

⁴ Gavrilenko (2012) 291.

⁵ IRWIN (1974) 114-116 and 206-213 on λευχός and λειριόεις used to denote both the texture and the colour of female skin and of the vulnerable heroic bodies (without forgetting that both adjectives can also describe high-pitched and clear sounds).

individual's exterior appearance. On the contrary, they were seen as revealing his or her inner states of mind, and this notion was bound to orient the physiognomic gaze throughout antiquity.⁶ On the other hand and equally importantly, colours could work as indicators of inner physical states. I am of course thinking of how the colours not only of skin or eyes, but also of the tongue, urine, spit, and vomit, worked as symptoms of disease to ancient doctors from Hippocrates to Galen — as they do to a personal clinical gaze even today when medicine is provided with instrumental means of diagnosis that were unthinkable in the ancient world.⁷ Furthermore, the surface of the body was believed to reflect the colours of the various internal components: physical constitutions were often classified according to the elementary property and/or the humour that was supposed to prevail and determine the colour of the skin (for instance, lighter and darker complexions indicate more humid and dryer constitutions, respectively); colour change might indicate the morbid effect (the darker the more ominous) of one particular humour exceeding in quantity or irregularly moving through the body (the bile being either yellow-green or black, the phlegma white, the blood red). In such contexts colours even seem to work as material substances, endowed with a force of their own. Most telling is a passage from the Hippocratic Prognostic 13, wherein vomiting dark and black substances is a bad sign, yet the most fatal sign is when the same individual vomits "all the colours" (πάντα τὰ γρώματα).8 However, colours may also have a therapeutic effect: the often repeated

⁶ As a matter of fact, I was incited to reconstruct the cultural background of the ancient Greek physiognomists by noticing that the countless references to complexion in physiognomic descriptions of early Greek literature were quite consistent with the typologies first systematized at the end of the 4th century BC in the pseudo-Aristotelian treatise *De physiognomonia*. See SASSI (2001) 1-81 as well as Grand-Clément (2010) 195-264.

⁷ SASSI (2001) 140-160. For what immediately follows in the text see Trinquier (2002); Villard (2002); Galen's work is helpfully explored from this standpoint by BOEHM (2018).

⁸ A confused coloration of a humour (ποιχίλον) unlike a uniform one (δμόχροον), was considered a bad sign: VILLARD (2002) 55.

view that gazing at green objects (minerals or plants) helps to refresh tired eyes is already found in Pliny's *Naturalis Historia* (37, 62), who develops a comment of Theophrastus in the *De lapidibus* (4, 24), where such virtue is attributed to emeralds. The possibility that this view derived from Egyptian magic medicine does not detract from the fact that it rested on the assumption of a close link and almost an identification of the colour with the material object that it covers.

In fact, the notion that not only the colours of humans but also those of inanimate objects somehow extend from the surface into the body underlies the psychology of colour in the ancient Greek world. Equally specific features of Greek chromatic culture are the polarity of light and darkness, with their symbolic associations to feelings of, respectively, joy/life and sorrow/death, and the related emphasis on luminosity in representing, naming, and classifying colours. One should also mention here the efficacy of the pairing of materiality and sheen in the usage of colours in ancient Mediterranean art, which has been highlighted more and more in scholarship in the last two decades. 10 What is most noteworthy here is that ancient Greek *theories* turn out to be based exactly on such pretheoretical assumptions, that is to say that: a) colour, while exposed to the subjectivity of perception, is a quality intrinsic to the nature of the body; and b) the colour of a body is determined by the amount of light (conceived as an equally material substance) that is present in it, within a range defined by the two extremes of λευχόν (which may indicate both the hue "white" and a maximum degree of brightness) and μέλαν (which may similarly be translated according to the contexts either as "black" or as "dark").¹¹

Nevertheless, philosophers could find the seed of doubt in those assumptions. Within a naturalistic view of colour it was

⁹ LLOYD (2007) 9-22.

¹⁰ ROUVERET / DUBEL / NAAS (2006); STAGER (2016).

¹¹ SASSI (2009) and (2015).

left vague how deep the colour goes from the surface into the body, as well as where and to what extent light trespasses into darkness: the external, more or less thick layer of coloured objects may hide matter that has different properties from what we see, while luminosity may dazzle the eye and therefore prevent distinct vision. It was this intuition of a twilight zone between surface and body, light and darkness, that prompted some philosophers to question the very relation of colours to the nature of things.

2. Fascination cum suspicion: a few early statements

The earliest preserved inkling of mistrust toward colour and its relation to an underlying true reality in early Greek philosophy is found in the work of Parmenides, the same thinker who proclaimed an ontological gap between the world of change deceivingly shown to mortals by sensible perception and the truth of Being that the wise can attain by the sole use of reason. Within the long, complex and rigorous argumentation on the attributes of the one immobile and unalterable Being, Parmenides lists "altering in bright colour" (διά ... χρόα φανόν άμείβειν, 28 B 8, 41 DK) along with generation and corruption, being and not being, among the sensible appearances which mortals trust to be true (39). Since perceptual information — and, for Parmenides, the illusion of perceiving — is essentially based on sight, colour is taken as the sensible datum par excellence. In the condensed phrase contained in Frg. 8, the emphasis on the brightness inherent to the chromatic phaenomenon serves as a warning against the power of colour to cover the truth of Being by holding the sense of sight back on the (multiple) surfaces of things.

Whereas Melissus collects the Eleatic heritage and mentions black and white with water, fire, and iron as examples of the deceptive multiplicity of the sensible world (30 B 8, 2 DK), Empedocles is more sympathetic to chromatic appearances, in

accordance with his giving back to perception an important role in grasping the principles underlying the natural phenomena. For he maintains that all "forms and colours of mortal beings" (εἴδη τε γενοίατο χροῖά τε θνητῶν: 31 B 71, 3 DK) were born from the mingling of the four divine "roots" according to ordered proportions under the surveillance of Aphrodite. This goddess is a figure for *Philotes*, elsewhere named *Harmonie* because her job is to govern the aggregation of the elements against the complementary, disaggregating power of *Neikos*. As to the elements themselves, two of them have a colour of their own (fire is λευκόν and water is μέλαν), and in any case they are all characterised by a certain degree of brightness, fire and air belonging to the area of lightness, water and earth to that of darkness (31 B 6; 31 B 21, 3-5; 31 B 85; 31 B 96 DK). ¹²

A clear appreciation of brightness occurs in Empedocles' Frg. 93, where a dyeing process is likely described as a mixing in of "splendor of gleaming saffron" (γλαυκής †κρόκου† ... ἀκτίς). 13 Yet a more nuanced view transpires in hindsight from the famous Frg. 23, where Empedocles translates his account of how the multi-coloured biosphere is born thanks to the joint action of Love and Strife on the elements into a vivid analogy between the work of nature and that of two painters intent on painting (ποιχίλλωσιν, l. 1) votive tablets and skilled (ἀμφὶ τέχνης ὑπὸ μήτιος εὖ δεδαῶτε, l. 2) at creating likenesses (εἴδεα ἀλίγκια, 1. 5) of all things, be they trees, men and women, animals, or gods. This is accomplished by mixing in varied proportions a limited number of pigments of various colours (πολύχροα φάρμακα, l. 3). It has been noted that the term φάρμακον alludes to a magical procedure and thus implies that the final product of the skilled artists is enchanting to the beholder, and is therefore possibly deceiving. As a matter of fact, this imagery introduces the exhortation that Empedocles addresses a few lines later to his listener: the listener's mind should escape the deception (ἀπάτη,

¹² Ierodiakonou (2005a).

