A New Season For the Study of Byzantine Theories of Vision*

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I. Introduction: Byzantine Theories of Vision and 'Haptic Sight'

The study of Byzantine theories of vision, in contrast to what has happened for their ancient, Islamic, or Latin counterparts (but not, one must admit, for their Jewish ones),¹ is still a largely unexplored field of research, notwithstanding the ample body of texts that, directly or indirectly, discusses the process of vision in the Byzantine world.²

* ROLAND BETANCOURT, Sight, Touch, and Imagination in Byzantium, Cambridge University Press, Cambridge 2018, XVI + 404 pp., ISBN: 9781108424745.

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Save for some important exceptions, such as RACHEL NEIS, The Sense of Sight in Rabbinic Culture. Jewish Ways of Seeing in Late Antiquity, Cambridge University Press, Cambridge 2013 (Greek Culture in the Roman World).

This situation is, however, slowly starting to change, as some important recent contributions attest. Of particular value is the summary - specifically focused on early fourteenth-century Byzantine theories of vision - provided by Börje Bydén in Börje Bydén, Theodore Metochites' Stoicheiosis Astronomike and the Study of Natural Philosophy and Mathematics in Early Palaiologan Byzantium, Acta Universitatis Gothoburgensis, Goteborg 2003 (Studia Graeca et Latina Gothoburgensia LXVI), p. 199-210, which deals extensively with the theory of vision of three « early Palaiologan texts » (ibid., p. 203), namely, Nikephoros Blemmydes's Epitome Physica, Nikephoros Choumnos's On the Nutritive and Sensitive Souls, and Nikephoros Gregoras's Solutions for Empress Helena Palaiologina (together, of course, with some remarks on Theodore Metochites's own position), although Bydén usefully describes some of the most important ancient optical theories influencing those authors, especially Plato's, Aristotle's and Galen's. Another important (and up-to-date) summary on Byzantine theories of vision is Katerina IERODIAKONOU, Byzantine Theories of Vision, in Stavros Lazaris (ed.), A Companion to Byzantine Science, Brill, Leiden 2019 (Brill's Companions to the Byzantine World 6), p. 160-176. Ierodiakonou's summary, while partly relying on Bydén's presentation, is much wider in its scope, since it considers, apart from the works also discussed by Bydén, Symeon Seth's Conspectus rerum naturalium, Michael Psellos's On Colour, On the Five Senses and On Sense Perception and its Objects, and Sophonias's Paraphrase of Aristotle's De anima, together with some passing remarks on other authors and theories. Interestingly, just like Bydén, Ierodiakonou also starts from a reconsideration of some of the most important ancient theories of vision influencing these Byzantine authors, giving (again) great importance to Plato, Aristotle, and Galen. The strong (and

The most important driver of the study of these theories in recent decades has not come from historians of philosophy, science, or medicine, but rather from art historians, whose interest in the subject is integral to the importance of fully understanding the nuances and implications of the Iconoclastic controversy.³

It should, therefore, come as no surprise that one of the first and most comprehensive book-length studies to date of Byzantine theories of vision, Roland Betancourt's *Sight, Touch, and Imagination in Byzantium*,⁴ was written by an art historian. However, the purpose of the book, the erudition and ability of which to make even the most disparate sources (from liturgical commentaries to medical treatises) interact in a productive way is remarkable, is not (or at least not only) to provide a complete account of Byzantine theories of vision. Rather, Betancourt's aim is to resist a view that the author sees as having become prevalent in the field of studies of Byzantine art in recent years, namely, the idea that Byzantine authors favoured what Betancourt calls a theory of 'haptic sight'.⁵

creative) connection between the classical heritage and Byzantine speculation concerning theories of vision is an aspect which is also shared by Betancourt's volume which this article discusses.

The bibliography on this subject is vast, and it would be difficult to summarise it here. To provide a few examples, however, especially relevant to Betancourt's arguments and intellectual milieu, see Liz James, Light and Colour in Byzantine Art, Clarendon Press, Oxford 1966 (Clarendon Studies in the History of Art 15), ROBERT S. NELSON, To Say and To See: Ekphrasis and Vision in Byzantium, in Id. (ed.), Visuality Before and Beyond the Renaissance: Seeing as Others Saw, Cambridge University Press, Cambridge 2000 (Cambridge Studies in New Art History and Criticism), p. 143–168, and, finally, CHARLES BARBER, Figure and Likeness. On the Limits of Representation in Byzantine Iconoclasm, Princeton University Press, Princeton 2002. The root of the interest in the wider context of Byzantine theories of vision in these and similar contributions seems to be an increasing awareness of the need to 'distance' the perception of Byzantine viewers (and, to a lesser extent, artists) when faced with a work of art from modern and contemporary ones. Thus, reconstructing Byzantine theories of vision becomes, in this perspective, part of a wider attempt to recontextualise Byzantine art within its broader cultural context, where, it should also be noted, alongside theories of vision, an important place was occupied by theories and understandings of the performativity associated with vision itself (and with the contemplation of icons more specifically), an aspect to which I shall return in the article.

Note that a more recent book, which (albeit in a narrower way, and with a greater attention to the performative aspect of vision just mentioned, one which is not dealt with extensively in Sight, Touch, and Imagination in Byzantium) tackles Byzantine theories of vision (in strict relation with theories of hearing) has been published by Betancourt: ROLAND BETANCOURT, Performing the Gospels in Byzantium. Sight, Sound and Space in the Divine Liturgy, Cambridge University Press, Cambridge 2021.

The emergence of this trend among historians of Byzantine art is traced back by Betancourt to an important passage of Nelson, *To Say and to See*, which is also quoted at the outset of the Introduction to Betancourt's book, where Nelson affirms: « This embracing or kissing the image visually, I submit, was meant literally as well as metaphorically. Like all successful religious symbolism, this metaphor was grounded in perception and perceptual theory. Because the optical rays that issue forth from the eyes were thought to touch the object seen, vision was haptic, as well as optic, tactile as well as visual. Vision thus connected one with the object seen,

Betancourt takes theories of haptic sight to be theories according to which sight is reduced to a form of touch, whereby (to use a very general and neutral formulation) sight, or better yet the eyes as its sense organ, are able to physically touch the object seen by reaching it, through rays or other kinds of visual effluences. To use more familiar categories, a theory of 'haptic sight' in this sense should therefore be understood as a 'hardcore' extramissionist theory of vision, according to which the eyes see by sending forth some physical effluences that reach the objects seen, conceived as totally passive and not emitting any sort of effluence.⁶ In line with this understanding of 'haptic sight', the process of vision

and, according to extramission, that action was initiated by the viewer » (Nelson, To Say and to See, p. 153). Other similar formulations can be found in more recent contributions by a significant number of Byzantine art historians. See, for instance, RUTH WEBB, Accomplishing the Picture: Ekphrasis, Mimesis and Martyrdom in Asterios of Amaseia, in Liz James (ed.), Art and Text in Byzantine Culture, Cambridge University Press, Cambridge 2007, p. 13-32, where on p. 22, reflecting on the anecdote, recounted by Philostratos the Elder in his *Imagines* (I.4), of the viewers who, moved by the vividness of a painting representing the dying Menoikeus, tried to collect the blood dripping from the dying figure, comments: « At moments like this there is no separation between viewer and image; the frame dissolves and the viewer is able to interact physically with the figures depicted. This is a response to the figurative arts that we find throughout the tradition of ekphrasis, often expressed in the idea that the figures can be (or can almost be) heard to speak. As Robert Nelson has pointed out, the idea of the haptic gaze, that the eye sends out rays which physically caress the painting as the view contemplates it, provides some 'scientific' backing for this idea of visual contact » (the passage is quoted in Betancourt, Sight, Touch, and Imagination in Byzantium, p. 232). See also Bissera V. Pentcheva, « The Performative Icon », The Art Bulletin, 88/4 (2006), p. 631–655, where on p. 631, talking about relief icons in Byzantium, the author claims: « The relief icon also best responds to the prevailing theory of vision known as extramission. According to this model, the eye of the beholder is active, constantly moving and sending light rays that touch the surfaces of objects. The eye seeks the tactility of textures and reliefs. Sight is understood and experienced as touch » (emphasis in the original). Interestingly, Pentcheva does not connect the idea of haptic sight to Nelson's influential piece, or to the contemporary debate on Byzantine art more generally. Rather, she claims: « Sight as touch resonates with Maurice Merleau-Ponty's ideas expressed in 'The Intertwining-the Chiasm', in Merleau-Ponty, The Visible and the Invisible, Evanston, Ill.: Northwestern University Press, 1968, p. 130–55 » (ibid., n. 6, p. 652). The idea that the notion of haptic sight in contemporary studies on Byzantine art might have been influenced by twentieth-century phenomenology of perception is an interesting avenue for investigation. Betancourt, unfortunately, does not discuss this aspect.

In a recent contribution concerning Augustine's theory of vision, Mark Eli Kalderon has distinguished between five successive grades of 'extramissive commitment' (cf. Mark E. Kalderon, Perception and Extramission in De quantitate animae, in Robert Pasnau (ed.), Oxford Studies in Medieval Philosophy, vol. IX, Oxford University Press, Oxford 2021, p. 1–39). According to his scale, what I here call 'haptic' theories of vision are the only pure extramissionist theories, since, in all other cases, even though something extends from the eyes to the object seen, perception does not occur where the object is but rather only where the eyes are, since the eyes' effluences are not themselves sensitive. Contrary to Kalderon, I believe that it is possible to identify (according to his own understanding of extramission) a pure extramissionist theory that is not haptic, in the form of what I call a 'prosthetic' theory of vision, a notion which I explore in sections 3 and 4 of this article. In my reconstruction, therefore, the scale proposed by Kalderon should be

becomes unmediated, or, better, one that only allows the kind and degree of mediation allowed by the process of touch.⁷

The notion of 'haptic sight' is not, of course, a creation of contemporary historiography. Indeed, there are some (admittedly scattered) passages from ancient sources that, under a certain interpretation, could fall under this definition. The most important one, which is discussed multiple times by Betancourt throughout the book,⁸ is a certain interpretation of the Stoic metaphor, reported by Diogenes Laertius in Book VII of the *Vitae philosophorum*, according to which the optic *pneuma* responsible for vision, once emitted by the eyes, flows into the air in a conic shape up to the object seen, which is then « reported to us as if through a stick ($\dot{\omega}_S$ διὰ βακτηρίας) of air stretching out towards it ».⁹

supplemented with a further grade, to be positioned between his grades 4 and 5. Commitment to this degree is, as I will argue, sufficient to identify a pure extramissionist theory of vision. For another (and more general) analysis of the degrees of extramissionist commitment, see Lukáš Lička, « The Visual Process: Immediate or Successive? Approaches to the Extramission Postulate in 13th Century Theories of Vision », in Elena Băltuță (ed.), Medieval Perceptual Puzzles. Theories of Sense Perception in the 13th and 14th Centuries, Brill, Leiden 2020 (Investigating Medieval Philosophy 13), p. 73–110, here p. 74–79.

One comment concerning terminology is in order here: indeed, while the critical target of Betancourt's discussion is clearly identifiable, I would like to underline that one might wonder whether, after all, the expression of 'haptic sight' is the most appropriate one to uniquely denote the kind of theories of vision Betancourt has in mind. Indeed, the idea of a haptic contact between the organ of sight and the object seen can be equally found (if not with more right) in the atomistic theories of vision developed by Leucippus and Democritus first and, later, by Epicurus. Indeed, such theories, while being intromissionist rather than extramissionist, explicitly posit an unmediated contact between the object seen and the visual organ, whereby the eyes are variously affected by $\epsilon i\delta\omega\lambda\alpha$ coming from the objects seen. The reception of atomism in Byzantium is of course much more limited than the reception of extramissionist theories presenting 'haptic' features, yet, in principle, I do not see any reason why one variety of theories should count as more 'haptic' than the other.

⁸ See especially Betancourt, Sight, Touch, and Imagination in Byzantium, p. 52–63.

