THE EUROPE-ASIA ANTITHESIS IN THE HIPPOCRATIC TREATISE ON THE AIRS, WATERS, PLACES AS SCIENTIFIC IMAGE AND MYTHICAL HERITAGE. A SHORT CHAPTER FROM THE HISTORY OF IDEAS¹

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On the Airs, Waters, Places (Aër. 12 = L II, 52): Now I intend to compare Asia and Europe, and to show how they differ in every respect, and how the nations of the one differ entirely in physique from those of the other. ... I hold that Asia differs very widely from Europe in the nature of all its inhabitants and of all its vegetation. For everything in Asia grows to far greater beauty and size; the one region is less wild than the other, the character of the inhabitants is milder and more gentle. The cause of this is the temperate climate, because it lies towards the east midway between the risings of the sun, and farther away than is Europe from the cold. Growth and freedom from wildness are most fostered when nothing is forcibly predominant, but equality in every respect prevails.

On the Airs, Waters, Places (Aër. 16 = L II, 62): So much for the difference, in nature and in shape, between the inhabitants of Asia and the inhabitants of Europe. With regard to the lack of spirit and courage among the inhabitants, the chief reason why Asiatics are less warlike and more gentle in character than Europeans is the uniformity of the seasons, which show no violent changes either towards heat or towards cold, but are equable. For there occur no mental shocks nor violent physical change, which are more likely to steel the temper and impart to it a fierce passion than is a monotonous sameness. For it is changes of all things that rouse the temper of man and prevent its stagnation. For these reasons, I think, Asiatics are feeble. Their institutions are a contributory cause, the greater part of Asia being governed by kings. Now where men are not their own masters and independent, but are ruled by despots, they are not keen on military efficiency but on not appearing warlike. ... Moreover, the temper of men like these must be gentle, because they are unwarlike and inactive, so that even if a naturally brave and spirited man is born his temper is changed by their institutions. Whereof I can give a clear proof. All the inhabitants of Asia, whether Greek or non-Greek, who are not ruled by despots, but are independent, toiling for their own advantage, are the most warlike of all men. ... You will find that Asiatics also differ from one another, some being superior, others inferior. The reason for this, as I have said above, is the changes of the seasons.²

This study is published as a part of the research grant supported by the Grant Agency of the Czech Republic "Corpus Hippocraticum in the Light of Modern Human Sciences", GA CR 401/09/0767.

² Translations by Jones (1923: 105–117).

In summary, this is the antithesis between Europe and Asia, as introduced in chapters 12-16 of the Hippocratic treatise On the Airs, Waters, Places, and at the end of the treatise in chapters 23 and 24. The antithesis has become the subject of various interpretive strategies, the prevailing strategy being historical-cultural: the opening declaration about Europe and Asia has been read in terms of Greeks and barbarians, or as a covert manifesto about Persians versus Greeks, i.e. as a consequence of the political conflict between the Greeks and the Persians.³ Jacques Jouanna presents a different reading strategy in the thorough introduction to his edition of the treatise: in his view, the antithesis is primarily "une image « scientifique » issue de l'ethnographie ionienne," - and especially climatology - "et non ... une image issue de l'expérience politique" (Jouanna 1996: 68). However, he admits that this "scientific" image is also supported by a political vision, caused by the shock of the Greek-Persian wars, when the Athenian ideological perspective seemed to be decisive.⁴ But nevertheless, the political opposition is, in his opinion, only of secondary importance in the treatise. R. Thomas, in her inspiring book about Herodotus, slightly changes the scientific framework: for her, the fundamental theory presented in the treatise remains "environmental and biological, with considerable input of nomoi" (Thomas 2000: 96).

In this contribution, I will try to interpret the Europe-Asia antithesis, as introduced in the treatise, by evolving the last two aforementioned attitudes hopefully in a more complex way: as an intricate phenomenon, whose nature is characterized by many specific aspects of Greek thought of that time and especially by a very peculiar way of reasoning present in the Hippocratic Corpus. At the same time, this kind of reasoning regards itself as heir to the previous tradition of Greek thought.

Let me now introduce step by step the factors at work in the treatise:

First, and obvious: Antithetic, or, more precisely, binary segmentation is present in any classification, as has been proved by anthropologists (let me mention only Levi-Strauss' analyses of the classificatory schemes of the American Indians, or analyses referred to by Lloyd in his famous *Polarity and Analogy*⁵). Generally speaking, antithetic or binary classification of any kind is an "anthropological constant", indispensable for any person attempting to make a comparison, i.e. to make order out of any complex of things submitted for classification.