¹³ According to the reading and translation in LAKS-MOST edition.

l. 9) inherent to the variegate spectacle of nature and should rather adhere to Empedocles' teaching, which will reveal the true nature of those components of the sensible world that get blurred in the mixture/picture.¹⁴

Interestingly, Empedocles' view on colours resurfaces and is reversed in a passage of Gorgias' Encomium of Helen. The Sophist Gorgias is of course not interested in questioning any truth that lies possibly hidden under the sensible appearances. All that is valuable belongs to the world of subjective cognition, which includes perceptions, emotions, and opinions. These are determined by the persuasive power of the *logos* spoken by whoever is able to skilfully appeal to emotions rather than reason to condition the listener's mind. Thus, in order to exhibit his rhetoric ability in defending Helen from the worst of accusations — namely of having caused the disastrous war between Greeks and Trojans by following Paris to his country — Gorgias paradoxically argues that she is not at all responsible for it, since her will was externally determined in any case. Taking this perspective, Helen was forced by the gods, abducted with violence, dragged along by eros or by the seductive words of her lover (82 B 11, 6-8 DK). In this case the $\lambda \delta \gamma \sigma \zeta$ serves to implement the erotic impulse, but in the following paragraphs Gorgias presents the capability of poetic language to elicit emotions, as exhibited by two interesting parallels. The first of these concerns the similar effects that magic enchantments (ἐπωδαί, §10) may have on the $\psi \nu \chi \dot{\eta}$ leading to pleasure and eliminating pain, while the second example is centered on the efficacy of doctors' drugs (φάρμακα, §14) in restoring bodily health. Later on, in arguing that the greatest emotional effects derive from the author's talent in representing things as if these were before the eyes of the audience, Gorgias introduces a further analogy (likely taken from Empedocles' Frg. 23) with the work of painters, who "pleasure

 $^{^{14}}$ Skarsouli (2009). As to the meaning of ποιχίλλωσιν see Grand-Clément (2015) on the concept of ποιχιλία being constantly suspended between enchantment and illusion, as it will also emerge from a number of texts considered below in this work.

the eyes" (τέρπουσιν) by accomplishing from many colours and bodies a single body and a single shape (σχημα, §18).

Composing a *logos* by combining words is like composing a painting by mixing colours. While the *inlustrandum* in Empedocles' text is different (the working of nature), the *inlustrans* remains the same. In both contexts, the painters' practice is presented as a manipulation of materials that gives birth to entities that not only have a reality of their own, but are also emotionally stimulating. The deceptiveness involved in the contemplation of artificial figures that simulate real ones, while not explicit in Gorgias' version of the analogy, can be easily inferred from the general emphasis in the *Encomium* on the enchanting power of *logos*. In any case, in the anonymous sophistic work Dissoi logoi, likely written some time after 400 BC, it is clearly said that "in tragedy as well as in painting, the best is the one who is able to deceive by creating things similar to the real ones ($\delta\mu$ οια τοῖς ἀληθινοῖς)" (3, 10). These texts are free of the concern for the truth of things that motivated Empedocles to evoke the art of painting and those that will be central to Plato's reflections on mimesis. Nevertheless, it seems that the focus on the power of painting to produce a 'second life' was initiated in the Sophistic context, likely stimulated by the noticeable naturalistic trend of contemporary painting. 15

It should also be noted that one concept of aesthetic pleasure that emerges from Gorgias' statement, which visual arts share with poetry (as well as with its emulator, Gorgian rhetoric), is a great potential to delight the audience. This observation prompts us to include into this picture Democritus' account of colour, which is reported in the *De sensibus* by Theophrastus (73-82, in 68 A 135 DK) and likely derives from the treatise that the atomist specifically dedicated to colours (Περὶ χροῶν, included in Thrasyllus' catalogue of Democritus' writings related by Diogenes Laertius 9, 46, in 68 A 33 DK). It is true that

¹⁵ Leszl (2004) 161-164; Tanner (2016) 108.

Democritus was an exception in antiquity in maintaining that colours are not quite intrinsic to the bodies, as the latter are atomic aggregates only characterized by quantitative properties. However, an appreciation of the brightness factor remained central to his theory, in which the variety of colours was made to depend on how atmospheric light is reflected through and from the reticular surface of objects. This latter point is determined by the shape, position and reciprocal arrangement of atoms, thus producing a certain chromatic quality that is transmitted to the eye through the visual *eidôlon*. For example, $\lambda \epsilon \nu \mu \delta \nu$ is the colour of "what is smooth. For what neither is rough nor casts shadows nor is hard to penetrate — all this stuff is brilliant $(\lambda \alpha \mu \pi \rho \delta \nu)$. Bright things must also have straight passages for the light to pass through" (Theophr. *Sens.* 73).

What is more, there are a few indications that Democritus paid attention to the pleasure inherent to chromatic vision and traced it precisely back to the aforementioned brightness factor. For example, in his account of the generation of the different colours from various combinations of the four primary ones (λευχόν, μέλαν, ἐρυθρόν, γλωρόν), he states that the mixture of red and white (corresponding to a golden and copper-like colour) plus a small amount of green (adding probably a sense of freshness and life) yields "the most beautiful colour" (τὸ κάλλιστον γρωμα, Theophr. Sens. 76). Whatever metal is referred to here, there is no doubt that Democritus shared with all Greek culture since Homer a peculiar sensitivity to precious metals and to the artifacts made with them. 16 Yet it has been demonstrated that Democritus' theory, as well as Plato's, about the production of colours is based on speculations on mixing lights rather than on empirical observations of metallurgical operations or of mixing pigments in the painting practice.¹⁷ There is thus all the more reason to underscore the focus of

¹⁶ SASSI (2014); SASSI (2015) 265; GRAND-CLÉMENT (2016). This point emerges as well from Philipp Jockey's contribution to this volume.

¹⁷ STRUYCKEN (2003). The same might also be argued (as I plan to do elsewhere) for Aristotle's accounts in *Sens.* 439b18-440a15 and *Meteor.* 371b18-375b15.

these theories on the luminous intensity of colours and the aesthetic feelings that follow. Democritus also links the "delightful appearance" (ἡδύ φαίνεσθαι πρὸς τὴν αἴσθησιν) of the colour purple (τὸ πορφυροῦν: a mixture mainly made of red, some white, and just a bit of black) to the presence of λευκόν, which is indicated by the bright reflections of purple objects (τὸ λαμπρὸν καὶ διαυγής, Theophr. Sens. 77). 18

It is unfortunate that we do not have any fragments of Democritus' writing on Drawing with rays (Ἀκτινογραφίη, a title attested in Thrasyllus' catalogue, Diog. Laert. 9, 47, within the group of the mathematical works). We can only suppose that this writing was the same as what Democritus was encouraged to write (like Anaxagoras) by Agatharchus, a well-known theatrical scenographer working for Aeschylus and Sophocles, according to Vitruvius (7, Praef. 10). Recent work on scenepainting in the Athenian theatre has confirmed that, in this context, a specific kind of perspective painting (σκηνογραφία) was elaborated, whereby the images of buildings in the background were drawn in such a way as to give a general impression of three-dimensionality; and this could happen only by applying certain geometrical notions about light travelling in the form of linear rays, measuring shadows, and so on.¹⁹ Although one can only speculate that Democritus might have poured his interest in visual perception and colours into the optical research requested by scenographic art, 20 we can at least get a useful idea from this problematic subject. That is to say, it is likely that experts of σκηνογραφία shared the interest in the behaviour of light-rays as well as in the potential of colours with that technique of shadow-painting (σκιαγραφία) that would be a major target of Plato's criticism.

¹⁸ On Aristotle's judgment that purple (άλουργόν) and crimson (φοινιχοῦν) are "the most attractive colours" (τὰ ήδιστα τῶν χρωμάτων, Sens. 439b32-440a1) see Sassi (2015) 266. On the peculiar resonances of purple both in the Greek and the Latin world see Grand-Clément (2011) 116-120; Bradley (2009) 189-211.

¹⁹ Tanner (2016).

²⁰ PORTER (2010) 210-212.

3. Plato, a colour lover?

The standard view is that Plato aligns to — and firmly establishes on the basis of his ontological stance — the depreciation of the cognitive content of colours that had already emerged in such earlier statements as those by Parmenides and Empedocles. At the same time, he turns Gorgias' observation of the emotional potential of visual arts into a disparaging judgment on the delusory claims of contemporary painting to represent the 'truth' of things.