The full passage concerning the theories of vision presented by Chrisippus and by Apollodorus, reads as follows: ὁρᾶν δὲ τοῦ μεταξὺ τῆς ὁράσεως καὶ τοῦ ὑποκειμένου φωτὸς ἐντεινομένου κωνοειδῶς, καθά φησι Χρύσιππος ἐν δευτέρῳ τῶν Φυσικῶν καὶ Ἀπολλόδωρος. γίνεσθαι μέντοι τὸ κωνοειδὲς τοῦ ἀέρος πρὸς τῆ ὄψει, τὴν δὲ βάσιν πρὸς τῷ ὁρωμένῳ ὡς διὰ βακτηρίας οὖν τοῦ ταθέντος ἀέρος τὸ βλεπόμενον ἀναγγέλλεσθαι (« [They, the Stoics, hold that we] see when the light between the visual organ and the object stretches in the form of a cone: so Chrysippus in the second book of his *Physics* and Apollodorus. The apex of the cone of air is at the eye, the base at the object seen. Thus the thing seen is reported to us as if through a stick of air stretching out towards it », Diogenes Laertius, *Vitae philosophorum*, VII.1.157, ed. and trans. Robert D. Hicks, *Lives of Eminent Philosophers*, vol. II, Harvard University Press, Cambridge, MA 1925 (Loeb Classical Library 185), p. 260–261, but translation modified by Betancourt, *Sight, Touch, and Imagination in Byzantium*, p. 52–53). Another passage which is equally telling, in this sense, is the passage in which Aetios of Antioch (Pseudo-Plutarch), in the *Placita philosophorum*, refers to Hipparchus' extramissionist theory of vision in the following terms: ἀκτῖνας ἀπὸ τῶν ὀφθαλμῶν ἀποτεινομένας τοῖς πέρασιν ἑαυτῶν καθάπερ χειρῶν ἐπαφαῖς καθαπτούσας τοῖς ἐκτὸς

Although, therefore, Byzantine authors had at their disposal this and other passages that could have allowed them to build theories of haptic sight, Betancourt is absolutely convincing in showing that they carefully avoided doing so. In the next section I will summarise the contents of the book by outlining the main steps of Betancourt's argument, leaving it to the following sections to underline some problematic aspects that call for further discussion.

II. From Sight to Imagination, and Back

The book is organised into three parts, completed by an extensive introduction and by the conclusions, together with a bibliography of both primary sources and secondary literature and an index of names.

In the Introduction, Betancourt carefully traces the emergence of the notion of 'haptic sight' among historians of Byzantine art in the twentieth century, giving paramount importance to the influence of Robert Nelson. Betancourt also tries to connect the emergence of this notion with that of a parallel trend in studies on the Latin Middle Ages on the tactility of sight, an aspect that he traces back to Margaret Miles's studies of the influence of Augustine's theory of vision in the Medieval Latin world.¹¹ This is an important 'transdisciplinary' intuition. However,

σώμασι τὴν ἀντίληψιν αὐτῶν πρὸς τὸ ὁρατικὸν ἀναδιδόναι (« rays from the eyes stretched out to the ends just as by the touch of the hands themselves, seizing the bodies outside to deliver an apprehension of them to the faculty of sight »; Aetios of Antioch, *De placitis reliquiae (Theodori et Nemesii excerpta)*, IV.13.9, ed. Hermann Diels, *Doxographi Graeci*, Reimer, Berlin 1879, p. 404, translation in Betancourt, *Sight, Touch, and Imagination in Byzantium*, p. 8). Other passages showing the diffusion, in antiquity, of some elements which could lead to the development of theories of 'haptic sight', especially from the *Placita*, might be quoted as well, such as IV.13.2, where Aetios refers to the theory according to which some Academicians believed that vision occurs through the diffusion of optical rays which, after encountering the resistance of the objects, come back to the eyes (cf. Diels, *Doxographi Graeci*, p. 403).

Betancourt refers specifically to MARGARET R. MILES, « Vision: The Eye of the Body and the Eye of the Mind in Saint Augustine's De trinitate and Confessions », Journal of Religion, 63/2 (1983), p. 125-142, and to EAD., Augustine on the Body, Scholars Press, Missoula, MT 1979, p. 9-39 (cf. Betancourt, Sight, Touch, and Imagination in Byzantium, p. 2-3). While Betancourt might be right to claim that Nelson drew inspiration from Miles's studies, attributing to Miles's herself a 'haptic' understanding of Augustine's theory of vision (and of his Latin heritage) is probably an overstatement. Indeed, the only passage that Betancourt quotes in this respect is one where Miles claims: « For the classical people [...] sight was an accurate and fruitful metaphor for knowledge because they relied on the physics of vision, subscribed to by Plato and many others, that a ray of light, energized and projected by the mind toward an object, actually touches its object, thereby connecting viewer and object » (MILES, « Vision », p. 127). However, from the context of the passage it is clear that Miles's interpretation is here focusing on the role of the soul, in Augustine's model, in shaping perception, by trying to unite, through the visual rays, with the objects perceived by them, and not, therefore, on the physical process of the rays 'touching' the objects. Cf. a passage which, two paragraphs later than the one quoted by Betancourt, clarifies this aspect: « Second, in the act of vision, viewer and object are momentarily

while Betancourt might be right in claiming that Miles's studies exerted a direct influence on Nelson's work and, through him, on the rise of 'haptic sight' in Byzantine historiography, I believe that one should exercise caution in excessively emphasising this 'Augustinian' trend in the modern historiography of Medieval Latin theories of vision. Turthermore, Betancourt provides a useful summary of the ancient theories of vision that held the strongest influence in the Byzantine tradition, and he also looks at the mechanisms of transmission of the ancient corpus of these theories to the Byzantine world, focusing on the paradigmatic case of Michael Psellos in the eleventh century. Before concluding the Introduction with a summary of the structure of the book, Betancourt also presents an interesting defence of the methodology used throughout, which is, I believe, one of the book's strongest points.

The first part of the volume is divided into three chapters and focuses more directly on a systematic exposition of some representative Byzantine theories of vision and of their ancient sources. The first chapter, in particular, examines the central role played by the medium in ancient and Byzantine theories of vision alike. Here Betancourt focuses on Plato's and Aristotle's theories of vision (where Aristotle's theory is usefully introduced by looking at its presentation by Michael Psellos in the eleventh century) and of their 'afterlifes', as he calls them, in Late Antiquity and in Byzantium (focusing on the cases of Philo of Alexandria, of the Pseudo-Basil of Caesarea's *Homilies X* and *XI* on the *Hexaemeron*, and of Nikephoros Choumnos). While the two theories differ profoundly (Aristotle's theory being an intromissionist one, and Plato's theory being, at least in part, an extramissionist one), both are united by an equal concern with underscoring the mediated nature of the visual process. It is thanks to the importance given to the medium of sight both by Plato and Aristotle, in Betancourt's reconstruction, that Nikephoros

united. 'Three things', viewer, object, and the power that unites them, are barely distinguishable, even 'to the judgment of reason'. In the act of vision itself, 'the will possesses such power in uniting these two [viewer and object] that it attaches the sense to be formed to that thing which is seen' ([De Trinitate] 11.2.5). Vision, then, connects or attaches the viewer to the object. Moreover, the soul of the viewer both initially projects the visual ray, and it also 'absorbs into itself' the form or image of the object, which is then permanently retained by the memory » (ibid., p. 127–128).

Note, moreover, that Augustine's own adherence to extramission has been challenged in recent scholarship on the subject (cf., for instance, Kalderon, *Perception and Extramission in* De quantitate animae).

Betancourt's methodology of reading the primary sources, it should be remarked, does not limit itself to an interpretation of the primary texts in themselves but also tries to bring into dialogue the existing translations, reflecting on their underlying conceptual assumptions: this constitutes, unfortunately, a practice which is still not so widespread, and its usefulness can clearly be seen by the way in which it enriches the discussion of the book, most notably in the case of the problematisation of Cyril Mango's translation of Photios's *Homily 17*, a text which, as it will be seen below, is at the centre of Betancourt's analysis.

Choumnos can achieve the self-proclaimed synthesis between them in his treatise *On the Nutritive and the Sensitive Souls.*

Betancourt's presentation is convincing, save for one aspect, namely his discussion of Plato's theory of vision in the Timaeus, to which I want to dedicate some more attention given its paramount importance for Byzantine theories of vision. Indeed, Plato discusses his theory of vision (and of colours) mainly in two different passages of the Timaeus, namely 45b2-d3 and 67c4-68d7.¹³ Now, it is generally acknowledged that while the perspective adopted by Plato in Timaeus 45b2-d3 is largely extramissionist, leading him to affirm that vision depends on fiery rays sent out from our eyes and coalescing with sun rays so as to form a homogeneous body suitable for perceiving objects by extending to them, in Timaeus 67c4-7, this earlier image is nuanced and qualified by the claim that objects themselves also send out fiery effluences (which are, ontologically, colours) that have particles commensurate with those of the visual body formed by the eyes's rays and daylight, therefore, making visual perception possible by uniting with them. Betancourt seems to take for granted that the two passages form a unitary and internally consistent theory,14 which he interprets along the lines later set out by Theophrastus in his *De sensibus* as a theory that constitutes an intermediate alternative between extramission and intromission (which might be called an 'interactionist' theory). 15 Nevertheless, it should be noted that in contemporary Platonic scholarship, this is still a matter of debate. True, the interactionist interpretation seems to have prevailed. However, nothing allows

For discussions of Plato's theory of vision as outlined in the *Timaeus*, see for instance, among recent contributions, Luc Brisson, « Plato's Theory of Sense Perception in the *Timaeus*: How it Works and What It Means », Boston Area Colloquium in Ancient Philosophy, 13 (1999), p. 147–176, Gösta Grönroos, « Plato on Perceptual Cognition », PhD Diss., Stockholm University 2001, Thomas K. Johansen, Plato's Natural Philosophy: A Study of the Timaeus-Critias, Cambridge University Press, Cambridge 2004, Katerina Ierodiakonou, « Plato's Theory of Colours in the *Timaeus* », Rhizai, 2/2 (2005), p. 219–233, and Paulina Remes, Plato: Interaction between the External Body and the Perceiver in the Timaeus, in José F. Silva, Mikko Yrjönsuuri (eds.), Active Perception in the History of Philosophy. From Plato to Modern Philosophy, Springer, Dordrecht 2014 (Studies in the History of Philosophy of Mind 14). p. 9–30.

¹⁴ Betancourt, Sight, Touch, and Imagination in Byzantium, p. 36.

Cf. Theophrastus, *De sensibus*, § 5, 86, and 91 (ed. Diels, *Doxographi Graeci*, p. 499–527). On Theophrastus's interpretation of Plato's theory of vision in the *De sensibus*, see Katerina Ierodiakonou, « Theophrastus on Plato's Theory of Vision », *Rhizomata*, 7/2 (2019), p. 249–268, but see also Anthony A. Long, *Theophrastus'* De Sensibus *on Plato*, in Keimpe A. Algra, Pieter W. van der Horst, David T. Runia (eds.), Polyhistor. *Studies in the History and Historiography of Ancient Philosophy. Presented to Jaap Mansfeld on His Sixtieth Birthday*, Brill, Leiden 1996 (Philosophia Antiqua, 72), p. 345–362. Of course, Theophrastus's interpretation allows to preserve an 'Aristotelian' element within Plato's theory of vision, namely, a (limited) agency for the colours coming from the objects perceived.

More correctly, it seems to have been generally accepted that there is both a passive and an active character to Plato's overall theory of vision, understanding the later passage of 67c4-7 as

one to take it for granted and, what is more, even if this interpretation is accepted as correct, a further discussion is needed to understand the relative weight that each of the two components of sight (the extramissionist and the intromissionist) play.¹⁷

The second chapter, then, looks at the way in which, in ancient and Byzantine writings, an explicit 'tactile' language, or even metaphors comparing sight with touch, are used not to reduce sight to a species of touch, but rather to aptly describe the cognitive process associated with visual perception. The chapter, in this way, also usefully complements the previous one by concluding the overview of the ancient theories of vision that exerted a significant influence in Byzantium. The discussion starts with the Stoic theory, insofar as some Late Ancient interpretations of the Stoic metaphor of the walking stick, already discussed above, provide the main textual support for the very notion of a 'haptic' theory of vision.¹8 It is understandable, then, that Betancourt devotes a great importance to

correcting the picture provided by 45b2–d3; yet, whether one of the two prevails over the other (and, in the positive case, which one) in making vision ultimately possible, remains a further and separate issue. That is, it is not so uncontroversial to claim, as Betancourt does, that Plato's theory of vision is « midway between extramission and intromission » (Betancourt, Sight, Touch, and Imagination in Byzantium, p. 37).

Betancourt's position on this issue seems to be that both aspects play an equal role in the process of vision, since he affirms (in presenting Theophrastus's reading, which he then goes on to endorse) that « Plato's model was midway between extramission and intromission » (Betancourt, Sight, Touch and Imagination in Byzantium, p. 37). However, Betancourt's reticence to discuss this issue any further is probably motivated by the fact that, in the Byzantine reception of the Theophrastean interpretation of Plato's theory of vision, the possibility to give more importance to the extramissionist or to the intromissionist aspect of it respectively was part of its success. As Betancourt puts it: « This syncretic understanding of Plato's hybrid theory of intromission and extramission may well have accounted for the popularity of his theory of vision above that of others in Byzantium, but it had an amorphous character. Because of Plato's disconnected inclusion of both extramissive and intromissive features, writers could stress one side or another to articulate their own ideas regarding the agency of the object or viewer in the process of sight, or to make a point regarding the operation of the soul and its relationship with material bodies » (ibid.).