Second: When speaking about the Greeks, such an obvious anthropological constant is intensified in a manifold way. The Greeks themselves reflected upon the antithetical structure of argumentation and reasoning in general, and upon speech figures in particular. In the third book of Aristotle's *Rhetoric*, a well-known passage describes the so-called *schemata Gorgieia*: rhetorical figures of an artificial speech, where the antithesis is itself one of the figures. But, as Norden vehemently argues in his old, but still fascinating book *Die antike Kunstprosa*, these figures were not invented by Gorgias – they are already present in the works of his predecessors, especially in Heraclitus' book, but of course not only there. To illustrate this feature of the Greek language, we may consider – following Norden's argument – the case of some deuterocanonical books of the Bible, whose authorship could be discerned (i.e. whether they were written by Greek or non-Greek

³ See especially Diller (1971), Backhaus (1976) or Schubert (2000).

⁴ For more detailed analysis of the topic see Jouanna (1994).

⁵ Lloyd (1966); Lévi-Strauss (1996).

authors) primarily according to the following criterion: the presence or absence of *men – de* particles in the text (Norden 1909: 26, n. 3).

Following these two preliminary points, we come to the third, more specific one. This antithetical prism, nearly omnipresent in Greek culture, became even more intensified and deepened in the Presocratic thought. Opposite categories like hot and cold, dry and wet, etc. played a crucial role in Presocratic thinking and formed an essential and indispensable part of the elemental view of nature (*phusis*) as a whole, which was based on the theory of opposing elements. Such an approach was almost codified by the Pythagoreans and by their invention of the famous "table of opposites", in which some fundamental dichotomies appear that would in following centuries play an important part in the development of Greek philosophical thought. However, as has been pointed out by W. Schadewaldt years ago, we can even find the *enantion-homoion* polarity in Homer's "poetical ontology" and especially in Homeric similes (Schadewaldt 1978: 47–82). To summarize: "The well-known Greek penchant for polarity is not characteristic simply of popular culture, popular or archaic concepts, but also something that lies deep within the intellectual, medical and scientific discussions of the latter part of the fifth century" (Thomas 2000: 78).

Now, by my fourth point, we get to the heart of the matter: the Hippocratics, or at least the authors of a number of treatises, which compose the *Corpus Hippocraticum*, are the heirs of this way of thinking; the heirs who, nevertheless, in this hypoleptical culture, as Jan Assmann characterized the Greek culture (Assmann 1997), take the baton from their predecessors and apply the relayed heritage in a specific manner to the object of their interest. In this case, it is applied to the human body and the way it functions as both a limited unit and as a part belonging to an environment and to the cosmos as a whole. In the different treatises of the Corpus, we can distinguish a specific type of discourse, in which phenomena are focused through a specific "grille de fonctionalisation", if I may borrow a term from Foucault's *Archeology of Knowledge/L'archéologie du savoir* and adapt it for my purposes (literally, Foucault speaks of a "grille de spécification" when describing the psychiatric discourse of the 19th century; Foucault 1969: 58). In ancient Hippocratic thought, such a grille of functionalization is constituted by the following mutually interconnected categories:

Mixture or, more precisely, a right or well composed mixture and its disturbance, supremacy and the necessity of its removal, similarity and dissimilarity, excess and default, filling up and depleting; furthermore, the opposites: part – whole, inside – outside, more – less, minimum – maximum, up – down (these opposites are introduced due to phenomena being described according to the local movement inside the body, or by the body's interactions with its surroundings), and, finally, the remaining important antitheses are the notions of nature (*phusis*) – custom (*nomos*), necessity and chance, etc. This kind of discourse is a construction constituting a paradigm to remain obligatory in medical thought for centuries.

Naturally, not all of the components of this "grille" may be found in all the treatises of the Corpus. According to the object of his interest, a Hippocratic author is free to choose the proper components for his momentary object of interest. When describing the different character of the two continents of *oikoumene* and of their inhabitants in *On the Airs, Wa-*

The amount of literature on this topic is immense. From all the multitude, I would like to stress at least obligatory Kirk, Raven, Schofield (1983); Hussey (1972); Lloyd (1966); Boudouris (1989); Kahn (1970); Lloyd (1970); Graham (2006). Useful is consulting the following on-line entry: http://plato.stanford.edu/archives/fall2011/entries/presocratics/.

ters, Places, kresis, or mixture, remains the key term together with the character of seasons, horai. But still, we can find here the aforementioned categories of a right or well-composed mixture and its disturbance, of supremacy and the necessity of its removal, of similarity and dissimilarity, as well as the opposites more – less, minimum – maximum, up – down (applied to the opposition North – South, and together with the fundamental notion of meson, the center, and its opposite: periphery, which here has the form of the most distant regions, eschatiai), not to mention further opposites such as part – whole, and also the notions of nature, necessity, nomos/custom. The principle of isonomie (= equal distribution, equilibrium), inherited from Alcmaeon, was replaced by the principle of isomorie (= equal share), etc.