As an authority on aesthetic ancient thought, James Porter remarked ten years ago that "Plato appears to be echoing Parmenides, who in his great poem took a firm line against phenomena generally and against color (and change) in particular. [...] Color is objectionable — not a property worthy of true Being — because it just is an alteration of the visible spectrum, unlike white, which represents visuality in its purest, most limpid, and unchanging condition". 21 In principle one can only agree with the notion of a direct link between Plato's and Parmenides' ontological as well as epistemological dualism. Nevertheless, I do not concur with the aftermath of this claim and with Porter's general interpretation of Plato's aesthetic thought, wherein the aforesaid standard view is taken to the extreme. In fact, Porter plays what he claims to be Plato's (and Aristotle's) "formalism" against "Presocratic materialism", holding that Plato's aesthetics is one "of purity", "a minimal aesthetics" (or even an anti-aesthetics) essentially related to his being "unfriendly to the senses" and especially to the vision of colours, which comes to the fore in his criticism of the manipulation of pigments used in the σχιαγραφία technique to seduce people into a false perception of reality.²² Conversely, I will argue against the grain in

²¹ PORTER (2010) 88 (italics in the text).

²² For a similar, though more nuanced, view, cf., e.g., BAJ (2009). I feel closer to Stephen Halliwell's balanced approach in HALLIWELL (2002), although he admits that Plato's theory of mimesis is "anti-aesthetic" because of the intrusion of ethico-cultural concepts (140).

trying to demonstrate, through an examination of the relevant texts, that Plato was rather ambivalent toward colours and, if anything, in his attitude, fascination won over suspiciousness. I organize the survey that follows according to a sequence aimed at setting out how Plato's perspective shifts, passing through superimposed layers of the appearance of the human body, moving from the observation of counterfeit aesthetic practices of coloration of the skin (in cosmetics) to pictorial representations of the physical world, to the colours featured in natural bodies. I then will question what Plato means by "pure" colours and which place he assigns them within his ontological framework. Lastly, I will attempt to clarify what might be Plato's notion of the relation of colours and light in accordance with his metaphysical premises. For I do not think that colours were conceived by Plato as "just... alterations of the visible spectrum", namely, of the "visuality in its purest and unchanging condition" represented by white, as Porter purports in the passage quoted above. Porter seems indeed to attribute to Plato a Newtonian concept of light while at the same time ignoring that Greek "white" (λευκόν) did not coincide with atmospheric light, although it had the privileged status of being determined by the maximum degree of luminosity. Λευκόν was instead conceived as a colour itself, placed at one extremity of the coloured spectrum, whose interaction with the polar opposite μέλαν (and possibly with other basic colours, most often red) was to generate all the *other* colours.

3.1. Artificial colours

3.1.1. Cosmetics and dyeing

One does not need to say much to prove that Plato totally rejects the cosmetic use of colours as adornment for the human body. Joining an anticosmetic trend widespread in the Greco-Roman world, in accordance with an ethical code in which natural

beauty is associated to physical and moral health,²³ Plato claims in the *Gorgias* (465b) that cosmetics (κομμωτική) are a deceitful and despicable pseudo-art, "unworthy of a free man". For Plato, cosmetics counterfeits gymnastics in producing through colours and other embellishments an "unnatural [or alien: ἀλλότριον] beauty", the exact opposite of the natural beauty of a body shaped by gymnastic exercise. Furthermore, in the *Phaedrus* (239c-d), Plato specifically deplores the behaviour of the effeminate man, who, having neglected physical effort and masculine exertion, ends up with a pallid complexion that is contrary to men's "natural beauty", prompting him to conceal it with "alien" hues.

Interestingly, at Lys. 217d Socrates argues that if someone were to dye his blond hair with white lead (ψιμυθίω ἀλείψειεν) so that whiteness is present in them, they would not be but rather just appear white. No moral judgment emerges in this exemplification aimed at demonstrating that something can be neither bad nor good, therefore not yet bad even if bad is present (217e). Yet what is interesting in this passage is the implication that spreading a coloured substance on an object is a superficial operation that does not bring about a change in the essential properties of an object. The use of the verb ἀλείφω is significant too, because it typically occurs in Greek literature to designate the action of "smearing" and "anointing with" in contexts describing cosmetic as well as painting practices. Let us mention here as well that the frequent description of pigments and cosmetic materials as φάρμακα worked as a constant reminder of their being artificial, albeit effective, means to create beauty.²⁴ Similarly, in Resp. 601b the verb ἐπιχρωματίζειν is used to indicate the deceitful habit of poets who try to mask their defective compositions by

²³ Grand-Clément (2011) 285-290; Bradley (2009) 260-288. For a picture embracing Plato and Xenophon see YATES (2016).

²⁴ Cf. Grand-Clément (2011) 43-48. However, Plato was aware that some dyeing practices have a more durable effect: this was famously the case of purple dyeing, which Plato invokes to explain how the soul of the soldiers in Kallipolis must be permanently marked by education. This instills in them the firmest opinions on what should or should not be feared, namely, the kind of knowledge on which the virtue of courage is based (*Resp.* 429a-430c).

overlapping the adornments of rhythm, metre, and harmony.²⁵ However, this is just one among many of Plato's references to the use of colours in painting practice, which it is now appropriate to deal with specifically.

3.1.2. The painters' colours

In the last book of the Republic, Plato famously resumes the criticism of poetical mimesis that he had initiated in Books 2 and 3, blaming traditional mythoi for the dangerous effect they have on souls by representing gods fighting with each other and heroes getting emotional in the face of their own or others' death (376e-390a). In book 10, the perspective is metaphysical rather than moral, and Plato starts from a neat distinction between the Forms, the sensible objects, and the products of art. This is done in order to argue that art does not imitate what is the way it is, but what appears the way it appears. Therefore, in producing mere images (είδωλα) of sensible appearances that are in turn images of the Forms, art is two steps removed from reality (595a-598d). An analogy between poetry and painting is central to Plato's argument, based on the observation that a "good painter" is in fact the one who is able to paint a carpenter and, showing it from afar, to make fools believe that what they see is a true human figure (598b-c). Moreover, painters are not interested in knowing the truth about the objects they imitate (601a-b). What is worse, they are aware that they deceive people, aiming to confuse the beholder's chromatic vision (την περί τὰ χρώματα ... πλάνην τῆς δψεως), and to affect that part of his or her soul that is incapable of judgment, by what is a real witchcraft (γοητεία), namely, σκιαγραφία (602c-d).²⁶

²⁵ Leszl (2006b) 337-338.

²⁶ In *Resp.* 523b 5-6 "things painted in σχιαγραφία" (τὰ ἐσχιαγραφγημένα) are mentioned along with "things appearing from afar" as examples of optical illusion within a discussion on the clearness of perception. The judgment on τέχνη φανταστιχή in PL. *Soph.* 234b belongs to this set of problems.

As mentioned above, the term σκιαγραφία indicates a technique more or less corresponding to the modern chiaroscuro, which took hold in Greek painting between the 5th and 4th centuries BC and was likely based on lightening and darkening colours with broad brush strokes in order to achieve a naturalistic effect, thus blending in any distinctly drawn contours and producing an effect of trompe-l'oeil.²⁷ Plato's harsh judgment in Resp. 10 has persuaded most scholars that the philosopher blamed this artistic trend to the point of being completely hostile to any attempt at representing reality by using coloured pigments, and of considering painted colours to be deceiving owing to their being there, so to speak, covering the truth of things. A fatal objection to this generalization, raised as far as I know only by Walter Leszl, is that the disparaging analogy between poetry and painting is abandoned when Plato resumes "the greatest charge against poetry". This accusation instills into the audience that irrational emotions are disruptive for the psychical equilibrium of the citizens (see for instance Resp. 605c-d). "This must imply", Leszl writes, "that painting does not give rise to the same sort of emotional involvement in the observers".²⁸

Let us mention now that, in the *Cratylus*, Plato sketches a definition of visual representation as something that succeeds in representing the image ($\varepsilon i \varkappa \omega \nu$) of an individual by reproducing just his or her "colour and shape" ($\chi \rho \tilde{\omega} \mu \alpha \varkappa \alpha i \sigma \chi \tilde{\eta} \mu \alpha$). This is a critical point, given that reproducing all the qualities of the model, life and movement included, thus creates not an image but a duplicate, and is a prerogative of god (432b-c). This, then, is "perhaps the nearest Plato comes to providing a definition of pictorial mimesis".²⁹ Although it would be difficult to make the skiagraphic *technê* fit this (neutral) definition, there is no reason to doubt that the definition remained central to Plato's conception of the visual arts. Moreover, let us note that, in the texts

²⁷ ROUVERET (1989) 24-26, 39-63.