In discussing the Stoic theory of vision, where admittedly (even apart from the problematic case of the walking stick metaphor), sight and touch are probably more closely associated than in any other major ancient theory of vision (although, as I have remarked above, an even stronger relation is present in the atomistic theories of vision, an aspect which Betancourt almost ignores), Betancourt inserts the following passing remark, which I think is of great value, both for studies of ancient and Byzantine theories of vision and (probably even more) for Medieval Latin ones, and which I therefore consider appropriate to quote in full: « Such parallelism between sight and other senses, particularly hearing, points to one of the challenges in the study of ancient and medieval visual theories of perception, namely, that sight often has been surveyed and considered on its own, at times without substantial concern for how writers described and characterized the other senses » (Betancourt, Sight, Touch, and Imagination in Byzantium, p. 54). The insistence on the need to study theories of perception, in the ancient and Medieval world, as a whole, and on the correct way to do that (giving the right weight both to the commonalities and

the criticism of these interpretations provided by Galen, something that brings to a full-fledged discussion of his own theory of vision, which Betancourt takes to be another kind of interactionist theory where the Stoic concept of the optic pneuma replaces the Platonic notion of the fiery rays emitted from the eyes. Although this will be discussed in more detail in the next section of this article, I think that Betancourt is mistaken in claiming that Galen's theory can be understood in interactionist terms. Indeed, as it has recently been shown in a convincing way by Katerina Ierodiakonou, Galen developed a fundamentally different theory of vision (which he took to be the correct interpretation of Plato's own theory), one which, mixing a Platonic framework with Stoic and Aristotelian elements, provided an explanation of the process of vision in purely extramissionist terms. In this way, Galen distanced himself from the Theophrastean interactionist interpretation of Plato's theory of vision later adopted by all major Late Ancient Aristotelian commentators, most notably Alexander of Aphrodisias and John Philoponos. After discussing Galen's theory of vision (but also in connection with it), Betancourt moves on to another source of influence for Byzantine theories of vision, one which is clearly visible in Galen's own work, namely, the geometrical tradition founded upon Euclid's and Ptolemy's Optics, a tradition whose extramissionist character is hardly debatable. This survey is then complemented by a discussion of the theories of vision expounded in the Byzantine medical tradition, as well as by three self-standing studies on the theories of vision discussed by such different authors as Nemesios of Emesa (in his *De natura hominis*), Symeon Seth and Nikephoros Blemmydes. These first two chapters, each in its own way, contribute to showing how the notion of 'haptic sight' was ultimately absent from all the most important ancient theories of vision that influenced Byzantine authors.

The third chapter, then, attempts to balance this conclusion by looking at the aspects that, in the ancient and Byzantine traditions alike, were brought into play to bridge the gap between sight and touch and, more broadly, between all five senses (and between the different beings endowed with them). Betancourt identifies four of them, namely, the commonality of touch as the only sense that is possessed by all animals, the commonality of touch as a sense that is also possessed by the sense organs of the other senses, the notion of common sensibles (in the traditional Aristotelian list of *De anima* II.6, 418a17–18, motion, rest, number, shape and size) and, finally, the common sense as the faculty that merges the perceptions coming from all the external senses. This last chapter, therefore, contributes nicely to showing how the various senses were conceived of as distinct

the peculiarities of each sense), is probably one of the aspects of the book which makes it most valuable to historians of the ancient and the Medieval world alike, an aspect which retains the same value throughout all the disciplinary domains within these fields of study.

by ancient and Byzantine authors, even when they came to be associated with each other.

The second part of the book¹⁹ is constituted by an extremely close and finegrained reading of section five of Photios's Homily 17, a text of paramount importance for the history of Byzantine theories of vision, where a few years after the end of the Iconoclastic controversy, in 867, celebrating the image of the Theotokos just placed in the apse of Hagia Sophia, the Patriarch of Constantinople delineates a complete theory of vision, from external sensation until the storage of perceptions into memory, affirming the superiority of sight on all the other senses, most notably hearing.²⁰ Betancourt addresses all the stages of Photios's theory of vision in separate chapters. The fourth chapter of the book (the first of the second part) is dedicated to the process of external sensation, the crucial stage in which the eyes, as sense organ of sight, come to perceive the sensible qualities of external objects, most notably colours. Here Betancourt attempts to show that, contrary to what Cyril Mango's influential translation of Photios's Homily 17 might suggest, the Patriarch is not advocating a thorough extramissionist theory of vision, one which could come dangerously close to a theory of 'haptic sight'. The crucial passage to adjudicate the issue is the one where Photios affirms that:

For surely, having somehow through the outpouring and effluence of the optical rays ($\tau \tilde{\eta} \pi \rho o \chi \acute{u} \sigma \epsilon \iota \kappa \alpha i \acute{u} \pi o \rho \rho o \tilde{\eta} \tau \tilde{\omega} \nu \acute{o} \pi \iota \iota \kappa \tilde{\omega} \nu \acute{u} \kappa \iota \iota \iota \omega \nu$) touched and encompassed the object, it too [i.e., sight] sends the essence of the thing seen to the mind, letting it be conveyed from there to the memory for the concentration of unfailing knowledge. ²¹

Which is based on ROLAND BETANCOURT, « Why Sight Is Not Touch: Reconsidering the Tactility of Vision in Byzantium », Dumbarton Oaks Papers, 70 (2016), p. 1–23.

This text has constantly been at the centre of the attention of both art historians and historians of philosophy in recent decades. See, for instance, among art historians, Robin Cormack, Writing in Gold: Byzantine Society and Its Icons, George Philip, London 1985, esp. Chapter 4 and Nelson, To Say and to See, and, among historians of philosophy, Ierodiakonou, Byzantine Theories of Vision, and Christophe Erismann, « John the Grammarian and Photios. A Ninth-Century Byzantine Debate on Depiction, Visual Perception and Verbal Description », Jahrbuch der Österreichischen Byzantinistik, 70 (2020), p. 67–87. Further important discussions of the Homily can also be found in Kathy J. O. Wetter, « The Changing Relationship between Archetype and Image throughout the Era of Byzantine Iconoclasm », PhD Diss., University of North Carolina 2001, and in Sergei Mariev, « Echi delle teorie ottiche antiche nelle Omelie di Fozio », Bulgaria Mediaevalis, 1 (2011), p. 71–80.

Photios, Homily 17, ed. Basil Laourdas, ΦΩΤΙΟΥ ΟΜΙΛΙΑΙ, Hetaireia Makedonikon Spoudon, Thessaloniki 1959, p. 170–171 (emphasis mine): Καὶ γὰρ καὶ αὐτή γε δήπου τῇ προχύσει καὶ ἀπορροῇ τῶν ἀπτικῶν ἀκτίνων τὸ ὁρατὸν οἱονεί πως ἐπαφωμένη καὶ περιέπουσα τὸ εἶδος τοῦ ὁραθέντος τῷ ἡγεμονικῷ παραπέμπεται, ἐκεῖθεν διαπορθμευθῆναι διδοῦσα τῇ μνήμῃ πρὸς ἐπιστήμης ἀπλανεστάτης συνάθροισιν (trans. Cyril Mango, The Homilies of Photius, Patriarch of Costantinople, Harvard University Press, Cambridge, MA 1958, p. 294).

The focus of Betancourt's discussion is the notion of the 'outpouring' and that of the 'effluence' of the optical rays. Contrary to almost all available scholarship on this passage, ²² Betancourt claims that while προχύσει refers to the optical rays being sent forth from the eyes towards the visible objects, ἀπορροῆ is not to be conceived as a mere synonym or as another term referring to the optical rays sent forth from the eyes (as Mango does in his translation), but rather as a term referring to rays emitted from the objects themselves and sent forth towards the eyes through the medium, where they make vision possible by meeting the rays coming from the eyes in a typically interactionist model of vision. To support his claim, Betancourt provides an extensive list of examples from both ancient and Byzantine sources, where the verb ἀπορρέω or its corresponding noun and adjective are used to indicate effluences coming from the objects towards the eyes. He notes, in particular, that the verb ἀπορρέω is used with this meaning in *Timaeus* 67c, and in the Byzantine period, for instance, the verb is used (almost invariably) with the same meaning in Michael Psellos's summary on vision and in the De omnifaria doctrina. The same is also true of ancient atomistic theories of vision, of Theophrastus's De sensibus, and also of a significant number of other Late Ancient sources. Betancourt also gives great importance, in his discussion, to a passage from Plotinos's *Enneads* describing the birth of Eros, ²³ which he reads in connection with a passage describing the mutual gaze of lovers in Achilles Tatius's Leukippe and Kleitophon.²⁴ However, at the same time, as Betancourt himself admits, ἀπορρέω is used to denote the rays sent forth from the eyes in texts such as the very popular doxographical work *Placita philosophorum* by the Pseudo-Plutarch (Aetios of Antioch), 25 and the verb is used indifferently for both kinds of effluences in Alexander of Aphrodisias's commentary on the *De sensu.*²⁶ Further instances

²² See, among recent contributions, IERODIAKONOU, *Byzantine Theories of Vision*, p. 161: « Interestingly enough, Photius also gives us in a brief summary his theory of vision, which undoubtedly follows ancient extramission theories: visual rays are emitted by our eyes, extend all the way to the visible object and grasp it; the acquired information is then brought to our eyes, from there it is sent to the mind and stored in memory ».

PLOTINOS, Enneads, III.5 [50], 3, ed. PAUL HENRY, HANS-RUDOLF SCHWYZER, Opera, vol. I, Brill, Leiden 1951.

ACHILLES TATIUS, Leukippe and Kleitophon, I.9.4–5, ed. EBBE VILBORG, Leucippe and Clitophon, Almquist & Wiksell, Stockholm 1955 (Studia Graeca et Latina Gothoburgensia 1), p. 11. For a specific interpretation of the theory of vision underpinning this passage, see Helen Morales, Vision and Narrative in Achilles Tatius' Leucippe and Clitophon, Cambridge University Press, Cambridge 2004 (Cambridge Classical Studies), p. 130–135.

²⁵ Cf. Aetios of Antioch, *Placita Philosophorum*, IV.13, ed. Jürgen Mau, *Plutarchi moralia*, vol. V.2.1, Teubner, Leipzig 1971 (Bibliotheca Scriptorum Graecorum et Romanorum Teubneriana), p. 123.

The verb is used with reference to the effluences coming from the eyes in four instances in the commentary: Alexander of Aphrodisias, *In librum De sensu commentarium*, ed. Paul Wendland, Reimer, Berlin 1901 (Commentaria in Aristotelem Graeca III.1), 30.22, 31.21, 32.14 and 58.25.

might be easily found.²⁷ Therefore, I believe that Betancourt lacks sufficient textual support for his interpretation of Photios's theory of vision as an interactionist one, especially in light of the fact that, just after the sentence in question, Photios seems to unmistakably claim that the rays sent forth from the eyes reach the object by « touching » and « encompassing » it.²⁸

Nevertheless, even apart from the truth or falsity of his interpretation, I believe that this is probably the only point in the book where Betancourt, in an attempt to dismiss the (important) counterinstances of the use of $\dot{\alpha}\pi$ opp $\dot{\epsilon}\omega$ highlighted above, tries to force his own reading upon them. For instance, with reference to Aetios of Antioch's passage, he first affirms, while commenting upon it: « Aetios is not emphasizing the act of the active viewer's sending out of rays, but rather their progression into space » (p. 121). Or, again on the same passage: « Michael Psellos precisely altered – or rather, corrected – the language found in the Aetios text, where Aetios distractingly used $\dot{\alpha}\pi$ opp $\dot{\epsilon}$ ov τ l to describe the outpouring from the eyes, rather than the emanation from the object » (p, 126). Finally, talking about Alexander of Aphrodias's use of the term in the *De sensu* commentary: « In these cases, we witness a desire to stage a certain passivity of the efflux going from the eye into space » (p. 126).

Of course, Betancourt is absolutely right to stress the fact that no 'haptic' process is entailed by Photios's theory of vision; yet such a theory, in the present state of research, still appears to be firmly grounded in the extramissionist camp.

