Serena Bianchetti, Michele R. Cataudella, Hans-Joachim Gehrke (eds.), *Brill's Companion to Ancient Geography. The Inhabited World in Greek and Roman Tradition*, Leiden-Boston: Brill, 2016, xviii+490 pp., ISSN 1872-3357; ISBN 978-90-04-28511-8 (hardback); ISBN 978-90-04-28471-5 (e-book).

Scholarship devoted to the study of Greek and Roman geography has gone through periods of rise and decline. In the last decades of the 19th century and the beginnings of the 20th, a period characterised by the overall expansion of Classical studies, ancient geography was the subject of interest of scholars such as Karl Müller or Hugo Berger, among others, who dedicated significant efforts to both the study of ideas of geographic space in Antiquity and their evolution, and the publication of critical editions of the works of ancient geographers. Products of such efforts are, for instance, the two volumes of Geographi graeci minores (Müller, Paris 1855, 1861), the first edition of the geographic fragments of Eratosthenes (Berger, Leipzig 1880), the work of Karl Trüdinger, Studien zur Geschichte der griechischrömischen Ethnographie (Basel 1918), or the monumental Geschichte der wissenschaflichen Erdkunde (Berger, Leipzig 1903), the earliest study dealing with ancient geography as a science, describing and analysing its progress. Nevertheless, in the wake of such growth, the fifty years following up to the last decades of the 20th century saw practically no significant development in subsequent studies on Greek and Roman geography. 1984 and 1985, however, marked a turning point in the field, when the works of Oswald Dilke (Greek and Roman Maps, 1985) and, in particular, Pietro Janni (La mappa e il periplo: cartografia antica e spazio odologico, Rome 1984), opened a new era of studies in the geographic thought of the ancient Greeks and Romans. Shortly afterwards, interest in the publication and commentary of the texts of the ancient geographers also returned with renewed energy, giving way, among other things, to the wide-ranging projects aimed at the (re)edition of the Greek fragmentary geographers headed by Didier Marcotte (in the context of the Budé Collection) and Hans-Joachim Gehrke (*FGrHist* V).

This Companion to Greek and Roman Geography should be regarded both as a result and as a testimony of the interest ancient geography has been eliciting in the last 30 years. The three editors are, to a great extent, responsible for the increase and progress of studies in the field described: apart from the already-mentioned Hans-Joachim Gehrke, Serena Bianchetti and Michele Cataudella have authored countless contributions to the research

area, ranging from topics as diverse as the voyage and work of Pytheas of Massalia, the sitting and nature of the Pillars of Heracles, the geographic thought and works of Eudoxus of Cnidus and Dicaearchus of Messina, the reception of Greek geography among Christian authors, or the relationship between astronomy and cartography, *inter alia*. Moreover, under their guidance, the book brings together many of the most relevant authorities in recent scholarship on ancient geographic literature and thought.

The work is organised in accordance with a structure that combines chronological order with the conceptual evaluation of the periods and authors it deals with. It consists of three main sections, respectively dedicated to the archaic and classical periods (up to the voyage of Alexander the Great), the Hellenistic and Roman periods, and Late Antiquity, presenting the first of these as preliminary in relation to the "real" development of geography as a mature science ("Geography before Geography"), and the last period as an era of legacy reception ("Geographical rebounds"). This entails a view of Hellenistic and Roman times - between the generation after Aristotle and Alexander and the work of Ptolemy – as the age in which ancient geography made its greatest strides forward and produced its most relevant and original results. However, the editors entitle this section "Geography between Science and Politics", in view of that relevant aspect of geography as a science that is frequently fostered to serve the needs and interests of the ruling power, a discipline that depends on the information provided by expeditions and explorations sent by the elite, and an area of knowledge that benefits from the protection and support of institutions – like the Alexandrian Museum – promoted by political authorities.

The chapter by Reinhold Bichler on "Persian Geography and the Ionians: Herodotus" opens the volume as well as the first section. The author highlights the importance of Herodotus as the first Greek author whose specific concept of the world is known to us. In addition, the paper somehow prefigures the main topics that will structure the second section of the book: the dialogue between geographic knowledge and political power. The gist of the study is principally the influence of the historical context – i.e., the Persian wars – on Herodotus' geography, such that the depth and density of geographic details that the *Histories* offer depends on the way the different countries were affected by wartime events.