²⁸ Leszl (2006b) 268.

²⁹ Halliwell (2002) 126.

that will be examined henceforth, Plato's main concern is with representing human beings or gods (as well as the $\hat{e}thos$ possibly transpiring from their appearance) in conformity with the centrality of the human and animal figure. This is done at the expense of the landscape in ancient Greek painting, as the noun $\zeta\omega\gamma\rho\alpha\varphi\iota\alpha$, the "painting of *live* things", declares.³⁰ Bearing these considerations in mind, we will more readily observe that Plato was anything but hostile to a certain use of colours that was not at all absent in contemporary artistic practice. More specifically, a survey of the numerous occurrences of $\sigma\kappa\iota\alpha\gamma\rho\alpha\varphi\iota\alpha$ in Plato's work will show that his appraisal was at the very least elastic.

It is true that σχιαγραφία is often mentioned for its producing representations that seem to mean something only if seen from far away, as it happens with a theoretical statement or a notion of virtue that does not hold up under close analysis (Resp. 365c; Tht. 208e; Prm. 165c-d; Leg. 663c). However, this kind of references have an essentially metaphorical function, and the same can be said of the parallels between the simultaneous presence of contrasting colours in a painting and the alternation and intermingling of pleasures and pains in human life. This makes it so that only intelligent people are able to recognise the "true pleasure", while others are to get only a false image (εἴδωλον, Plat. Phd. 69b; Resp. 583b, 586b-c). All in all, one should not read in these passages a strictly aesthetic feeling of aversion toward the σχιαγραφία technique and even less toward the use of coloured pigments in visual representation.³¹

³⁰ ROUVERET (1989) 50-53.

³¹ Keuls (1978) 78-87; Rouveret (1989) 42-53; Tanner (2016) 117-121. Tanner adds an interesting comparison with the paintings of the Great Tomb at Lefkadia, dated to the early 3rd century BC. Let us add here that the observation at Pl. Resp. 378b that Gigantomachies should not be narrated nor represented with a wealth of vivid hues (μυθολογητέον ... ποιχιλτέον) does not imply so much a disparaging of the act of ποιχίλλειν in itself as the fact that vivid colours add attraction and efficacy to representations of fights among gods that should not be there at all, owing to the bad influence they would exert on the education of the guardians of the city (a similar point is made at Pl. Euthphr. 6c). See Grand-Clément (2016) 415-416 on ποιχιλία meaning disorder and malfunction in Plato's ethical and political imagery.

Let us dwell now on one among the latest references to σχιαγραφία in Plato. At the beginning of his speech in the homonymous dialogue, Critias requests benevolence from the audience by suggesting that it is more difficult to speak on mortals than on gods, as Timaeus did earlier, because humans are better judges of the things that concern them. That is why "an unclear and deceptive σκιαγραφία" is more acceptable in landscape painting than in the depiction of divine and human bodies, which requires more precision (ἀμρίβεια, Criti. 107c). One may read in this passage — which assumes the centrality of human life in the philosopher's horizon — a statement about specific requisites (in this case, ἀκρίβεια) for an accurate representation of the human figure. In other words, a correct use of colours is admitted by Plato, with correctness (ὀρθότης) being given by honest approximation to, not pretending to be clonation of, the true nature of things. Another related requisite, namely appropriateness, is specified at the beginning of Republic 4, where Socrates argues that the ideal State that is being founded is going to be happy "as a whole" (ὅλην), not limited to a privileged class of people. Similarly, for a statue to be truly beautiful, every part must be painted with the colour that is appropriate (τὰ προσήμοντα) in relation to the beauty of the whole. For instance, a part as beautiful as the eye should not be painted with "the most beautiful pigments" (φάρμακα), in this case purple (ὄστρειον), as if the guardians of the polis should have the privilege of happiness, but black, as the eyes usually are by nature (Resp. 420c-d).³² The way in which Socrates argues for a realistic coloration of statues in this passage, as well as the prompt assent by Adeimantus, indicates that such was indeed the usual approach, something that is confirmed by the intensive

³² ROUVERET (2006), in examining the similar judgment ascribed to Sophocles in ATH. 603F-604A, rightly remarks that in *Resp.* 420c-d the reference to purple with its connotations of preciousness is evocative of the problem of the distribution of wealth within the polis.

work of reconstruction of the polychromy of ancient sculpture in archaeology today.³³

A passage in the *Cratylus* shows that Plato's appreciation for the search of a naturalistic although not illusionistic effect must not be limited to sculpture. Assuming the definition of pictorial art formerly given in the dialogue (422e), Plato compares the painters' mixing of the pigments (φάρμακα) they deem more appropriate to portray a certain complexion (ἀνδρείκελον) with the combination of letters into words and of words into speeches. He concludes that the *logos* is a product of the art of naming, or of rhetoric, or whichever art may be, in the same way as the figure $(\tau \delta \zeta \tilde{\omega} \circ \nu)$ is the product of painting (424a-425b). More importantly, right in the Republic, one can find a number of variations on this theme aimed at emphasizing the need to adhere to the reality of human affairs in designing the ideal State — variations mostly neglected by scholars of Plato's aesthetics, though no less numerous than the references to σκιαγραφία. Suffice it to mention Resp. 500e-501d, where the philosopher-ruler is described as a "painter of constitutions" (πολιτειῶν ζωγράφος) who mixes the various forms of human life in order to produce a unitary ἀνδρείχελον modelled on divine life.34 It is also noteworthy that in a later dialogue, the Statesman, Socrates likens the talk of truth he has just delivered to a picture of a living creature which has contours (περιφέρειαν) good enough to be followed by clever people, but in order to be comprehensible to others needs to get the clearness (ἐνάργειαν) provided by such an artful aid as the blending of colours (τοῖς

³³ PRIMAVESI (2004); BRINKMANN / WÜNSCHE (2004). See also STAGER (2016) 99-101 on the blue-black eyes of Zeus and Ganymedes in the famous painted terracotta sculpture from Olympia (early 5th century BC).

³⁴ VILLARD (2006) links the semantics of ἀνδρείχελον in the *Cratylus* and the *Republic* to Plato's taste for chromatic realism, which is all the more significant in that the term is attested in contexts regarding painting starting with the 4th century and is applied to statuary later. HALLIWELL (2002) 130 points out that the frequence of similar images in the *Republic* (besides 500c-501e see 472d, 484c, 540a) makes the project of Kallipolis to appear like a sort of great verbal painting. In this connexion we must add the painter analogy in *Leg.* 769a7-e2, which pivots around the concept of ἀκρίβεια, as BARTELS (2017) 152-166 rightly, points out.

φαρμάκοις καὶ τῆ συγκράσει τῶν χρωμάτων, Plt. 277c-d). Here the concept of ἐνάργεια starts to emerge, which is destined to become an important category of art criticism, and, significantly to us, is implicitly linked to the brightness potential of colours. This is further proof that Plato is far from denigrating painted colours, provided they are applied in accordance with other criteria that will become part of the vocabulary of art criticism, namely ἀκρίβεια, ὀρθότης, and προσῆκον.