²⁷ Another one is discussed by Betancourt, although in a completely different context, in the third part of the book, concerning a discussion of the Byzantine understanding of the evil eye. There, Betancourt quotes a text from Basil of Caesarea's Homilia de invidia (Homily 11) (Patrologiae Cursus Completus. Series Graeca, ed. Jacques-Paul Migne, vol. XXXI, Imprimerie Catholique, Paris 1857, col. 372–385, here col. 380) where the verb ἀπορρέω is unmistakably used to denote the malignous (and potentially harmful) effluences being sent forth from the eyes of the envious towards those who are the object of his envy (cf. Betancourt, Sight, Touch, and Imagination in Byzantium, p. 312–313). Betancourt tries to provide an interpretation of this counterinstance (as of all the others) which makes it consistent with his understanding of the verb; yet it is hard to deny that the referent of Basil's use of ἀπορρέω in this passage are effluences emitted from the eyes, not from visible objects. For a further counterinstance, see below, footnote 48.

Betancourt, after revising the meaning of $\dot{\alpha}\pi \sigma \rho \rho \dot{\epsilon}\omega$ and completing his discussion of the first stages of perception according to Photios, at the end of Chapter 5 (the second of the second part) also presents an alternative translation of Photios's relevant passage based on his own reading, where 'touching' is replaced by 'contacting' and 'encompassing' by 'regarding' (cf. Betancourt, Sight, Touch, and Imagination in Byzantium, p. 140). However, these modifications are not, by themselves, sufficient in order to establish an overall interactionist interpretation of the passage, rather than an extramissionist one. To the contrary, it seems to me that, even in Betancourt's translation (supposedly the closest to his interpretation), taken by themselves, these two verbs unmistakably denote an extramissionist process (not, however, a 'haptic' one, whereas the translation of both verbs chosen by Mango, but especially the use of the verb 'encompassing', might have been slightly misleading in this respect).

The following chapter introduces all the subsequent stages of perception delineated by Photios, usefully comparing them to an ancient model that bears close resemblance to it, namely, Porphyry's theory of perception, as delineated in a famous excursus of the Commentary on Ptolemy's Harmonics. Here what emerges is the difference between the importance of an initial stage where the sensations, once apprehended, go through a process of belief-making assumptions (δοξαστικὴ ὑπόληψις), before being passed on to the imagination (φαντασία), in Porphyry, and the lack of a corresponding stage in Photios, who, instead, gives paramount importance to the reception of visual sensations in the imagination. ²⁹ Indeed, the two subsequent chapters of the book are dedicated to elucidating the role of imagination in Photios, reading it both against its ancient background and

This is a fundamental difference, in terms of its consequences on the overall picture of cognitive psychology. Indeed, the δοξαστική ὑπόληψις in Poprhyry is a faculty which converts the raw data of sensation in propositional terms (or which at the very least names them), before sensations can be passed on to the imagination (cf. Porphyry, Είς τὰ ἀρμονικὰ Πτολεμαίου ύπόμνημα, ed. Ingemar Düring, Kommentar zur Harmonielehre des Ptolemaios, Wettergren & Kerber, Göteborg 1932 (Göteborgs högskolas årsskrift XXXVIII 1932/2), p. 13-14); on the role of δοξαστικὴ ὑπόληψις in Porphyry's theory of knowledge see Michael Chase, « Porphyry on the Cognitive Process », Ancient Philosophy, 30 (2010), p. 383-405, esp. p. 386-391). The (almost complete) absence of a comparable faculty in Photios, therefore, seems to present a picture of cognitive psychology where the imagination is only bounded, in its operation, by the 'immediate' data of sensation. As Betancourt aptly notices: « Photios's omission of this step is noticeable, given that for earlier Christian writers, this stage would seem to allow one to slow down the process of assenting to the cognitive impressions instigated by sensation » (BETANCOURT, Sight, Touch, and Imagination in Byzantium, p. 174). Betancourt goes on to notice that the situation might be more nuanced, since part of the role of the δοξαστική ὑπόληψις is taken up, in Photios's theory, by a stage of πρόληψις. However, the fact remains that the πρόληψις, as described by Photios, is not able to convert the raw data of sensation in propositional terms. One could here try to go one step further than Betancourt. Indeed, as Chase remarks (Chase, « Porphyry on the Cognitive Process », p. 389–390), Porphyry drew inspiration in describing the role, respectively, of the δοξαστική ὑπόληψις and of the imagination, among other sources, from Plato's Philebus, 39a-b, where Plato describes a two-stage process where first, « on the basis of memory and sensation, a faculty equivalent to a scribe writes something down in our soul, with the end-result being opinion ($\delta\delta\xi\alpha$) » (ibidem), and «[a]fter this, another faculty, equivalent to a painter, draws images (εἰκόνας) in the soul of what the scribe has written » (ibidem). By assuming, then, that Photios conceived of the respective roles of the δοξαστική ὑπόληψις and of the imagination (directly or indirectly) along the lines of the Platonic analogies between the δοξαστική ὑπόληψις and the scribe on the one hand and the imagination and the painter on the other, it becomes easier to understand why the δοξαστικὴ ὑπόληψις is fundamentally absent from the text of his Homily, while the imagination plays such an important role. After all, indeed, the δοξαστική ὑπόληψις, through its connection with words (albeit written ones), can be easily associated with the sense of hearing, whereas the imagination can (even more easily) be associated with the sense of sight. Therefore, insofar as the overall aim pursued by Photios in section five of his Homily 17 is that of affirming the superiority of sight over hearing (and all the other senses), it should not come as a surprise that he neglects the role of δοξαστική ὑπόληψις and extolls the one of imagination in describing the process of perception.

the apparent mistrust with which such a notion was treated by Church Fathers, as a faculty with a potentially deceptive character. Along the way, Betancourt takes great care to underline how the haptic language usually associated by Byzantine art historians with haptic theories of vision is frequently used by ancient and Byzantine authors to denote the grasp of the objects seen by the imagination thanks to its ability to visualise what lies outside of the perceiving subject on the basis of the sensations received from the sense organ.

The second part of Betancourt's book is then closed by a chapter reflecting on the function of judgement, as the cognitive faculty that evaluates the truthful nature of the images produced by the imagination so that once it has assented to them, they can be passed on to higher cognitive faculties in the process of thought and to the memory for storage for future uses. This chapter, again, gives Betancourt the possibility of reflecting more deeply on the criteria used by Photios (and by his ancient and Byzantine interlocutors) to distinguish true and deceptive images produced by the imagination, also comparing the judgement between the images produced from visual and from aural perceptions, insofar as Photios tends to consider this stage of perception absent from visual perception, where the vividness of the sensations and of the images produced from them have the consequence that such images are passed on « effortlessly » (ἀκόπως), as Photios says, to the memory.

The third part of the book,³⁰ which consists of three chapters, returns to the topics discussed in the first part, enriching the discussion with a series of further reflections. Each of the three chapters of this part, therefore, responds specifically to one of the chapters of the first part. The ninth chapter (the first of the third part) connects the discourse on the medium of sight to a wider reflection on the notion of medium in Byzantine theories of representation (particularly those which can be reconstructed from an analysis of Byzantine texts reflecting on art, whose paradigmatic literary genre, or better, whose paradigmatic technique, is the *ekphrasis*) and in modern theorisations about Byzantine art, moving beyond a reductive understanding of the medium of the icon (as the paradigmatic Byzantine artwork) as the mere material support on which the image lies.

The subsequent chapter then returns to the problem of the relation between sight and touch by looking at a 'performative' context in which, indeed, sight and touch came to be closely associated in the Byzantine world, namely, that of the icon's ritual of veneration (but Betancourt also usefully inserts many parallels with sacramental liturgy), where among other steps, the faithful should touch the icon with his eyes, as part of a ritual aimed at receiving the blessing of the icon itself. This process, notably, is used to explain important (and apparently puzzling) texts,

Which is based on ROLAND BETANCOURT, « Tempted to Touch: Tactility, Ritual, and Mediation in Byzantine Visuality », *Speculum*, 91 (2016), p. 660–689.

among others, of John of Damascus, who, in the *Orationes de imaginibus tres*, repeatedly encourages the faithful to embrace and kiss the icon with the eyes.³¹

Finally, the last chapter of the third part comes back to the issue of the commonalities and the relations among the senses by reflecting on the uses of a conscious synesthetic language throughout the Byzantine world. Here, great attention is, again, given to the unity of perception in the common sense, where the sensory inputs from all the sense organs come together. This clearly Aristotelian theme is followed through a series of Late Ancient and Byzantine authors as diverse as Plotinos, Michael Psellos, Nikephoros Gregoras, Theodore Metochites and Nikephoros Choumnos. What this intellectual path suggests is that the use of synesthetic language in Late Ancient and, especially, Byzantine reflections on perception is not aimed at confusing in any way the distinctness and specificity of each sense but rather at identifying the particular states in which sensory inputs are received with a particular vividness. The chapter then purports to show how an analogous use of this synesthetic language can be found not only in ekphrastic texts celebrating works of art but also in a variety of other contexts, for instance, in the Patristic interpretation of the popular theme of the evil eye. The key notion that unites all of these uses of synesthetic language is that of 'vividness' (ἐνάργεια), a key concept whose closest relative in the Latin world might, maybe, be identified in that of *claritas*. Interestingly, indeed, the synesthetic language of ἐνάργεια in the Byzantine world, as Betancourt shows, also came to be associated with the religious illumination coming from the Scripture. This conclusion further restates one of the most important presuppositions of the whole third part of the book, namely, the importance of a parallel between Byzantine theories of (artistic) representation and Byzantine rhetorical theories.

The Conclusion finally returns to the issue of the emergence of the historiographic trend of haptic sight in studies of Byzantine art, and it (re)asserts, on the basis of the investigation conducted throughout the book, its inability to fully understand the way in which the Byzantines conceived of and experienced the work of art, paradigmatically the icon. Here Betancourt, from the standpoint of comparative cultural anthropology, asks the reader to reflect on his or her own desire to touch the artwork, a desire that is constantly frustrated by the distance established between the viewer and the artwork in the context of fruition of the modern museum, and to project it onto the Byzantine viewer. In Byzantium, however, and especially in the context of the experience of the icon and of the sacred works of art more generally, such a desire was heightened to paroxysm.

³¹ Cf. John of Damascus, Orationes de imaginibus tres, II.10 and III.9, ed. P. Bonifatius Kotter, Die Schriften des Johannes von Damaskos, vol. III, De Gruyter, Berlin 1975 (Patristiche Texte und Studien 17). Betancourt's interpretation of these passages, by taking them to refer to the physical ritual of veneration of the icon, effectively pushes back any attempt to use them as implying an adherence to a theory of haptic sight, as suggested in Nelson, To Say and to See, p. 153.

Although Byzantines were supposed to touch the icons in the process of veneration, as mentioned above, this did not satisfy them. Quite the contrary: touch, coupled with sight, only contributed to making them painfully aware of the ultimate absence of the figure(s) represented in the icon, therefore reinforcing the desire to reach a further form of communion with the sacred which, however, could only be achieved through spiritual means.

The variety of the subjects discussed in the book and of the texts analysed is, as it should be clear, noteworthy. Throughout this kaleidoscopic investigation, Betancourt succeeds in contrasting the notion of (extramissionist) haptic sight in (ancient and) Byzantine studies, showing the constant awareness, in the main ancient and Byzantine theories of vision, of the ontological and epistemological distinction between sight and touch and their respective processes of perception. Moreover, Betancourt effectively shows that the kind of haptic language which, throughout the ancient and the Byzantine world, came to be associated with visual perception, ultimately referred to the cognitive stages of the process of perception itself, and especially to the workings of the faculty of the imagination $(\phi\alpha\nu\tau\alpha\sigma(\alpha))$, rather than to the initial phase of sensation, where the sense organ first perceives the qualities of the object.

III. Galen's Theory of Vision: Interactionist or Extramissionist? The Role of Medium as a 'Prosthesis' to Sight

It would be beyond the scope of this article to look at the many avenues for further investigation opened up by Betancourt's rich and important contribution. However, I believe that one particular element of the book deserves further discussion. Indeed, as I mentioned above, probably due to his emphasis on rebutting any possible hint to (extramissionist) theories of haptic sight in the sources analysed, Betancourt is sometimes brought to interpret in an interactionist way theories of vision whose exclusive (or prevalent) extramissionist character can hardly be denied. This is the case with Photios, but it is even more so with Galen and the Byzantine tradition directly or indirectly influenced by him, or in any case bearing close resemblances to it. It is exactly on the case of Galen's theory of vision (and on his – direct and indirect – reception in later Byzantine history) that I want to focus in this section of the article and in the next one.