The second chapter ("The Sea of Greeks and Romans"), by Pietro Janni, focuses on the importance of the sea as a key element in early Greek geography. Ancient geography, indeed, was born from the practical experience of sailors, a fact that makes the author consider it not only a "geography" in the strict sense, but also a "thalassography". The great expeditions of exploration that brought Greece most of its geographic information were mainly maritime explorations: of the Mediterranean, the Ocean beyond the Pillars of Heracles – sailing either northwards or southwards –, the Indian Ocean, etc. Even the

campaign of Alexander the Great entailed an investigation of the Hyrcanian Sea

Gianfranco Maddoli's paper ("The Concept of Magna Graecia and the Pythagoreans") calls attention to the fact that the ancient authors frequently associate the denomination of "Magna Graecia" (or in Greek  $\mu\epsilon\gamma\dot\alpha\lambda\eta$  'E $\lambda\lambda\dot\alpha\varsigma$ ) to the Pythagorean school. This fact leads him to trace the origin of such denomination and to connect it to the blossoming of the cities of southern Italy between the 6th and 5th centuries BCE, which also coincides with the main period of Pythagorean success in that region.

Giovanna Daverio Rocchi researches the "Systems of Borders in Ancient Greece", both among the Greeks themselves and with respect to the barbarian "others". The author points out that ancient Greek boundaries are flexible margins resulting from the confluence of a self-perceived homogeneous ethnic group, shared linguistic, religious and cultural peculiarities, natural geographic limits and political units. This is true particularly in the archaic and classical periods, when the Greek poleis established their limits according to criteria that involved "geography, history, law, economy and religion" (p. 64).

Hans-Joachim Gehrke's chapter analyses "The «Revolution» of Alexander the Great: Old and New in the World's View". The expedition of Alexander to the east inverted the proportion between theory and experience in the knowledge of Asia among the Greeks. Thus, the author aims to evaluate the impact of this new knowledge through the reconstruction of Alexander's "mental map". So, he offers an in-depth account of the geographic "state of the art" in the time of Alexander. In this context, apart from the clear idea of the Indus' course as independent from the Nile and the awareness of the Persian Gulf as distinct from the Red Sea, the Alexandrian campaign did not substantially change the Greek image of Asia. However, the main contribution of the expedition is the abundance of new details that made progress possible among later scientists, outstanding among them Eratosthenes.

Finally, Veronica Bucciantini's "Geographical Description and Historical Narrative in the Tradition on Alexander's Expedition" closes the first section of the book. The author compares the accounts of Indian hydrography in the remnants of the works of Nearchus of Crete, Onesicritus of Astypalaea, Ptolemy son of Lagus and Aristobulus of Casandreia, seeking out their peculiarities and differences. Onesicritus' fondness for the fabulous diverges from Nearchus' interest in correcting the exaggerations and fictional inventions of earlier authors (mainly Ctesias). Aristobulus' interest in engineering works, as well as the practical exploitation of natural resources, fully concords with his role as architect within the Macedonian expedition. In the fragments of Ptolemy, however, hydrographic information is conspicuous by its absence, probably due to the prevailing interest of this author in pragmatic aspects of military and political practice.

The second section of the volume starts with a short trip back in time: Michele Cataudella's chapter on "Some Scientific Approaches: Eudoxus of Cnidus and Dicaearchus of Messene" dedicates detailed study to the works and scientific attitudes and theories of Eudoxus, Aristotle's contemporary, one generation ahead of Alexander's historians. However, his thought is presented as ancestral to one of the most relevant concerns of subsequent generations of geographers: he appears as the first to prefigure a geographic vision based on a main parallel and a main meridian, the cornerstone of the network of latitudinal and longitudinal lines that Dicaearchus with his "diaphragma", and, above all, Eratosthenes, would later develop during the Hellenistic period.