All in all, painted colours maintain their appeal to Plato to the extent that they stick to the appearance of sensible objects. But what about the sensible colours themselves? Do they tell us the truth about things — and if so, to what extent — or do they conceal it from us? Dwelling on a few passages of the Timaeus will help us show that Plato was anything but unsensitive to the fascination of the natural colours, insofar as they were endowed with more or less brilliance. This outcome might come as a surprise, if one thinks of the experience of the prisoner forced to get out of the cave as described in Republic 515c-516b. In passing from looking at the shadows on the back wall of the cave, which he believed to be the real things (an obvious metaphor of the illusory world of sensible perception), to seeing the things outside in the light of the intelligible world, the prisoner is blinded by the glare and feels such pain (ἀλγεῖν, όδυνᾶσθαι, ἀγανακτεῖν) that he wants to go back inside the cave. Therefore, his gaze must be educated by being directed first at the shadows and reflections of the outside objects, thus gradually gaining the ability to stare directly at the light of the intelligible truth. A similar image is found in Phd. 99d-e, within an argument on the necessity of resorting to reason in order to grasp the truth of the Good, which is impossible to see immediately in the phaenomena. However, one should take into account that, in a few of his later dialogues, Plato developed a more positive evaluation of the cognitive value of sense perception. This parallels the *Timaeus*, where he focused on the physical world as a worthy object of knowledge no longer populated, so to speak, by mere shadows.

3.2 Natural colours

3.2.1. The colours we see

Plato's theory of chromatic vision borrows from Empedocles (as is already clear in Plato, Meno 76c-d) both the notion of a ray coming out of the eye, which implies a certain agency of the viewer, and the definition of colour as a sensible emanation detaching from the object, which implies a conception of colour as a material substance. Vision takes place, according to the account at Ti. 45b-e, when the visual ray, a particularly pure and tenuous quality of fire, merges into the daylight (which is also materially conceived) and encounters the emanation (more precisely, a "flame") transmitted by coloured objects. Therefore, daylight is not only a condition of the act of vision, but it also forms a body with the fire coming from the objects and helps to shape it. What is determining in the chromatic vision, both on the side of the subject and of the object, is the power of fire, which is given by the fire being constituted by pyramidal particles, whose angular configuration explains its extreme mobility and capacity of penetration into and through the body (see Ti. 55a, 56a-b). The fact that every step of the process is dominated by fire, the bright element par excellence, leaves no doubt that Plato shares that "natural" concept of colour, common to ancient Greek culture, which constantly displays an appreciation of brightness and materiality.

The explanation of the generation of colours at Ti. 67c-68d develops accordingly.³⁵ After echoing Empedocles' definition of colour as a "flame" streaming off from bodies (67c), Plato places $\lambda \epsilon \nu \kappa \delta \nu$ and $\mu \epsilon \lambda \alpha \nu$, as usual, at the two extremes of the chromatic range, corresponding to the maximum degree of light and its absence respectively. The sensation of the former is produced when the particles of the external fire are smaller, dividing and dilating those of the visual ray, while the latter is characterized by

³⁵ Merker (2003) 44-53; Ierodiakonou (2005b).

the opposite process, in which larger particles contract the visual ray and extinguish in the eye, which is primarily composed of water (Ti. 67a). 36 Λευκόν and μέλαν belong to a list of four basic colours, from whose mingling all the other colours in nature are generated. Εανθόν, άλουργόν, ὄρφνινον, φαιόν, and κυανοῦν are primary mixtures, and it is from combining these that secondary mixtures are produced, such as πυρρόν, ώχρόν, γλαυκόν, πράσιον (Ti. 68b-d). The list of basic colours also includes red (ἐρυθρόν), which is produced by a kind of intermediate fire coming from the body, making the visual body lose brilliance when mixed with the humidity (Ti. 68b).

Last but not least in our discussion is the concept of "bright and brilliant" ($\lambda \alpha \mu \pi \rho \delta \nu \tau \epsilon \kappa \alpha i \sigma \tau i \lambda \beta \sigma \nu$, *Ti.* 68a), which is as far as I know a unique instance in any ancient and modern chromatic system. It is worth quoting at length the description of how the latter arises:

"and when a more piercing motion of a different kind of fire strikes upon the visual stream and dilates it as far as to the eyes, and penetrating and dissolving violently the very passages of the eyes causes a mass of fire and water to pour from them — which we call 'tears' — and this movement that is fire encounters fire from the opposite, leaping out as from a lightning, while the other fire gets in and is quenched in the moisture, in this confusion colours of all kinds arise. The affection we call 'dazzling' and the agent which causes it 'bright' and 'brilliant' (μαρμαρυγὰς μὲν τὸ πάθος προσείπομεν, τὸ δὲ τοῦτο ἀπεργαζόμενον λαμπρόν τε καὶ στίλβον ἐπωνομάσαμεν)." (*Ti.* 67e5-68a)

This description might reveal that Plato was anything but unfriendly to natural colours, as he saw the chromatic sensation as the product of a fusion between a luminous substance coming from the objects, daylight, and the fire internal to the eye. It should be added that, in the *Timaeus*, Plato slightly

³⁶ In Plato's geometrical construction of the physical elements, at *Ti.* 56a water is associated to the icosahedron, which is placed between the cube (earth) and the octahedron (air) in the scale of increasing mobility and penetrability at whose top is fire.

modifies a theory that he had advanced in the Republic about the propedeutical value of astronomy in philosophical education. In the Republic, Plato observes the beauty of the ornaments (ποιχίλματα) in the heavens, and invites us to move beyond it to contemplate the highest beauty of the intelligible entities (Resp. 528e-530b). By contratst, in the more sensual perspective of the *Timaeus*, looking at the heavenly bodies is what helps any individual to recognise the perfect order of reason within the physical cosmos, which is like a "sacred image (ἄγαλμα) of the eternal gods" (Ti. 37c). The stars are "visible gods" made of fire dotting the whole heaven with their colours (πεποικιλμένον, 40a7), and observing their circular motions allows the orbits of the rational part of the soul to regain their own regularity after the upheaval due to incarnation (Ti. 47ac). The motion of the stars is defined as a "choric dance" (χορεία, 40c), enjoyable by the senses because its performers spark with light, or, better, with diverse coloured lights.³⁷ It seems appropriate to conclude that the spectacle of heaven in the *Timaeus* takes hold of emotions and senses rather than reason. On the other hand, as I mentioned, it is a central assumption of this dialogue that recognising the order and beauty that pervade the sensible world is a constant reminder of the benevolence of the Demiurge. Accordingly, the colours of the things on earth are all the more appreciated the more they are characterized by brightness. An exception that only proves the rule in this picture is Plato's description of the colours of morbid fluids, which is now worth discussing briefly.

3.2.2. The colours underneath

Similar to how Plato draws from naturalists when discussing the physiology of perception, he takes several notions about

This image is valorized by NIGHTINGALE (2018); on the association of dance and light in ancient literary descriptions, cf. Peponi (2015) 212-213, citing among other texts Od. 8, 265, where the expression μαρμαρυγάς ποδῶν notably occurs, to be compared with μαρμαρυγαί at PL. Ti. 68a.

diseases from medicine (both of the Hippocratic and the Italic lineage), which he reassembles into a system of his own. Since the *Timaeus* is not a medical treatise, considerations on skin colours as symptoms of illnesses are found in only a single example that I will mention shortly. However, just like a doctor, Plato is focused on the changes in the colour of the humours related to physical disorders (Ti. 82e-84a). So, the blood, whose usual colour is red (ἐρυθρόν, Ti. 82e) transmutes into a range of colours and flavours when it mingles with bile, serum and phlegma following the decomposition of the flesh due to some disease (χρώμασι καὶ πικρότησι ποικιλλομένον, ἔτι δε όξείαις καὶ άλμυραῖς δυνάμεσιν). The pathological effects of black bile might be linked to its ominous colour (83c5, 85a5), but the white hue of phlegm does not have the positive resonance that one might expect. On the contrary, phlegm causes all the catarrhous diseases. In fact, one might say that no luminosity is allowed through the darkness of the body. Moreover, white phlegm causes the "sacred disease" (epilepsy) if it gets mixed with black bile (85a5), and is dangerous if it absorbs too much air, yet less dangerous if air gets outside, causing white patches on the body and other similar skin diseases (85a1). In short, it is significant that in this section of the *Timaeus*, in which Plato thinks as a true physician, he shows an unequivocally diagnostic approach to colours. He does so by not only accurately describing the colours of the humours, but also by considering them as almost material substances, endowed with a power to produce morbid effects.³⁸