Indeed, one aspect that features prominently in Galen's theory of vision is a conception of the medium of vision as an entity capable of acting as a sort of sensitive *prosthesis* to the eyes, considered the proper organ of sight. This is certainly not a new observation. Indeed, not only, as I will show below, some of the early Byzantine interpreters of Galen's theory of vision, such as Nemesios of Emesa, put in sharp focus this aspect, but even readers of Galen coming from

different cultural contexts underlined it. Just to quote an example, this aspect is mentioned (and criticised) in Averroes's *Epitome* on the *Parva naturalia*. ³² More than this, this same aspect has certainly not passed unnoticed among contemporary scholars discussing Galen's theory of vision.³³ Nevertheless, it is only in very recent years (and after the publication of Betancourt's book), that, thanks to the efforts of Katerina Ierodiakonou, this aspect has been investigated in all its nuances and it has been put at the centre of a careful and, I believe, fully convincing interpretation of Galen's theory of vision.³⁴ According to such a reconstruction, a theory of vision such as Galen's one, while never reducing vision to an unmediated and 'tactile' process, rather retaining the ontological and epistemological distinction between the sense organ and the medium, still considers the medium as an entity that participates in an active way to the process of perception on the side of the perceiving agent (and, therefore, characterises vision in a peculiar extramissionist way, contrary to Betancourt's interpretation). In this conception, while the medium is not the sense organ, once it has started to interact with the sense organ itself, it finds itself ontologically changed so that it becomes, in a specific sense, an 'extension' of it into space.

One might wonder why, after all, I focus on such an interpretation in the context of a review article of Betancourt's book. Indeed, it might be easily objected that, since this interpretation of Galen's theory of vision has been fully articulated after the publication of Betancourt's book, it would be unfair to criticise the author for not having taken it into account. Nevertheless, not only the central aspect of it (i.e., the 'prosthetic' role of the medium) had already been fully acknowledged

³² Cf. Averroes, *Compendia librorum Aristotelis qui Parva Naturalia vocantur*, ed. EMILY L. SHIELDS, with the help of Harry Blumberg, The Mediaeval Academy of America, Cambridge, MA 1949 (Corpus commentariorum Averrois in Aristotelem: Versionum latinarum, 7), p. 36, l. 35–36: « Galienus autem in tantum applicabatur errori quod existimavit aërem esse sentientem ».

See, for instance, Bydén, Theodore Metochites' Stoicheiosis Astronomike and the Study of Natural Philosophy and Mathematics in Early Palaiologan Byzantium, p. 201: « The mechanism of sight described by Galen in Placita Hippocratis et Platonis 7.4–7 is similar to that in Timaeus 45b–46c, although the 'pure fire' which according to Plato is emitted through the eyes is replaced with psychic pneuma, and the external fire with air. Through the emission of pneuma into illuminated air, the latter is converted into an organ of sight (PHP 7.7.18–19, 472.33–474.7) ». For another similar formulation (albeit one that is less explicit and accompanied by some further qualifications, which it is not possible to discuss here), see for instance Heinrich Von Staden, « La théorie de la vision chez Galien: la colonne qui saute et autres énigmes », Philosophie antique. Problèmes, Renaissances, Usages, 12 (2012), p. 115–155, p. 135: « [...], ici, il suffit de faire remarquer qu'à son avis [i.e., according to Galen] le pneuma sensoriel visuel s'échappant hors de la pupille produit un effet de sensibilisation instantané sur l'air extérieur qu'il rencontre dans sa sortie – effet semblable à celui produit sur l'air par la lumière du soleil [...] ».

³⁴ Cf. IERODIAKONOU, « Theophrastus on Plato's Theory of Vision », p. 257–258, although this same interpretation had already been quite clearly articulated (and critically evaluated) by Ierodiakonou, in its fundamental elements, in EAD., « On Galen's Theory of Vision », Bulletin of the Institute of Classical Studies. Supplement, 114 (2014), p. 235–247.

before, as I have recalled, but, what is more, the main Galenic texts from which this interpretation can be inferred are exactly those on which Betancourt grounds his interactionist reading of Galen's theory of vision. It therefore seems fair to devote some effort, in this article, to showing in some detail, and closely following Ierodiakonou's lead, the way in which these texts go against an interactionist reading of Galen's theory of vision and clearly favour a 'prosthetic' extramissionist one. To this task I now turn.

Galen's theory of vision is found mostly in Book VII, chapters 4–7 of the *De placitis Hippocratis et Platonis* and in Book 10 of the *De usu partium*.³⁵ Although Galen's discussion in the two works presents some differences,³⁶ for the time being I am going to consider the two accounts largely compatible (although the weight of the geometrical tradition is much greater in the *De usu partium* than in the *De placitis*) and I am going to focus on the presentation of his theory of vision that Galen inserts in Book VII of the *De placitis*, concentrating especially on chapter 7, since this chapter plays a key role in Betancourt's interpretation.

The overall theory of vision that emerges from Book VII of the *De placitis* (following, once again, the reconstruction provided by Ierodiakonou) is a syncretic one, where a largely Platonic framework (indeed, as said, Galen takes his theory of vision to represent the correct interpretation of Plato's one) is integrated with an appeal to Aristotelian elements (especially an understanding of the medium of vision which comes close to Aristotle's transparent) and Stoic ones (especially the role of optic *pneuma*, which entirely replaces the Platonic concept of fiery rays emitted from the eyes). In crude summary, it might be claimed that Galen thought that vision occurred through the outpouring of optic *pneuma* from the eyes, which

As already mentioned, in what follows I will ground my reading of Galen's texts on Ierodiakonou,
«Theophrastus on Plato's Theory of Vision», p. 257–258, which, in what concerns the
interpretation of Galen's theory of vision, further articulates and develops what already
presented in Ead., «On Galen's Theory of Vision». Apart from these contributions, a very detailed
(and comprehensive) recent discussion of Galen's theory of vision, giving a great importance to
the anatomy, the physiology and the geometry of vision, can be found in Von Staden, « La théorie
de la vision chez Galien: la colonne qui saute et autres énigmes ». The classical account of Galen's
theory of vision is to be found in Rudolph E. Siegel, Galen on Sense Perception. His Doctrines,
Observations and Experiments on Vision, Hearing, Smell, Taste, Touch and Pain, and Their Historical
Sources, Karger, Basel-New York 1970. Older discussions of Galen's theory of vision can also be
found, among others, in Owsel Temkin, « On Galen's Pneumatology », Gesnerus, 8 (1951), p. 180–
189, and in Harold Cherniss, « Galen and Posidonius' Theory of Vision », American Journal of
Philology, 54/2 (1933), p. 154–161.

For a short presentation of these differences, see IERODIAKONOU, Byzantine Theories of Vision, p. 166–167.

Concerning the role of optic pneuma in Galen's theory of vision, see, in addition to the literature already quoted above, Véronique Boudon-Millot, Vision and Vision Disorders. Galen's Physiology of Sight, in Manfred Horstmanshoff, Helen King, Claus Zittel (eds.), Blood, Sweat and Tears. The Changing Concepts of Physiology from Antiquity into Early Modern Europe, Brill, Leiden 2012 (Intersections 25), p. 549–567.

then joined the surrounding air (appropriately activated by sunlight) so as to form with it a homogeneous body capable of perceiving the colours (which Galen takes to be qualities capable of altering the air immediately surrounding the object to which they belong), size, shape and relative position of the objects with which such a body came into contact.

In this reconstruction, the crucial element to understand Galen's theory of vision is the role of the body formed by the optic *pneuma* and the illuminated air. In connection with this aspect, Betancourt is obviously right when he underlines the importance played in Book VII, chapter 7 of the *De placitis* by Galen's criticism of the Stoic metaphor of the air as a walking stick in visual perception.³⁸ However, what Betancourt does not see (an aspect that has been clearly remarked, among others, by Ierodiakonou)³⁹ is that Galen is not criticising the idea, as I have defined it above, of air acting as an instrument to the sense organ of sight; rather, he is criticising the *kind* of instrument that the Stoics take air to be. Indeed, as Galen notes:

This latter kind of discernment is of resistant bodies, and it is besides more inferential than perceptive, whereas the perception of our eye is not perceptive of a thing as close packed, or of its hardness or softness, but of its color, size, and position, and none of these can be discerned by a walking-stick.⁴⁰

Galen's criticism is founded upon the idea that if the air surrounding us were akin to a walking stick for the eyes, then visual perception would become a mere form of touch, and we would, therefore, only perceive through it the same properties of the objects that we perceive through touch, such as hardness or softness. Nevertheless, this does not mean that Galen, as Betancourt claims, ⁴¹ takes air as a mere passive medium where the optic *pneuma* and the effluences coming from the

³⁸ Cf. Galen, *De placitis Hippocratis et Platonis* VII.7.20, ed. and trans. by Phillip De Lacy, *On the Doctrines of Hippocrates and Plato. Second Part: Books VI-IX*, Akademie Verlag, Berlin 1980 (Corpus Medicorum Graecorum V 4, 1, 2), p. 474–475, and above, n. 7.

³⁹ Cf. Ierodiakonou, « On Galen's Theory of Vision », p. 242–244. On the complex debate surrounding the Stoic theory of vision and its various possible interpretations in contemporary scholarship, a debate which it is unfortunately impossible to discuss here, see at least Ead., « Two Puzzles in Post-Aristotelian Theories of Vision », in Brian Glenney, José F. Silva (eds.), *The Senses and the History of Philosophy*, Routledge, London 2019 (Rewriting the History of Philosophy), p. 69–80, where also Galen's criticism of the Stoic metaphor of the air as a walking stick in visual perception is discussed.

GALEN, De placitis Hippocratis et Platonis, VII.7.20–21, ed. De LACY, p. 474–475: ή γὰρ τοιαύτη διάγνωσις ἀντιβαινόντων ἐστὶ σωμάτων, κατὰ συλλογισμὸν <δ'> ἔτι μᾶλλον οὐ πιλητοῦ δ'αἰσθητικὴ ἡ τοῦ ὅμματος αἴσθησις ἡμῖν ἐστιν οὕτε τῆς σκληρότητος ἢ μαλακότητος, ἀλλὰ χρόας καὶ μεγέθους καὶ θέσεως, ὧν οὐδὲν ἡ βακτηρία διαγνῶναι δύναται.

⁴¹ Cf. especially Betancourt, Sight, Touch, and Imagination in Byzantium, p. 60.

objects (or, as it should be said, the alterations caused in it by the colours of the objects) unite. Indeed, as he affirms just before criticising the walking stick metaphor:

Now it is clear and agreed to by all that we see through air as an intermediate; the problem here is to discover whether something comes to us from the objects of sight through the air as through some intermediate pathway, or the air is for us the same kind of instrument for discerning visible things as the nerve is for tangible things. Most people think even with regard to the nerve that the alteration caused by impinging objects is transmitted through it to the governing part of the soul and so leads us to the discernment of the objects; it does not occur to them that the pain would not be felt in the part of the body that is cut or crushed or burned if the power of sensation were not also present in the parts. The truth is the opposite of the opinion that those people hold. The nerve itself is a part of the brain, like a branch or offshoot of a tree, and the member to which the part is attached receives the power of the part into the whole of itself and thus becomes capable of discerning the things that touch it. Something similar happens also in the case of the air that surrounds us. When it has been illuminated by the sun, it is already an instrument of vision of the same description as the pneuma coming to it from the brain; but until it is illuminated it does not turn into a sympathetic instrument (ὁμοιοπαθὲς ὄργανον) by virtue of the change effected in it by the outflow of the pneuma.42

The passage as a whole, the comparison between the air (taken here as a shorthand for the body formed by the coalescence between the optic *pneuma* and illuminated air) and the nerve, and, finally, the very use of the expression of « sympathetic