The fact that *oikoumene* may be seen as divided into two distinctive parts, *mere*, is not self-evident at all. Herodot was well aware of the inadequacy of such a division⁷, and was skeptical in this matter. Why should inhabited land be divided into fundamental parts, *mere*? Where is any natural border between them? Why are these parts at a number of two, or three? What are the origins of those strange names of the *mere* that we are now accustomed to call "continents"? And why is *oikoumene* depicted on these maps in such a strange way?

"I cannot help laughing at the absurdity of all the map-makers – there are plenty of them – who show Ocean running like a river round a perfectly circular earth, with Asia and Europe of the same size." (*Hist.* IV, 36)⁸ ... "Another thing that puzzles me is why three distinct women's names should have been given to what is really a single landmass; and why, too, the Nile and the Phasis (or, according to some, the Maeotic Tanais and the Cimmerian Strait) should have been fixed upon for the boundaries. Nor have I been able to learn who it was that first marked the boundaries, or where they got the names from." (*Hist.* IV, 36) After this reading, we come to the famous passage, in which the origin of the name Europa from Europa, the Tyrian woman, is declared as unlikely for Europa was an Asiatic and had never visited the country which is now called Europe, having but only sailed from Phoenicia to Crete and from Crete to Lycia.

However, this critic presupposes an already highly developed discourse. We read about "all the map-makers – there are plenty of them"; and although those maps did not survive, we have some reports about their frame and of other details from either Hecataeus' *Periegesis*, i.e. *Periodos ges*, or via other authors. Various sources also inform us about the original linguistic use of the terms for the continents: Europe at first denoted only the mainland part of Greece, without the islands and Peloponnesus; Asia was originally only applied to Asia Minor; and Libya, or later Africa, were both derived from the names of African tribes living in the northern part of the continent.

⁷ The mutual relationship of Herodotus and the author of the Aër. remains uncertain. Instead of the previous hypotheses that the author of the Aër. was just a compilator, heavily dependent on Herodotus' *Histories*, the opposite view is preferred today, or another common source for both works is supposed.

All quotations from Herodotus' Histories are in Aubrey de Sélincourt's (1972) translation. Consulting How's and Wells' commentary is always useful (How – Wells 2002).

⁹ Some of them are late: Agathemerus, Strabo, Diogenes Laertius; see in Jacoby's FrGrHist, where all the fragments from Hecataeus' *Periegesis* have been collected. Another important passage is *Hist.* V, 49: "According to the Spartan account, Aristagoras brought to the interview (scil. with the Spartan king Cleomenes) a map of the world engraved on bronze, showing all the seas and rivers."

¹⁰ See the relevant entries in *Der Neue Pauly. Enzyklopädie der Antike* (1996–2003); also Souček (2008); Pagden (2002).

The genuineness of this very specific Greek "continental outlook" becomes apparent, when we compare Anaximander's and Hecataeus' maps, which are the object of Herodotus' criticism – and laughter! –, with both the Babylonian map *Imago mundi*, (approximately as old as the one made by Anaximander, but probably having much older predecessors), and with an Egyptian map from the late fourth century BC. ¹¹ Both maps confuse mythical and geographical datas (on the Egyptian map even the underworld, as well as the main "cosmical" gods are depicted in a complex and highly abstract topological scheme), and do not depict some countries well known to those nations. In the case of the *Imago mundi* map, the main interest of the mapmakers probably was, according to scholars, in locating and describing distant regions in relation to familiar locales, such as Babylon, Assyria, or the Euphrates. ¹² Nevertheless – and this is the point of our interest – we observe no division of the world into components of a higher degree, comparable to the Greek continents. ¹³

Naturally, all these maps, the Greek ones included, are "monocentric", representing the native land usually in the middle, as a region of primordial importance. Their shape is circular, the earth being surrounded by ocean; on the Egyptian map the world, surrounded by ocean, is once more embraced by the gods Geb and Nut. This feature was, in the case of the Greek maps, interpreted as a geometrical reworking of epic geography, known from Homer's Ilias, and influenced perhaps by the older Babylonian maps. Another theory, explaining the circular frame of the maps by the isonomical character of the Greek polis, also appeared, but it is, in my opinion, too far-fetched and does not in any way explain the circular frame of the Babylonian or Egyptian maps. 14 The central prism which enables the Greek mapmaker to see oikoumene, the inhabited world, as a whole, and at the same time divided into its distinct parts, is the prism of a seafarer and navigator, who always sees the world differently from a nomad traveling by the mainland; the mobility of a seafarer is of a different kind. 15 We can speak about specific "hodology" and "tropology", which indeed influence the form of Hecataeus' and Herodotus'works. However, this special hodology had its own precursors, too: a number of periploi, manuals for the seafarers, or sort of guidebooks for navigators.¹⁶

Unlike the case of *periploi*, where only a kind of hodology can be seen at work, on Anaximander's and Hecataeus' maps, we can observe "geometrical constructivism" (the term is Diller's; Gehrke spoke even about "die Geburt der Erdkunde aus dem Geiste der

Imago mundi map, enshrined in the British Museum as BM 92687, is in lato described and interpreted by Horowitz (1998). For the Czech translation, as well as polemics with some of Horowitz' suggestions, see Hruška (2002). Egyptian map and the Egyptian concept of the world are discussed in Allen (2003). Another important book on this topic is Sérandour (1997).