4. "Pure" colours and where to find them

Now that we have covered the whole range of views expressed by Plato on both artificial and natural colours, the time has come to ask whether there is a place in the sensible world for those

³⁸ See above, p. 8-9, on the doctors' diagnostic approach to colours.

colours that are famously described as "pure" in the *Philebus*. Of course, scholars keen to claim Plato's hostility to colours prefer to think that there is not. On the contrary, I will try to argue that colours constituted for Plato the way in which the Form of beauty manifests itself to humans in their life on Earth. The starting point of this discussion is the passage of the Philebus in which Plato distinguishes "pure" pleasures, free from any feeling of pain, from the "mixed" pleasures, which are often associated with bodily states and desires and thus with some experience of pain or a sense of lack from which the subject wants to break free (45e-47b). Yet, later on, Socrates mentions sight, hearing, and smell as examples of bodily pleasures that are both pure and true, with emphasis on those regarding the "so called beautiful colours" (τὰ καλὰ λεγόμενα χρώματα, 51b). Significantly, the argument aims to infer the purity of this type of pleasures in itself, regardless of any external relation to objects nor to subjective variations (51c). Hence it is most significant that Socrates after suggesting that geometrical shapes give the truest visual pleasures, unlike paintings and animate beings that lack geometrical outlines — admits that colours too are beautiful in themselves and thus give this type of pleasures (51c-d). Moreover, the purer $(\varkappa\alpha\theta\alpha\rho\dot{\alpha})$ these colours are, the more pleasure they give. In this case, purity indicates that they are not mixed with other colours, as for instance white at 52c-53b. This concept of purity inevitably brings to mind the kind of hues Piet Mondrian sought out in order to bring his painting to the extreme limit between sensitivity and abstraction; I am not alone in thinking that Plato's aesthetic stance could be compared to Mondrian's, albeit with some qualification.³⁹

Scholars tend to assume that "pure" colours, like pleasures, as conceived by Plato are not within the reach of ordinary experience, seeing the *Philebus* passage as proof of Plato being an antiaesthetic philosopher. ⁴⁰ Instead, I would like to make a different

³⁹ Janaway (1995) 175-176.

⁴⁰ PORTER (2002) 87-89. Contra, CASTELNÉRAC (2010).

point by recalling how the sensation of the "bright and brilliant" colour (λαμπρόν τε καὶ στίλβον) arises according to the description of the *Timaeus* I cited above. It is easy to recognise, in this description, the dazzling effect of directly looking at the Sun. While it is true that we cannot stare at the sun for a long time, it is not less true that according Plato's theory of vision it is thanks to sunlight that we can find brilliance and Beauty everywhere in our colourful world. For, according to the myth of the *Phaedrus*, human souls that before incarnation contemplated in the hyperouranion all the "valuable things" (the Forms) immersed in "shining beauty" (κάλλος ... λαμπρόν) are now forgetful. However, Beauty is the only Form whose "light" (φέγγος) remains in earthly copies and can be seen through our most reliable sense: sight (λαμπρόν; *Phdr.* 250b-e).

This reminds us of an argument put forth by Ralph Rosen, concerning the scala amoris in the Symposium: "the leap [Plato] advocates from the physico-material world to the purely noetic is utterly pivotal, and cannot possibly occur (as he seems to imply) in the absence of an early profound commitment to aesthetics in the real world". 42 Maintaining Rosen's metaphor, I would like to say that the space over which Plato "leaps" is occupied by mythical places. Such is the τόπος ύπερουράνιος of the *Phaedrus*, and such is the "true Earth" of the *Phaedo*. This is situated in the pure heaven and is coloured purple, golden, and white, which are there "brighter and purer" (λαμπροτέρων καὶ καθαροτέρων), and "more beautiful" than the colours that we see (and the painters employ) in the hollows where we live, amidst water, mist, and air (109b-110d, in partic. 110c). The "true Earth", where the blessed live in familiarity with the gods, is not within the realm of the sensible, 43 but somewhere between the sensible and the intelligible. The same can be said of the description of the Underworld in the myth of Er in

⁴¹ See above, p. 26.

⁴² Rosen (2013) 95.

 $^{^{43}}$ As NIGHTINGALE (2018) unproblematically assumes in her otherwise acute reading.

Republic 10 (616b-617b), as well as the music emitted by the spindle of Necessity that must be sonorous and not just abstractly conceived.⁴⁴ The colours of the eight concentric whorls, representing the orbits of the heavenly bodies, must be visible in their peculiar way, with these colours corresponding to those characterising the planets according to ancient astronomic wisdom. The same, finally, can be said of Critias' description of Atlantis in the homonymous dialogue (116a-c): the buildings were made with stones of various colours (white, black and red) to produce an effect of ποικιλία, which gave a quite natural pleasure (ήδονήν σύμφυτον, 116b). These walls are described as being with metals of increasing value and brilliance as one moves going towards the centre, with the wall encompassing the acropolis being covered with orichalcum that "sparkled like fire" (μαρμαρυγάς ἔχοντι πυρώδεις, 116c). Finally, the temple of Poseidon was all variegated (πεποικιλμένα) with silver, gold, and orichalcum again, and the statues of the God and the kings were golden (116d-e).

All in all, it is at the limits of the sensible, in the territory of myth, that one can find the purest colours. Nevertheless, these are distinguished by the colours in the natural world just by the degrees of their brilliance. I try to show this through the table in the *Addendum*, where I compare the terminology used in the contexts where we find the most complete lists of colours in Plato's work. One can note here, for example, that the qualities of purity and brilliance are said to be greater on the "true Earth" than on ours, which implies that they are not at all absent down here. Furthermore, the colour terms used in the *Timaeus* to indicate the colours that we are used to seeing are the same (I would say: inevitably), indicating that the colours of the true earth and those of celestial bodies are distinguished only by the use of the comparative or superlative to give the idea of greater purity.

⁴⁴ Cf. Pelosi (2018).

In light of what I have shown about the essential relation between light and colours in Plato's theory, I am tempted to conclude with a final suggestion, countering Porter's view on a Newtonian approach to Platonic concepts of colour I mentioned above. Might Plato consider the various colours to be sensible instantiations of intelligible light, and their diversity to be determined by their greater or lesser participation in the Form of light?

⁴⁵ P. 16-17.

Addendum

Resp. 616e-617b Whorls of the spindle of Necessity (from the central one to the most external): 8 colours	Phd. 110c-d: The "true Earth" (seen from above): 12 colours, all of them λαμπρότερα καὶ καθαρώτερα than the colours we see on Earth	Ti. 67c-68d: Colours we see on Earth	
1. ποικίλον (Fixed stars)	ποικίλη as a whole	Cf. heaven πεποικιλμένον in <i>Ti.</i> 40a7 basic colours	intermediate colours
 ξανθότερον than Sun and Moon (Saturn) λευκότατον (Jupiter) ὑπέρυθρον (Mars) ξανθότερον than Sun and Moon (Mercury) δεύτερον λευκότητι (Venus) λαμπρότατον (Sun) gets its χρῶμα from the Sun (Moon) 	χρυσοειδές άλουργῆ ὅση λευκὴ γύψου ἢ χιόνος λευκοτέραν	λευκόν + ἐρυθρόν + λαμπρόν τε καὶ στίλβον	ξανθόν πυρρόν ἀλουργόν
		+ μέλαν	ώχρόν φαιόν ὄρφνινον γλαυκόν κυανοῦν