Galen, De placitis Hippocratis et Platonis, VII.7.16–19, ed. De Lacy, p. 472–475: Τὸ μὲν οὖν διὰ μέσου τοῦ ἀέρος ὁρᾶν ἡμᾶς ἐναργές ἐστι καὶ πᾶσιν ὁμολογούμενον, ἡ ζήτησις δὲ ἐπὶ τῷδε γίγνεται, πότερον ὡς δι ὁδοῦ τινος μέσης ἀπὸ τῶν ὁρωμένων ἀφικνεῖταί τι πρὸς ἡμᾶς ἢ τοιοῦτον ὅργανον ὁ ἀήρ ἐστιν ἡμῖν εἰς τὴν τῶν ὁρατῶν διάγνωσιν οἶόν περ τὸ νεῦρον εἰς τὴν τῶν ἀπτῶν. οἴονται μὲν οὖν οἱ πλεῖστοι καὶ διὰ τοῦ νεύρου τὴν ἀπὸ τῶν προσπιπτόντων ἀλλοίωσιν ἀναδιδομένην ἐπὶ τὸ τῆς ψυχῆς ἡγεμονικὸν εἰς διάγνωσιν ἄγειν ἡμᾶς αὐτῶν, οὐκ ἐννοοῦντες ὡς οὐκ ἂν ἡ τῆς ἀδύνης αἴσθησις ἐγίγνετο κατὰ τὸ τεμνόμενον ἢ θλώμενον ἢ καόμενον μόριον εἰ μὴ καὶ τῆς αἰσθήσεως ἡ δύναμις ἦν ἐν αὐτοῖς. ἔχει δ'ἐναντίως ἢ[ν] δοξάζουσιν ἐκεῖνοι τὸ ἀληθές. αὐτό τε γὰρ τὸ νεῦρον ἐγκεφάλου μέρος ἐστὶν οἶόν περ ἀκρεμὼν ἢ βλάστημα δένδρου, τό τε μέλος εἰς ὃ τὸ μέρος ἐμφύεται τὴν δύναμιν αὐτοῦ δεχόμενον εἰς ὅλον ἐαυτὸ διαγνωστικὸν γίνεται τῶν ψαυόντων αὐτοῦ. παραπλήσιον οὖν τι κάπὶ τοῦ περιέχοντος ἡμᾶς ἀέρος γίγνεται· πεφωτισμένος γὰρ ὑφ' ἡλίου τοιοῦτόν ἐστιν ἡδη [τὸ] τῆς ὄψεως ὅργανον οἶον τὸ παραγιγνόμενον ἐξ ἐγκεφάλου πνεῦμα· πρὶν φωτισθῆναι δέ, κατὰ τὴν ὑπὸ <τῆς> τοῦ πνεύματος εἰς αὐτὸν ἐκβολῆς ἐναποτελουμένην ἀλλοίωσιν ὁμοιοπαθὲς ὄργανον οὐ γίγνεται (emphasis mine).

instrument (of sight) » (ὁμοιοπαθὲς ὅργανον)⁴³ with reference to the body formed by the coalescence between the optic *pneuma* and illuminated air in the process of vision, makes it overwhelmingly clear that, for Galen, vision is nothing like a midway encounter between the optic *pneuma* and the (alterations caused by the) colours of the objects. That is, as soon as the optic *pneuma* coalesces with the air surrounding the eyes (provided that such air is aptly activated by sunlight), it instantaneously perceives everything that (within a suitable distance) is touched by such air, therefore perceiving not only the colours but also the size, shape, and position of all such objects and, thus, overcoming what Galen takes to be the major objection to Aristotle's intromissionist account of vision. From this perspective, it is true that colours alterate the surrounding air, but as soon as they do it, *they have already been perceived*. This does not amount to a claim that vision is a tactile or unmediated process, but that it is a prosthetic (and therefore fundamentally extramissionist) one.

While Betancourt quotes a large part of this text, he downplays its importance by noting that, as Galen recognises in a later passage, the *pneuma* changes its nature when entering the process of vision and becoming united with the surrounding air. Betancourt quotes the following passage, which closes the discussion on sight in chapter 7 of Book VII of the *De placitis*:

But what difficulty is there in supposing that the sunlight is sensitive $(\alpha i\sigma\theta\eta\tau\iota\kappa\dot{\eta}\nu)$, much as the *pneuma* in the eyes that is brought forth in the brain is clearly seen to be? For it is luminous. And if we must speak of the substance of the soul, we must say one of two things: we must say either that it is this, as it were, bright and etherial body, a view to which the Stoics and Aristotle are carried in spite of themselves, as the logical consequence (of their teachings), or that it is (itself) an incorporeal substance and this body is its first vehicle, by means of which it establishes partnership with other bodies. We must say, then, that this ([psychic] *pneuma*) itself extends through all the brain, and that by partnership with it the optical *pneuma* becomes luminous.⁴⁴

The same adjective had already been used to describe the body formed by the union between the visual stream of fiery rays coming from the eyes and the daylight in Plato's *Timaeus* 45b2–d3, the first passage of the dialogue where Plato introduces his theory of vision, as remarked in Ierodiakonou, « On Galen's Theory of Vision », p. 236. The use of the same adjective employed by Plato in the *Timaeus* to describe the role of the body formed by the fiery rays emitted from the eyes and illuminated air as an instrument in vision is telling of the importance of Plato's influence on Galen in the development of an extramissionist 'prosthetic' theory of vision.

GALEN, De placitis Hippocratis et Platonis, VII.7.24-26, ed. De LACY, p. 474-475: τί δὲ χαλεπόν ἐστι τὴν ἡλιακὴν αὐγὴν αἰσθητικὴν ὑποθέσθαι, οἶον μάλιστα τὸ κατὰ τοὺς ὀφθαλμοὺς πνεῦμα τὸ παραγόμενον ἐξ ἐγκεφάλου προδήλως ὀρᾶται; φωτοειδὲς [καὶ] γάρ ἐστιν. εἰ δὲ καὶ περὶ ψυχῆς οὐσίας ἀποφήνασθαι χρή, δυοῖν θάτερον ἀναγκαῖον εἰπεῖν ἢ τοῦτ εἶναι τὸ οἶον αὐγοειδές τε καὶ αἰθερῶδες σῶμα λεκτέον αὐτήν, εἰς ὃ κἂν μὴ βούλωνται κατ ἀκολουθίαν ἀφικνοῦνται

Here, Galen – after restating in unmistakable terms that illuminated air (and, more directly, sunlight itself), once united with the optic pneuma, can become a suitable prosthesis to vision, being « sensitive » $(\alpha i\sigma\theta\eta\tau u\kappa\dot{\eta}\nu)$ – goes on to clarify that the optic pneuma, flowing from the eyes and acting onto its surrounding illuminated air to coalesce with it, is not consubstantial with the soul and therefore with the psychic pneuma. This is in itself an important claim, one that should make one particularly wary of adopting the idea that the surrounding air becomes the organ of sight itself (this, indeed, would amount to consider Galen's theory of vision as an unmediated and tactile one). However, nothing in this passage seems to go against the idea that illuminated air is a prosthesis to the organ of sight (if anything, the opening of the passage, calling sunlight – and therefore illuminated air – « sensitive », further supports it), in the same way as the nerve is for touch, and a branch is for a tree. Thus, I do not think that Betancourt can draw any support from this passage, as he does, to claim that:

Thus, sight is possible only through the unification of various properties as one: psychic pneuma, optic pneuma, air, and light. However, this does not mean that either sunlight or air are sensitive in themselves, but rather that through their union they are able to enable perception via the pneuma in the eyes, which is the only proper sensitive entity for sight. Putting this in the context of Galen's broader argument, as I have laid out here, the optic pneuma then does not reach the objects themselves, but rather unites with the surrounding air that has been activated by light in order to receive the visible qualities of the object being sent through that light-air mixture. [...] For this reason, Galen critiques the walking stick metaphor by carefully expounding the relationship between the brain and the pneuma, as well as the pneuma and the air, making sure not to make it seem as if the pneuma is an all-encompassing, all-reaching body that can touch the objects of sight, from a nearby tree to a distant star. The pneuma activates only the air immediately next to it - in the same way in which a single beam of sunlight can immediately affect the totality of air. This ensures that the sensitive faculty is embedded in the viewer, not distributed throughout the intervening medium as some extension of the body into space.⁴⁵

Contrary to what Betancourt suggests, Galen, especially with the analogy between the air surrounding us and the branch of the tree and the nerve, wants to claim that the medium can become an extension (what I call a 'prosthesis') of the visual

Στωϊκοί τε καὶ Ἀριστοτέλης, ἢ αὐτὴν μὲν ἀσώματον ὑπάρχειν οὐσίαν, ὅχημα δὲ τὸ πρῶτον αὐτῆς εἶναι τουτὶ τὸ σῶμα δι'οὖ μέσου τὴν πρὸς τἆλλα σώματα κοινωνίαν λαμβάνει. τοῦτο μὲν οὖν αὐτὸ δι'ὅλου λεκτέον ἡμῖν ἐκτετάσθαι τοῦ ἐγκεφάλου, τῇ δέ γε πρὸς αὐτὸ κοινωνία τὸ κατὰ τὰς ὄψεις [αὐτῶν] πνεῦμα φωτοειδὲς γίγνεσθαι.

⁴⁵ Betancourt, Sight, Touch, and Imagination in Byzantium, p. 62.

faculty into the external space, although, of course, the eyes remain the only proper organ of sight. As I have tried to show, therefore, it is true that according to Galen the optic *pneuma* does not directly touch any object, as Betancourt rightly remarks, but still, it does so indirectly through its union with illuminated air.

This might seem a difference of detail, yet I think it is of great importance, not only for a correct understanding of Galen's own theory of vision, but also for the history of its momentous reception in Byzantium, especially during the early and middle Byzantine period. Indeed, the fact that Galen's theory was interpreted as a sort of 'prosthetic' extramissionist one as early as the fourth century can be supported, as I have already mentioned, by looking at how the account of vision in Book VII of the *De placitis* is glossed over by an extremely influential text throughout Byzantine history, namely, Nemesios of Emesa's *De natura hominis*. Indeed, after quoting at length some of the main passages discussed above, together with the analogy between tactile nerves, tree branches and illuminated air, Nemesios remarks:

For air becomes an instrument (\Tilde{o} p α vov) for the eye for the recognition of visible objects such as is the nerve for the brain, so that the eye has the same relation to the air that has been given soul power by the sun's ray as the brain has to the nerve. That air naturally becomes like bodies near to it is clear from the fact that air, when something bright, red or blue or even shining silver travels through it, is altered by that which travels through it.⁴⁶

Nemesios's statement that « air becomes an instrument ($\delta\rho\gamma\alpha\nu\nu\nu$) for the eye for the recognition of visible objects as is the nerve for the brain » leaves no doubt as to the fact that he recognised Galen's theory of vision as relying on a 'prosthetic' model, in which illuminated air is sensitive (indeed, Nemesios clarifies that the sensitive character of illuminated air depends upon the fact that air has been

⁴⁶ Nemesios of Emesa, *De natura hominis*, 7, ed. Moreno Morani, *Nemesii Emeseni De natura hominis*, Teubner, Leipzig 1987 (Bibliotheca scriptorium Graecorum et Romanorum Teubneriana), p. 59.7–13: γίνεται γὰρ ὁ ἀὴρ ὅργανον τῷ ὁφθαλμῷ πρὸς τὴν τῶν ὁρωμένων διάγνωσιν τοιοῦτον, οιόνπερ ἐγκεφάλῳ τὸ νεῦρον, ὥστε ὃν ἔχει λόγον ἐγκέφαλος πρὸς τὸ νεῦρον, τοῦτον ἔχειν τὸν ὁφθαλμὸν πρὸς τὸν ἀέρα ἐψυχωμένον ὑπὸ τῆς ἡλιακῆς αὐγῆς. ὅτι δὲ πέφυκεν ὁ ἀὴρ τοῖς πλησιάζουσι σώμασι συνεξομοιοῦσθαι, δῆλον ἐκ τοῦ καὶ πυρροῦ τινος ἢ κυανοῦ ἢ καὶ ἀργύρου λαμπροῦ διαφερομένου, φωτὸς ὄντος, ὑπὸ τοῦ διενεχθέντος ἀλλοιοῦσθαι τὸν ἀέρα; trans. Robert W. Sharples, Pieter J. van der Eijk (eds.), *Nemesius: On the Nature of Man*, Liverpool University Press, Liverpool 2008 (Translated Texts for Historians 49), p. 105–106, quoted in Betancourt, *Sight, Touch, and Imagination in Byzantium*, p. 74–75. Concerning Nemesios's presentation of Galen's theory of vision, see Bolesław Domański, *Die Psychologie des Nemesius*, Aschendorff Verlag, Münster 1900, p. 101–102. For a general presentation of Nemesios's anthropology in the context of his wider philosophical and theological project, see David Lloyd Dusenbury, *Nemesius of Emesa on Human Nature. A Cosmopolitan Anthropology from Roman Syria*, Oxford University Press, Oxford 2021 (Oxford Early Christian Studies).

activated by sunlight) and, as a result, it can become part of an extramissionist process of visual perception by uniting with the optic pneuma. Betancourt himself recognises that « [i]n this model, as Nemesios clearly recounts, the air operates as a sort of prosthetic organ for the eye (\dot{o} $\dot{\alpha}\dot{\eta}\rho$ $\dot{o}\rho\gamma\alpha\nu\nu\nu$ $\tau\tilde{\phi}$ $\dot{o}\phi\theta\alpha\lambda\mu\tilde{\phi}$) by virtue of having 'ensouled' the air ($\dot{\alpha}\dot{\epsilon}\rho\alpha$ $\dot{\epsilon}\psi\nu\chi\omega\mu\dot{\epsilon}\nu\nu\nu$) ».⁴⁷ However, he ultimately reiterates his idea that Galen's theory of vision is interactionist, even in Nemesios's interpretation, and that none of them recognises air as being 'sensitive', something that appears to be clearly contradicted by the text just quoted. The case of Nemesios is even more important considering that, in his doxographic summary, Nemesios clearly qualifies Plato's theory as interactionist.⁴⁸ That is, even when Plato's theory of vision was interpreted as interactionist, Galen's theory remained influential as a distinct model, developing an idiosyncratic understanding of extramission that was to have a posterity in the Byzantine world (especially, but by no means solely, throughout the later Byzantine medical tradition), as Nemesios's case already shows.