Eratosthenes is precisely the topic of Serena Bianchetti's paper ("The «Invention» of Geography: Eratosthenes of Cyrene"). It was he, indeed, who coined the terms "geographer" and "geography" to refer to an activity and a discipline presenting itself as distinct from that of the philosopher and, for the first time, relying on a defined method: that of extracting conclusions about the earth from observations of the sky. The observation of celestial phenomena led him to draw a network of nine parallels or *klimata*, even if these abstract lines were based on empirically observed salient elements of landscape (rivers and mountain ranges) in constant interplay with the so-called "sphragides" – i.e. wide geographic areas denominated as the Egyptian cadastral divisions – building a new example of the dialogue between science and politics.

The contact between astronomy and geography is also the main focus of Klaus Geus' study on "Progress in the Sciences: Astronomy and Hipparchus". The principal aim of Hipparchus' geographic work is to outdo that of Eratosthenes by criticising and improving some aspects of it. In contrast to the limited set of latitudinal lines of Eratosthenes, Hipparchus' main contribution to geography was the development of an abstract grid of parallels ranging from 0 – the Equator – to 90° N – the North Pole –. Moreover, Hipparchus disagrees with his predecessor with respect to some particular details of his geographic view, as, for instance, regarding the existence of an all-encompassing ocean surrounding the inhabited world (the oikoumene) and the uniqueness of this alleged island we live on; rather to the contrary, he conceived other oikoumenai, the extreme ends of which were even visible to us.

In his "The Indian Ocean from Agatharchides of Cnidus to the *Periplus Maris Erythraei*", Didier Marcotte explores the role these authors play in creating the view of the area extending from the Horn of Africa to the Bay of Bengal as a unity, far exceeding our modern idea of the "Red Sea". The French scholar studies Agatharchides and his work as a continuation of the early "climatological" approach the companions of Alexander applied to the study of the Nile and the Indus valleys, comparing the similar physical

features they found and the similarities between the peoples who inhabited them. Natural history and human history then turn into one and the same thing. The second half of the chapter, however – dedicated to the Periplus of the Erythraean Sea – serves Marcotte to illustrate the decisive role of merchants in the progress of geographic knowledge of the Indian Ocean.

That same territory, between Africa and India, as well as early climatological theory, is behind Pierre Schneider's contribution, dealing with "The So-called Confusion between India and Ethiopia: The Eastern and Southern Edges of the Inhabited World from the Greco-Roman Perspective". As its title announces, this paper mainly aims to analyse the alleged confusion in order to re-interpret it, revealing its testimonial value in relation to a way of understanding the southern side of the *oikoumene*, and not as the result of a mistake.

The next chapter, by Pascal Arnaud, entitled "Marcus Vipsanius Agrippa and his Geographical Work", calls attention to the cultural context of the Roman Empire and its impact on ancient geographic knowledge. Arnaud deals with the problems entailed by the transmission of the fragments of Agrippa's work, their reflection in Pliny and the (in his opinion, unlikely) relationship between Agrippa and the "anonymous chorographer" quoted by Strabo, the nature of the work (as a text, perhaps unfinished, rather than a monumental map in its origins), and its purpose. He studies the extant testimonies on Agrippa's vision of the world, which place him as the last example of Hellenistic geographic tradition, rather than as the first expression of the Roman vision.

The subordination of scientific research in the field of geography to practical (mainly political, military and administrative) uses is the core of Anne Kolb's chapter, "The Romans and the World's Measure". Through two parallel processes consisting of surveying the space and appropriating it by creating pervasive infrastructures, such as the road networks, the milestones along them and the monumental inscriptions on public buildings, the Roman Empire manages its conquered territories and integrates them into a cultural structure.

However, the most outstanding instance of geographic literature in Roman times is the work of Strabo, which is precisely the topic of Francesco Prontera's contribution ("Strabo's Geography"). The work illustrates the tension, permanent throughout the Hellenistic period, between awareness of the need to draw up the map of the inhabited world on the basis of astronomical observations and the scarcity of such data, compared to the abundance of empirical information regarding the diverse regions and the history and ways of life of the peoples inhabiting them. The *Geography*, then, reflects the wide range of differing knowledge that the geographer needs to possess (physics, astronomy and mathematics, as well as the philosopher's all-encompassing knowledge of the human and the divine), and responds to

the interests of the cultivated Greek aristocracy in the cities of the Empire, as well as of the Roman upper class, educated according to the parameters of the Greek school tradition.