Works cited

- BAJ, A. (2009), "Faut-il se fier aux couleurs? Approches platoniciennes et aristotéliciennes des couleurs", in CARASTRO (ed.) (2009), 131-152.
- BARTELS, M.L. (2017), Plato's Pragmatic Project. A Reading of Plato's Laws (Stuttgart).
- BOEHM, I. (2018), "La couleur du corps chez Galien : coloration naturelle et couleurs modifiées dans la polychromie du vivant", in F. COLLARD / E. SAMAMA (eds.), Le corps polychrome. Couleurs et santé. Antiquité, Moyen âge, Époque moderne (Paris), 11-22.
- Bradley, M. (2009), Colour and Meaning in Ancient Rome (Cambridge).
- Brinkmann, V. / Wünsche, R. (eds.) (2004), Bunte Götter. Die Farbigkeit antiker Skulptur (Munich).
- CARASTRO, M. (2009), "La notion de *khrôs* chez Homère : éléments pour une anthropologie de la couleur en Grèce ancienne", in CARASTRO (ed.) (2009), 301-313.
- (ed.) (2009), L'antiquité en couleurs. Catégories, pratiques, représentations (Grenoble).
- CASTELNÉRAC, B. (2010), "Plaisirs esthétiques et beauté dans le *Philèbe*: un essai de reconstruction du discours platonicien sur l'art", in J.M. DILLON / L. BRISSON (eds.) (2015), *Plato's* Philebus: *Selected Papers from the Eighth Symposium Platonicum* (Sankt Augustin), 140-145.
- DESTRÉE, P. / MURRAY, P. (eds.) (2015), A Companion to Ancient Aesthetics (Malden).
- DUBEL, S. (2006), "Quand la matière est couleur : du bouclier d'Achille aux 'tableaux de bronze' de Taxila", in ROUVERET / DUBEL / NAAS (2006), 161-181.
- GAVRILENKO, V. (2012), "The 'Body without Skin' in the Homeric Poems.", in M. HORSTMANSHOF / H. KING / C. ZITTEL (eds.), Blood, Sweat and Tears Changing Concepts of Physiology from Antiquity into Early Modern Europe (Leiden-Boston), 481-502.
- GOETHE, J.W. VON (1957), "Materialien zur Geschichte der Farbenlehre" (1810), in *Die Schriften zur Naturwissenschaft*, I Abt. Bd. VI, *Zur Farbenlehre. Historischer Teil*, bearb. v. D. KUHN (Weimar).
- GOLDMAN, R.B. (ed.) (2016), Essays in Global Color History. Interpreting the Ancient Spectrum (Piscataway).
- GRAND-CLÉMENT, A. (2011), La fabrique des couleurs. Histoire du paysage sensible des Grecs anciens (VIII^e début du V^e s. av. n. è.) (Paris).

- (2015), *Poikilia*, in Destrée / Murray (2015), 406-421.
- (2016), "Gold and Purple: Brilliance, Materiality and Agency of Color in Ancient Greece", in GOLDMAN (ed.) (2016), 121-137.
- HALLIWELL, S. (2002), The Aesthetics of Mimesis. Ancient Texts and Modern Problems (Princeton).
- IERODIAKONOU, K. (2005a), "Empedocles on Colour and Colour Vision", *OSAPh* 29, 1-37.
- (2005b), "Plato's Theory of Colours in the *Timaeus*", *Rhizai* 2, 219-233.
- IRWIN, E. (1974), Colour Terms in Greek Poetry (Toronto).
- KAKOULLI, I. (2009), Greek Painting Techniques and Materials from the Fourth to the First Century BC (London).
- KEULS, E.C. (1978), Plato and Greek Painting (Leiden).
- LESZL, W. (2004), "Plato's Attitude to Poetry and the Fine Arts, and the Origins of Aesthetics Part I", *Études platoniciennes* 1, 114-197.
- (2006a), "Plato's Attitude to Poetry and the Fine Arts, and the Origins of Aesthetics Part II", *Études platoniciennes* 2, 284-351.
- (2006b), "Plato's Attitude to Poetry and the Fine Arts, and the Origins of Aesthetics Part III", *Études platoniciennes* 3, 238-336.
- LLOYD, G.E.R. (2007), Cognitive Variations. Reflections on the Unity and Diversity of the Human Mind (Oxford).
- NIGHTINGALE, A. (2018), "The Aesthetic of Vision in Plato's *Phaedo* and *Timaeus*", in A. KAMPAKOGLOU / A. NOVOKHATKO (eds.), *Gaze, Vision, and Visuality in Greek Literature* (Berlin), 331-354.
- PELOSI, F. (2018), "Eight Singing Sirens", in J. PRINS / M. VAN-HAELEN (eds.), Sing Aloud Harmonious Spheres. Renaissance Conceptions of Cosmic Harmony (New York), 15-30.
- PEPONI, A.E. (2015), "Dance and Aesthetic Perception", in DESTRÉE / MURRAY (2015), 204-217.
- PORTER, J.I. (2010), The Origins of Aesthetic Thought in Ancient Greece. Matter, Sensation, and Experience (Cambridge).
- PRIMAVESI, O. (2004), "Farbige Plastik in der antiken Literatur? Vorschläge für eine differenzierte Lesung", in BRINKMANN / WÜNSCHE (2004), 219-223.
- ROSEN, R.R. (2013), "Plato, Beauty and Philosophical Synaesthesia", in S. BUTLER / A. PURVES (eds.), Synaesthesia and the Ancient Senses (Durham), 127-140.
- ROUVERET, A. (1989), Histoire et imaginaire de la peinture ancienne (V^e siècle av. J.-C. I^{er} siècle ap. J.-C.) (Rome).
- (2006), "Les yeux pourpres : l'expérience de la couleur dans la peinture classique entre réalités et fiction", in ROUVERET / DUBEL / NAAS (2006), 17-28.

- ROUVERET, A. / DUBEL, S. / NAAS, V. (eds.) (2006), Couleurs et matières dans l'antiquité. Textes, techniques et pratiques (Paris).
- SASSI, M.M. (2001), The Science of Man in Ancient Greece (Chicago) (Rev. ed. and transl. of La scienza dell'uomo nella Grecia antica, Torino, 1988).
- (2009), "Entre corps et lumière : réflexions antiques sur la nature de la couleur", in CARASTRO (2009), 277-300.
- (2014), "Sul colore dell'oro", in M. TORTORELLI GHIDINI (ed.), Aurum. Funzioni e simbologie dell'oro nelle culture del Mediterraneo antico (Rome), 349-360.
- (2015), "Perceiving Colors", in DESTRÉE / MURRAY (2015), 262-273.
- SKARSOULI, P. (2009), "S'interroger sur la relation entre couleurs et mots : le terme *phármakon* chez Empédocle", in CARASTRO (2009), 165-177.
- SQUIRE, M. (ed.) (2016), Sight and the Ancient Senses (London).
- STAGER J. (2016), "The Materiality of Color in Ancient Mediterranean Art", in GOLDMAN (2016), 97-119.
- STRUYCKEN, P. (2003), "Colour Mixtures According to Democritus and Plato", *Mnemosyne* 56, 273-305.
- TANNER, J. (2016), "Sight and Painting: Optical Theory and Pictorial Poetics in Classical Greek Art", in SQUIRE (2016), 107-122.
- Trinquier J. (2002), "Confusis oculis prosunt uirentia (Sénèque, De ira, 3, 9, 2): les vertus magiques et hygiéniques du vert dans l'Antiquité", in VILLARD (2002), 129-152.
- VILLARD, L. (2002), "Couleurs et maladies dans la Collection Hippocratique: les faits et les mots", in L. VILLARD (ed.), Couleurs et vision dans l'antiquité classique (Rouen), 45-64.
- (2006), "L'essor du chromatisme au IV^e siècle: quelques témoignages contemporains", in ROUVERET / DUBEL / NAAS (2006), 43-54.
- YATES, V. (2016), "Men's Cosmetics in Plato and Xenophon", in GOLDMAN (2016), 139-161.

DISCUSSION

A. Grand-Clément: Vous avez mentionné la polarité blanc/noir comme étant associée à joie/douleur : on la trouve chez les poètes, mais figure-t-elle aussi explicitement chez les philosophes ?