IV. Understanding the Role of Medium as a 'Prosthesis' to Sight in Byzantine Eucharistic Theology: The Case of Nicholas Kabasilas

Of course, documenting the (direct or indirect) influence of Galen's 'prosthetic' theory of vision in Byzantium would require a burdensome investigation, analysing not only the texts of the medical tradition but also the 'philosophical' ones that came into dialogue with it, at least since the eleventh century onwards. Here, I cannot even start to sketch such an investigation. ⁴⁹ Still, I believe that the recognition of the existence of a distinctive group of extramissionist 'prosthetic' theories of vision in Byzantium (either directly or indirectly influenced by Galen's own theory, or in any case strongly resembling it), and of its full import, is an aspect that deserves further investigation.

In what follows, I am going to provide an example of how pervasive and ramified the extramissionist 'prosthetic' understanding of vision might have been

⁴⁷ Betancourt, Sight, Touch, and Imagination in Byzantium, p. 77.

Nemesios of Emesa, De natura hominis, 7, ed. Morani, Nemesii Emeseni De natura hominis, p. 58.11–14: Πλάτων δὲ κατὰ συναύγειαν τοῦ μὲν ἐκ τῶν ὀφθαλμῶν φωτὸς ἐπὶ ποσὸν ἀπορρέοντος εἰς τὸν ὁμογενῆ ἀέρα, τοῦ δὲ ἀπὸ τῶν σωμάτων ἀντιφερομένου, τοῦ δὲ περὶ τὸν μεταξὸ ἀέρα εὐδιάχυτον ὄντα καὶ εὕτρεπτον συνεκτεινομένου τῷ πυροειδεῖ τῆς ὄψεως. Note, incidentally, that the verb ἀπορρέω is used in this context to denote the effluences coming from the eyes, therefore adding another counterinstance to Betancourt's claims concerning the meaning of this verb in Byzantine theories of vision discussed above.

⁴⁹ An important starting point in such an investigation should certainly be represented by Part 1 of Petros Bouras-Vallianatos, Barbara Zipser (eds.), *Brill's Companion to the Reception of Galen*, Brill, Leiden 2019 (Brill's Companions to Classical Reception 17), where the important posterity of Galen's thought and works in (Late Antiquity and) Byzantium is carefully documented.

in the Byzantine world (and, therefore, of how potentially fruitful a comprehensive investigation of it might prove to be). In particular, what I want to suggest, developing and modifying an important intuition by Betancourt, is that the understanding of the role of the medium of vision as a 'prosthesis' to sight in the Byzantine world came to the point of influencing even Byzantine Eucharistic theology. This can be seen quite clearly in a relevant passage, on which I am going to focus in this section, from Nicholas Kabasilas's *Explicatio divinae liturgiae*, an influential fourteenth-century liturgical commentary.⁵⁰ Since this text is discussed at length in Betancourt's book, where it is read in an interactionist way, the analysis of it will allow me not only to uncover the extramissionist 'prosthetic' theory of vision on which it is grounded, but also, in the process, to challenge Betancourt's interactionist reading of it, also relying on what has been discussed in the previous section.

The relevant passage occurs in paragraph 44 of the commentary:

And just as light allows sight through itself to see, if [light] fails then seeing fails, thus continual union with Christ is necessary for the soul, if it is to live fully and be at rest. For neither without light is it possible for the eye to see, nor is it possible for the soul to have true life and peace without Christ; for He alone reconciles us to God and is the Author of that peace, without which we would be God's enemies, without hope of partaking in His good things.⁵¹

The first major study of Kabasilas's theology in modern times is Wilhelm Gass, Die Mystik des Nikolaus Cabasilas vom Leben in Christo, Koch, Greifswald 1849 (Beiträge zur kirchlichen Literatur und Dogmengeschichte des griechischen Mittelalters 2), which has been followed by Myrrha Lot-BORODINE, Nicolas Cabasilas. Un maître de la spiritualité byzantine au XIVe siècle, Éditions de l'Orante, Paris 1958, Constantine N. Tsirpanlis, The Liturgical and the Mystical Theology of Nicolas Cabasilas, Theologia, Athens 1976, and Walther Völker, Die Sakramentsmystik des Nikolaus Kabasilas, Steiner, Wiesbaden 1977. For some important studies focusing specifically on the details of Kabasilas's Eucharistic theology, see PAUL C. MANTOVANIS, « The Eucharistic Theology of Nicholas Cabasilas », PhD Diss., University of Oxford 1984, KALLISTOS WARE, 'Not an Image or a Figure'. St. Nicholas Cabasilas on the Eucharistic Sacrifice, in Job Getcha, Michel Stavrou (eds.), Le feu sur la terre. Mélanges offerts au Père Boris Bobrinskoy à l'occasion de son 80° anniversaire, Presses Saint-Serge, Paris 2005 (Analecta Sergiana 3), p. 143-149, and, more recently, PEKKA J. METSO, Divine Presence in the Eucharistic Theology of Nicholas Cabasilas, Publications of the University of Eastern Finland, Joensuu 2010 (Dissertations in Education, Humanities, and Theology 2). For some useful remarks, see also MARIE-HÉLÈNE CONGOURDEAU, Prier à Byzance au XIV^e siècle d'après la Vie en Christ de Nicolas Cabasilas, in La prière au Moyen Âge (littérature et civilisation), Presses universitaires de Provence, Aix-en-Provence 1981 (Sénéfiance 10), p. 120–132.

Nicholas Kabasilas, Explicatio divinae liturgiae, 44, ed. Sévérien Salaville, René Bornert, Jean Gouillard, Pierre Périchon, Explication de la divine liturgie, suivi de Explication des ornements sacrés et Explication des rites de la divine liturgie, Éditions du Cerf, Paris 1967 (Sources chrétiennes 4 bis), p. 252: Καὶ καθάπερ τὸ φῶς δι ἐαυτοῦ τὸ ὁρᾶν τοῖς ὁρῶσι παρέχον, οἶς ἂν ἐπιλίποι, καὶ τὸ ὁρᾶν ἐπιλείπει, οὕτω καὶ τὴν μετὰ τοῦ Χριστοῦ συνουσίαν ἀνάγκη διηνεκῆ ταῖς ψυχαῖς εἶναι, εἴγε μέλλοιεν ζῆν ὅλως καὶ ἀναπαύεσθαι. Οὕτε γὰρ χωρὶς φωτὸς ὀφθαλμὸς δύναται βλέπειν, οὕτε χωρὶς τοῦ Χριστοῦ ζωὴν ἀληθινὴν καὶ εἰρήνην ἐνεῖναι ταῖς ψυχαῖς δυνατόν, ὅτι αὐτός ἐστι ὁ

The analogy Kabasilas presents is striking. In his text, the union of the eyes (more properly, of the eyes's effluences) with light (a shorthand for the medium of sight) in vision becomes analogous to the role exercised by the Christ-Eucharist as Mediator in uniting souls with God.⁵² More precisely, by uniting with the Christ-Eucharist (and His divine life), the soul becomes able to partake in God's life, analogously to the way in which the eyes's effluences, through conjunction with light, come to perceive what light itself, as sensitive, perceives.

Betancourt is absolutely right, therefore, in underlining the centrality of this passage. His analysis, in particular, of the role of Christ as Mediator in comparison to the role of the visual medium is fitting, and it is therefore worth quoting it in full:

Most crucial to understanding Nicholas Kabasilas's theory of vision, however, is how the text speaks of the particular nature of that union

τῷ θεῷ καταλλάττων μόνος, ὁ τὴν εἰρήνην ταύτην ποιῶν ἦς χωρὶς ἐχθροὺς ὄντας τοῦ Θεοῦ τῶν ἀγαθῶν τῶν αὐτοῦ μετέχειν ὁπωσοῦν οὐδεμία ἐστὶν ἐλπίς (quoted according to the translation in Betancourt, Sight, Touch, and Imagination in Byzantium, p. 228, which is based on the translation in Joan M. Hussey, P. A. McNulty, A Commentary on the Divine Liturgy, St. Vladimir's Seminary Press, Crestwood, NY 1960, p. 100).

The analogy is, of course, indebted to Hesycastic theology, and, especially, to the role of the divine light in it. Indeed, in Gregory Palamas's theological reflection, the reference to divine light serves the purpose of identifying the aspect of God which man can come to know 'by acquaintance' through prayer already in this life, namely, God's activity (ἐνέργεια), while His essence remains entirely inaccessible to man in this life. The image used by Palamas to describe this concept is that of the light emanating from Christ during the Transfiguration, which became visible to the Apostles. The classical introductions to this topic in contemporary Western scholarship are Vladimir Lossky, The Vision of God, St. Vladimir's Seminary Press, Crestwood, NY 1983, which had been preceded by ID., The Mystical Theology of the Eastern Church, James Clarke, London 1957, and Jean Meyendorff, Saint Grégoire Palamas et la mystique orthodoxe, Éditions du Seuil, Paris 1959 (Microcosme. Maîtres spirituels 20); for what concerns Palamas's dialogue with the Dyonisian tradition in this respect, see Alexander Golitzin, « Dyonisius the Aeropagite in the Works of Gregory Palamas: On the Question of a 'Christological Corrective' and Related Matters », St. Vladimir's Theological Quarterly, 46/2 (2002), p. 163-190, here p. 165-167; finally, concerning the role of uncreated light in Palamas's Trinitarian and Christological reflection, especially in its role of an enhypostatic entity, see RAFFAELE GUERRA, « Il ruolo dell'ipostasi nella concezione ontologica di Gregorio Palamas », PhD Diss., University of Salerno 2019. It goes without saying that, in this perspective, divine light is much more than a mere medium. Although Kabasilas's independence from Palamas's thought (or at least an explicit attempt to distance himself from it) has been increasingly underlined in recent scholarship (cf. for instance Metso, Divine Presence in the Eucharistic Theology of Nicholas Cabasilas, p. 185, n. 134), on the theme of divine light and the 'deification' associated with it Palamas's influence is clearly discernible in Kabasilas's writings. Nevertheless, it is to be remarked that in the specific passage under discussion, Kabasilas's reference is not to this kind of divine light, but rather to 'physical' sunlight. This is why I think that a discussion of the analogy can be conducted even outside the Hesycastic understanding of divine light, which, nevertheless, remains an important background element to Kabasilas's passage.

between Christ and the souls. Here the inexorability of the mediating interval is reified in the very figure of Christ. Christ has a complex operation here: on the one hand, he is the medium, yet, on the other hand, he also unites the faithful to himself as that medium. Thus, we understand that there is a union that occurs between the mediator and the viewer, an outpouring toward Christ if one were to describe it in visual terms. Hence, we can understand that the union of the faithful comes to that intermediary point manifested by Christ the mediator.⁵³

Nevertheless, Betancourt's insistence, due to his tendency (already noted multiple times) to read ancient and Byzantine theories of vision in interactionist terms, brings him to claim that the medium (in this case, sunlight itself) ultimately remains a mere channel of transmission and of encounter between the effluences coming from the viewer and those coming from the object:

However, this is not the end of this process for it is Christ that 'reconciles us to God' (τῷ Θεῷ καταλλάττων). Thus, God unites with the faithful by virtue of their union with Christ in that intermediary role. Yet the nature of this union is not by virtue of Christ's intercessory actions alone, or rather, this alone is not the reason why God unifies himself with humanity, [...]. Thus, God's effluence of love (specifically, $\dot{\alpha}\gamma\dot{\alpha}\pi\eta$) for his son leads him then to become united with humanity by virtue of humanity's own union in spirit with Christ. Hence, what we come to observe here is that there are two vectors of union that make humanity's partaking in the benefits of God: one emerging from the righteous toward Christ, and another emerging from God toward Christ in his love for him. Thus, it is in Christ, the mediator, that both these vectors are united so as to enable humanity to partake of God's image. [...] When we consider Nicholas Kabasilas's text diagrammatically, we can quite neatly see at play the theory of Platonic extramission, whereby we can say that God emits the light emanating from the visible objects and the people emit the light issuing from the eyes, which fuse in that intermediary point, here manifested by Christ. This reading is only possible, however, if one is familiar with the language of union and the process of vision being obliquely indexed by the text. Thus, Nicholas Kabasilas's text can attest to the enduring belief in and nuanced understanding of Platonic extramission up through the fourteenth century. The impenetrability and lack of explicit clarification of this process of extramission in his text should not be understood as an underdeveloped theory of vision, but instead a telling shorthand that speaks to the manner in which this particular theory may have been taken for granted by Nicholas.54

BETANCOURT, Sight, Touch, and Imagination in Byzantium, p. 229.