Eckart Olshausen's chapter ("News from the East? Roman-Age Geographers and the Pontus Euxinus") proposes a revision in the knowledge of the Black Sea area in the works of Roman authors (Menippus of Pergamon, Strabo, Pomponius Mela and Pliny) with an eye to the sources they used. His analysis allows for appreciation of the fact that the region had been well-known since Hellenistic times, so that the Roman period had no need for new explorations to deepen or improve data about it.

After dealing with the eastern part of the Empire, the book presents a chapter regarding the west, which depicts a very different scenario in Gonzalo Cruz Andreotti's contribution on "Rome and Iberia: The Making of a Cultural Geography". In contrast to the early exploration of the Black Sea, the Iberian Peninsula had scarcely been explored until the arrival of Roman conquest, a period that was able to contrast inherited theoretical models with empirical information. The Roman expansion made a real difference with regard to scientific knowledge about the west, making it possible to include the area in the world maps, providing scientists with more accurate measurements of distances, and transforming and fleshing out the traditional image of the history and ways of life of the diverse human communities inhabiting Iberian territory.

Kai Brodersen's chapter on "The Geographies of Pliny and his 'Ape' Solinus" applies a critical eye in analysing the alleged lack of originality in the *Collectanea rerum memorabilium* with regard to the *Historia naturalis*. Solinus' innovative character in terms of geographic vision consists of his way of presenting the spatial data: as against the periplus-structure of his source, he frequently adds references to the cardinal points; that is, he substitutes the linear description of Pliny using the concept of area, allowing his readers to envisage a map.

The progress of cartographical science in Roman times is the main topic of the contribution by Germain Aujac, "The «Revolution» of Ptolemy" – a revolution that mainly consists of the full development of the network of abstract latitudes and longitudes for situating the cities and the use of conic projection to prepare his map, based on lists of coordinates for the places to be represented. The author, besides, depicts Ptolemy as an outstanding scholar who, apart from his interest in high-level science, was also conscious of the need to provide lay audiences with instruments, such as his handy tables, which adapted science to their level of comprehension and interest.

The last section of the Companion, dedicated, as has been said, to the reception of ancient geography in late Antiquity and in the Middle Ages, begins with Michael Rathman's contribution on "The *Tabula Peutingeriana* and Antique Cartography". He traces the earliest archetype of the extant

*Tabula* – one of the most famous examples of medieval cartography – to the Hellenistic age, being it later redrawn and modified up to the 5<sup>th</sup> century CE (the date of ca. 425 is suggested in p. 359 as the end of the editing process).

In his chapter on "Geography and Religion: The Lists of the *Thearodokoi*", Emilio Galvagno deals with documents that exceed late Antiquity by a wide margin, ranging from the Hellenistic age to the 5<sup>th</sup> c. CE. He studies the itinerary-like structure of many of the extant records for the travels of the "*Thearoi*", messengers sent by *poleis* holding religious festivals to invite other communities to participate in the games they organised.

Finally, the chapter written by Jan R. Stenger on "Eusebius and the Representation of the Holy Land" closes the volume, providing the reader with an example of the meaning of geographic knowledge to a Church Father. Eusebius first coined the concept of "holy place" and elaborated a sort of geographic directory or gazetteer in his *Onomasticon*, which aimed to give an account of the places where events of the Bible took place. Many of these places still existed, offering material evidence in support of the Christian faith.

The Companion, thus, offers the reader an account of the most outstanding authors who dealt with geography in Antiquity, a complete survey of the main problems they faced, and a profound analysis of the works they wrote and their transmission. The diverse chapters deal with aspects concerning ancient approaches to the field of geography, the reception and survival of ancient works, and modern methodologies to apply to the study of their extant testimonies. The contributors consistently attain the highest level of scientific rigour while at the same time avoiding jargon and unnecessary complication. All this makes the book an interesting piece of research for specialists with a background in the field of ancient geography, while also being an excellent and useful instrument for scholars from other areas of knowledge, interested in the geographic ideas of the Greeks and Romans.

IRENE PAJÓN LEYRA Universidad de Sevilla irene.pajon.leyra@gmail.com