M.M. Sassi: Je ne voulais pas dire que le lien entre lumière et joie est un concept sur lequel les philosophes réfléchissent explicitement dans le contexte plus théorique de leur travail. J'ai mentionné cette association dans mon introduction parce que je voulais souligner certaines prémisses que les philosophes partagent évidemment avec la 'culture chromatique' dans laquelle ils sont immergés. Par exemple, tout comme $\lambda \epsilon \nu \mu \delta \nu$ évoque un sentiment positif dans $\lambda \epsilon \nu \mu \delta \nu$ $\tilde{\eta} \mu \alpha \rho$ d'Eschyle (Pers. 301; Ag. 668), la fréquence des expressions de la luminosité dans la description de la "vraie terre" dans le Phédon (110b-111c) s'explique par le caractère de bonheur de l'environnement dans lequel se trouvent les âmes qui sont entrées finalement en contact avec le divin.

A. Grand-Clément: J'ai été frappée par le fait que dans les extraits que vous citez ce n'est pas tant la blancheur/clarté (leu-kos) qui apporte le plus de plaisir, mais la couleur pourpre. Platon la range aux côtés des couleurs de la vraie terre, et c'est la couleur qu'il mentionne à propos des yeux de la statue en la présentant comme une des plus belles couleurs. Démocrite suggère aussi la même chose. Les textes expliquent-ils pourquoi elle procure autant de plaisir ? Est-ce parce qu'elle est constituée d'un mélange équilibré de noir, blanc et rouge ? Quel mécanisme physiologique sa vision engendre-t-elle ?

M.M. Sassi: En effet la couleur pourpre a un statut spécial parmi les couleurs générées par le mélange des couleurs simples, au point

que c'est précisément à propos de la pourpre qu'on trouve les rares jugements explicites sur le plaisir esthétique donné par certaines couleurs. En fait, la remarque de Démocrite transmise par Théophraste doit être plutôt rapprochée de celle d'Aristote dans le De sensu sur l'άλουργές, tandis que la référence de Platon dans la République est à lire comme une reconnaissance générique du caractère précieux du pigment correspondant. En tout cas je crois que dans le prestige de la couleur pourpre les effets irisés et les reflets lumineux du colorant sont combinés à des éléments coûteux et luxueux. De manière cohérente, tant Démocrite que Platon et Aristote en expliquent la composition comme un mélange de rouge et noir, ce qui est évident, mais aussi de λευχόν, nécessaire pour expliquer les reflets lumineux de cette couleur.

K. Ierodiakonou: Why do you think that Empedocles' attitude to colours is rather ambivalent?

M.M. Sassi: I foremost mean this ambivalence in an epistemologic sense, which clearly emerges from the articulation of Empedocles' fragment 23. On the one hand, we find in the first part of it (ll. 1-8) a comparison with painting that effectively illustrates how a great variety of compounds can be derived from a small number of simple basic elements, based on the assumption that sensible perception (and primarily the experience of colours both in nature and in technical procedures) can give some clues on how nature actually works. On the other hand, one should remark at 1. 9 a twist not to be underestimated (I owe this observation to the acute reading by P. Skarsouli that I mentioned in my paper). Namely, Empedocles declares its fear that his addressee is misled by the multicolored nature of things if he is not provided with the cognitive tools needed to go beyond the senses to grasp, precisely, the underlying processes. Of course, in our discussion it is important to note that the epistemologic issue is emotionally connoted: Empedocle seems to invite his audience to contemplate the spectacle of colours, and then he warns that its very fascination is deceitful.

K. Ierodiakonou: Are the cosmetic colours considered less pleasurable, because they conceal natural beauty? Couldn't it be that they enhance it?

M.M. Sassi: In fact, the basic premise of the cosmetic practice at all times and still today is that the wise application of coloured substances is valuable not only to hide defects of facial features or skin, but also to enhance the natural beauty. Yet at all times, except for ancient Egypt, the application of cosmetic substances has been either stigmatized as a sign of vulgarity if not sophisticated enough to go unnoticed and/or fought by moralistic writers as an artificial tool of seduction. In the Greek society of the 4th century BC, Plato and Xenophon give voice to this attitude in terms that exclude that the sight of a woman or man made up can give any pleasure.

A. Rouveret: L'interprétation de la position de Platon comme un colour lover me semble particulièrement juste et pertinente. On peut simplement souligner que l'on observe une très nette répartition entre les textes positifs qui évoquent la peinture des portraits, en particulier la réalisation de l'andreikelon, la couleur chair, et les autres attestations où, comme tu le soulignes, Platon, en général sous le terme de skiagraphia, désigne soit des peintures vues de loin — et l'on pense à la scaenographia des décors de scène et au témoignage de Vitruve sur leur 'invention' par Agatharchos pour une tragédie d'Eschyle — ou, dans le Critias, la représentation de la nature. C'est pourquoi je suggérerais de traduire skiagraphia dans ces contextes par "trompe-l'œil".

M.M. Sassi: Merci pour cette précision. En effet, j'ai eu beaucoup de difficultés à m'orienter parmi les nombreux passages dans lesquels Platon affronte le 'problème couleur' avec une oscillation qui paraît à première vue inexplicable (et a paru telle à la plupart des commentateurs). Certes la situation devient plus claire si, comme tu le proposes, on peut assigner les évaluations plus positives à la peinture de portraits, d'un

côté, tandis que, d'un autre côté, le terme σκιαγραφία indique plutôt les peintures vues de loin, comme les sources sur la scénographie semblent le suggérer. Toutefois je me demande (et te demande) si Platon n'était pas préoccupé aussi par les représentations de figures humaines vues de loin, tels les guerriers peints à l'entrée de la tombe d'Aghios Athanasios que tu vas nous montrer.

A. Rouveret: C'est une question bien difficile et je ne peux y répondre que de façon très hypothétique. Il me semble que Platon aurait évalué de façon critique la représentation en trompel'oeil des deux guerriers de la tombe d'Aghios Athanasios, sans doute destinée à un officier de l'armée macédonienne. Grâce aux particularités du rituel, le décor peint sur la façade du tombeau crée, le temps des funérailles, un dispositif visuel qui répond à la définition de l'image phantastikê du Sophiste (235d-e - 236a-c). Vus de loin, les deux soldats en deuil créent une image trompeuse du vivant qui renforce l'effet illusionniste de l'architecture d'apparat dans laquelle ils s'intègrent. Lorsque Platon fait référence de façon positive à l'acribie du peintre dans la représentation des êtres vivants et des carnations (Crat. 424d-e; Rép. 501b; Lois 769a-b), il évoque les détails d'un tableau vu de près et se concentre sur la précision technique de la représentation mimétique. Le passage le plus intéressant est celui de la République (501b) dans lequel il ajoute deux éléments. D'une part, le peintre cherche à peindre une figure ressemblante mais en se réglant sur un modèle 'divin'. Comme le souligne Aristote à propos de la tragédie (Poét. 1454b8), il s'agit de créer un portrait ressemblant mais plus beau. D'autre part, les formes prises par l'imitation correspondent aux genres de vie. Il y a donc une hiérarchisation entre les types de portraits. Nos éléments de comparaison avec des peintures originales de l'époque classique sont extrêmement limités en raison de la perte des tableaux célèbres, le plus souvent peints sur bois. Les guerriers d'Aghios Athanasios sont saisis dans une posture de deuil et l'effet mimétique fonctionne avant tout comme une apostrophe au spectateur.

Grâce aux découvertes de Vergina, on peut cependant analyser en détail des portraits réalisés pour une commande royale. C'est le cas de la scène de chasse de la tombe de Philippe II. Il s'agit alors des portraits identifiables de personnages éminents (le jeune Alexandre ou certains compagnons du roi) et leur examen (Brecoulaki [2006], [2015]) fait apparaître une grande complexité dans l'art du modelé des ombres et des lumières qui me paraît rejoindre la description platonicienne.