⁵⁴ Betancourt, Sight, Touch, and Imagination in Byzantium, p. 229–230.

The fact that Betancourt finds the description of the process of extramission by Kabasilas impenetrable, however, simply depends on the fact that he interprets it in a faulty way. The adherence to Platonic extramission, which seems to permeate the text, indeed can only be fully understood according to a 'prosthetic' model of interpretation.

That this is so can be more fully appreciated by looking at Kabasilas's wider Christological doctrine, as it can be found not only in the *Explicatio divinae liturgiae* but also in the *De vita in Christo*, Kabasilas's other fundamental theological (and, specifically, Christological) work.⁵⁵ In both works, the notion of the union of man with Christ features prominently. What is distinctive of Kabasilas's doctrine in this respect is the idea that, through Eucharistic communion, man is, in a sense, « deified »; that is, he comes to form a single 'Body' with Christ, partaking not only in His humanity but also in His divinity.⁵⁶ Insistence on deification, while being

Note that for my analysis of the Christological doctrine of the *De vita in Christo* I rely on Metso, *Divine Presence in the Eucharistic Theology of Nicholas Cabasilas*. Thus, I do not claim any originality for it, but merely for the idea of applying such an analysis to the correct understanding of Kabasilas's theory of vision as expressed in the abovementioned passage of the *Explicatio divinae liturgiae*.

The two concepts that describe the communion of the faithful with Christ-Eucharist in Kabasilas's perspective are those of κοινωνία and ἕνωσις (on these two aspects cf. Metso, Divine Presence in the Eucharistic Theology of Nicholas Cabasilas, especially § 5.3 and 5.4 respectively, on which I base the following presentation of the two concepts). Koivwví α describes the fact that « one owns the same as the other at the same time » (ἀμφοῖν τὸ αὐτὸ κατὰ τὸν αὐτὸν χρόνον παρη; Nicholas Kabasilas, De vita in Christo IV.45, ed. Marie-Hélène Congourdeau, La Vie en Christ, tome I. Livres I-IV, Éditions du Cerf, Paris 2009 (Sources chrétiennes 355)). The term is therefore used by Kabasilas to indicate the fact that the communing faithful and Christ-Eucharist come to form a single entity, endowed with both human and divine nature, in the image of the Incarnate Word. This concept is illustrated with great effectiveness by Kabasilas in another passage of the same work, where he stresses the fact that κοινωνία entails a commingling of mind, will, body and blood between man and Christ ("Ω τοῦ μεγέθους τῶν μυστηρίων! Οἶον γάρ ἐστι τὸν τοῦ Χριστοῦ νοῦν τῷ ἡμετέρῳ συμμίξαι νῷ, καὶ θελήσει θέλησιν ἐκείνην καὶ σῷμα σώματι καὶ αἶμα αἵματι κερασθήναι· οἶος μὲν ὁ νοῦς ἡμῖν τοῦ θείου κατακρατήσαντος νοῦ, οἵα δὲ ἡ θέλησις τῆς μακαρίας θελήσεως περιγενομένες, οἶος δὲ ὁ χοῦς τοῦ πυρὸς ὑπερνενικηκότος ἐκείνου!, ibid., IV.9, quoted according to Metso, Divine Presence in the Eucharistic Theology of Nicholas Cabasilas, p. 165, n. 67). The concept of κοινωνία (taken in its wider meaning, and not with exclusive reference to the Eucharistic communion) is also explained by Kabasilas with reference to two allegories, that of a drop of water turning to oil when poured into it (ibid., IV.28) and that of the vessel of alabaster turning into the chrism situated within it (ibid., III.5). The second concept mentioned above, that of ἕνωσις, represents in many ways, in Kabasilas's thought, the true completion of κοινωνία. As Metso puts it: « Cabasilas' understanding of the effects of henosis with Christ can be outlined as a development in which man's unification with God is realized as an ever deepening process into the innermost of man » (Metso, Divine Presence in the Eucharistic Theology of Nicholas Cabasilas, p. 171). This process is so intimate that, in a sense, Kabasilas lacks the words to express it (cf. De vita in Christo I.8–9, ed. Congourdeau, La Vie en Christ, tome I). When he tries to characterise it in positive terms, he stresses the fact that the experience of ἕνωσις

common in Byzantine Hesycastic theology (and in Byzantine theology as a whole),⁵⁷ takes on a particular importance in Kabasilas's interpretation, underlining the decisive role of the Christ-Eucharist in the process.⁵⁸ What must be underlined here, in the perspective of the analogy between the communion of the eyes's effluences with the visual medium and Eucharistic communion, is the fact that, as the Eucharist becomes one with the communing faithful, the medium becomes one with the effluences coming from the sense organ of sight. Only this newly generated, 'homogeneous body' can bring forth participation in God's life and visual perception respectively.

allows man to experience a higher kind of unity than the one associated with his own selfconsciousness as a human being (cf. ibid., I.10-11: Καὶ οὕπω λέγω τὸ καινότατον. Τί γὰρ ἂν ἄλλο συνάπτοιτο μαλλον ἢ αὐτὸ ἐαυτῷ; Άλλὰ καὶ αὕτη ἡ ἐνότης τῆς συναφείας ἐκείνης ἔλαττον έχει. Τῶν γὰρ πνευμάτων τῶν μακαρίων ἕκαστον, ἔστι μὲν ε̂ν καὶ ταὑτὸ ἐαυτῷ, συνῆπται δὲ τῷ Σωτῆρι μᾶλλον ἢ ἐαυτῷ, quoted according to Metso, Divine Presence in the Eucharistic Theology of Nicholas Cabasilas, p. 171, n. 89). It is evident that the two aspects of κοινωνία and ἕνωσις, and especially the latter, extend beyond the mere act of Eucharistic communion, and they are ultimately understood by Kabasilas as aspects which have to invest every moment of the life of the faithful through the practice of constant prayer. It is probably here that Hesychasm exercises the strongest influence on Kabasilas's Christological thought, although Kabasilas makes it abundantly clear that, contrary to traditional Hesychasm, he takes constant prayer to be something which should be practised by all men, regardless of their status (on these aspects, cf. especially Congourdeau, Prier à Byzance au xiv^e siècle, and EAD., Nicolas Cabasilas et le Palamisme, in ANTONIO RIGO (ed.), Gregorio palamas e oltre. Studi e documenti sulle controversie teologiche del XIV secolo bizantino, Olschki, Firenze 2004 (Orientalia Venetiana 16), p. 191-210). Another aspect that should be underlined at this point is that, while the process of union with the Christ-Eucharist that Kabasilas describes is ultimately personal, it also has a strong communitarian aspect, on which Paul's language of the Church as the 'mystical Body' of Christ also exercises a strong influence.

For the origin of the doctrine of deification in the early Byzantine period, see Norman Russell, The Doctrine of Deification in the Greek Patristic Tradition, Oxford University Press, Oxford 2004. For the understanding of deification in the thought of Gregory Palamas, see Alexis Torrance, Human Perfection in Byzantine Theology: Attaining the Fullness of Christ, Oxford University Press, Oxford 2020 (Changing Paradigms in Historical and Systematic Theology), ch. 5, and Georgios I. Mantzaridis, The Deification of Man: St. Gregory Palamas and Orthodox Tradition, St. Vladimir's Seminary Press, Crestwood, NY 2001. For a comparison between Palamas's doctrine of deification and Aquinas's thought, see Anna N. Williams, The Ground of Union: Deification in Aquinas and Palamas, Oxford University Press, Oxford 1999.

As Panayiotis Nellas aptly summarises: « The doctrine of Deification subsequently saw a great and distinguished development as a genuine expression of Orthodox Christianity, and St Gregory Palamas upheld it most clearly and developed it admirably in confronting the Arianising heresy that man is united with created grace. Kavasilas was in complete agreement with Palamas, but at the same time he brought the Apostle Paul's terminology back to the forefront of theology and, taking it further, interpreted deification as true and real *Christification*. » (Panayiotis Nellas, « Redemption or Deification? Nicholas Kavasilas and Anselm's Question 'Why Did God Become Man?' », Sourozh, 66 (1996), p. 10–30, here p. 13). On the centrality of Christ in Kabasilas's overall theology, see also Sévérien Salaville, « Le christocentrisme de Nicolas Cabasilas », Échos d'Orient, 39 (1936), p. 129–167.

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This is why one cannot but consider reductive Betancourt's statement according to which:

And while the union with Christ might seem to offer up an unmediated contact with the divine, what is made clear is that Christ is merely that diaphanous interval between seer and object, a mediating middle point where the rays unite. He is the external light that allows the Platonic fire of the eye to fuse with it and extend outward, like onto like, but Christ is not the faculty of sight itself, nor does he represent himself as such to the viewer.⁵⁹

Of course, the Christ-Eucharist does not offer man an unmediated contact with the divine. However, man can only come to access the divine by first uniting with Him and undergoing a full ontological transformation. In a sense, the man who comes in contact with the divine through the Christ-Eucharist is a new being engendered by the communion with Christ, a new body 'homogeneous' with Christ Himself. Only by understanding sight as a 'prosthetic' process, therefore, can Kabasilas's passage become fully understandable. On the model of vision allows an explanation of the action of the Christ-Eucharist as Mediator between man and God with the same effectiveness: as the union of the eyes's effluences with light as a medium is a necessary precondition of visual perception, so too only the union with the Christ-Eucharist makes it possible for man to be reconciled with God and to partake in His life.

V. Conclusions

I have tried to show that Betancourt's book represents an important contribution to the understanding of Byzantine theories of vision and of their ancient sources. By discussing an impressive (and impressively diverse) body of texts, Betancourt is able to explore the nuances of each theory of vision discussed, as well as their reciprocal interrelations and, sometimes, the unexpected paths of their later influences. In this respect, Betancourt accomplishes much more than what he set

⁵⁹ Betancourt, Sight, Touch, and Imagination in Byzantium, p. 230–231.

Of course, an important caveat is in order here: indeed, while in the context of the Eucharistic communion it is Christ, as Mediator, who transforms the faithful who receives Him (after, however, that He has taken upon Himself human nature), in the case of sight it is rather the opposite, insofar as it is the effluence coming from the eyes which transforms the medium to become able to perceive through it. However, the analogy does not concern the relative role of subject and medium in the two processes described by Kabasilas: what truly matters is the end-state of them. Once united, the 'Body' formed by the Christ-Eucharist and the communing faithful operates in a way which is analogous to that of the body formed by the eyes's effluences and sunlight in the process of vision.

out to do. Indeed, not only does he successfully refute the pertinence of the notion of 'haptic sight' for Byzantine theories of vision, highlighting instead the role that imagination ($\phi\alpha\nu\tau\alpha\sigma(\alpha)$) and internal sensory cognition play more in general in them, but he also opens up many new and potentially fruitful avenues for investigation.

All these positive aspects and strengths will certainly make Betancourt's œuvre a fundamental reference point for all further investigations on the topic of Byzantine theories of vision - and not only for those. One might find only few minor shortcomings. The most important one, as I have tried to show in the latter part of the article, is the excessive tendency to interpret the majority of ancient and Byzantine theories of vision discussed as instances of an interactionist account, where the effluences coming from the eyes meet at some point in the medium with those coming from visible objects. While this might be a correct reading in many cases, I have suggested that it is fundamentally mistaken in the case of Galen (whose theory of vision, as Katerina Ierodiakonou has effectively shown, is better understood as what I call an extramissionist 'prosthetic' one) and of the tradition directly or indirectly influenced by him, or in any case showing close similarities to it, and that it remains at best dubious in the case of Photios, whose theory of vision, however, plays a central role in the book as a whole. This said, Betancourt's book has the undeniable merit of having opened a new season in the study of Byzantine theories of vision as a field of research in its own right, and it is to be hoped that many other scholars will soon follow in his footsteps.