However, this explanation cannot clarify why e.g. Urartu is depicted on the map; as for the nature – and even number – of the distant regions or islands (nagú), there is no consensus among scholars, see Horowitz (1998); Hruška (2002).

¹³ For larger discussion see Couprie (2003).

¹⁴ See Hartog (2001: 85–88); Calame (2005), commenting Vernant's interpretive concept of *mesotes*; Gehrke (1998b: 31).

¹⁵ The terms are Gauer's (1995). See also old, but still valuable study by Ninck (1945).

¹⁶ The *periploi* – contrary to the maps – pursued practical purposes: they were keen on measurements, on the distance between two points, the number of days it took to sail from one to the other. In any case, their structure was similar to that of Hecataeus' *Periegesis*: circumnavigating the Mediterranean. For more see Gehrke (1998), Hartog (2001: 92, Jacob (1997).

Geometrie"17), which is in good congruence with other achievements of Anaximander (his gnomon and sphaira) and of other Presocratics, who were deeply interested in geometry and astronomy.¹⁸ This constructivism is primarily based on binary opposition between North and South (North being cold and South being hot enables to divide the earth into two corresponding parts, the major division being between Europeans and Asiatics). The opposition is completed by another division, which follows the East-West axis, wherein Scythians and Egyptians occupy opposite poles. (This antithesis is reshaped and fully introduced especially by the author of the Hippocratic treatise and by Herodotus: on each side of the antithesis, pairs of terms form a double opposition: on one side is cold and wet, on the other is hot and dry). 19 The two basic operative principles of these maps are symmetry and inversion on either side of the "Ionian equator", which runs through the Mediterranean, and inbetween the furthest latitudes struck by the sun, i.e. the "tropics", which are marked by the upper reaches of the Istrus to the North, and the Nile to the South.²⁰ Thus, the earth is divided into four quadrants characterized by a set of binary oppositions – ²¹ or, in Gehrke's words: "The earth is put at the Procrustean bed of geometry" (Gehrke 1998: 38). However, we can suppose that over the course of time at least some shift or "progress" appeared: starting from the inaugural map of Anaximander to a more empirical map of Hecataeus and to Herodotus' skepticism; this shift was probably caused by the "feed-back zwischen dem geometrischen und dem empirischen Raum."22

Kurt von Fritz explains Herodotus' skepticism towards the continental division of the earth as a development of his method, which was at the same time characterized "by a gradual weakening of unmethodical hyper-rationalism and hypercriticism, and by a corresponding strengthening of the empirical element". To state this more accurately, "the empirico-rationalistic criticism of his first period is replaced by some kind of empirical skepticism" (von Fritz 1936: 338). Bichler comments similarly: according to him, Herodotus shows "wesentlich komplexere Gedankenführung" in his attitude toward the

¹⁷ Gehrke 1998a. Elsewhere he quotes Burkert's similar idea, applied not to geography, but to astronomy (Gehrke 1998b: 34).

The importance of an astronomical concept of the world for constructing maps is undeniable; however, it is not possible to discuss all the nuances of the matter within the scope of this article. For larger discussion see e.g. Couprie (2003), Kirk – Raven – Schofield (1983), Kahn (1970), Kočandrle (2011).

¹⁹ See Calame (2005: 151). In Herodotus' account, the extremity of the Egyptians, as well as of the Scythes, is shown also from the chronological point of view: the Egyptians are taken to be the most ancient people, the Scythes the newest (*Hist.* II, 2, resp. IV, 5).

The importance of the big rivers for ordering the frame of earth should not be underestimated; their connection with the circumfluent ocean, as well as with the epic depiction of the god Okeanos, and rivers and nymphs as his descendants, comes to mind.

However, there are some hints in Hecataeus' fragments indicating that his division of the earth could be also threefold, as Zimmermann argues: almost one third of the toponymes of Egypt given by Hecataeus are quoted as derived from the *Periegesis Aigyptou* (*The geographical description of Egypt*, e.g. FrGrHist 1 F 305; 311–312; 316; 319; 327), and also, moreover, some places in Libya are introduced by Stephanus Byzantius as taken from *Periegesis Libues* (*The geographical description of Libya*, e.g. FrGrHist 1 F 332; 329; 342–343; 350–351; 353). In my opinion, these fragments do not prove the existence of the third book of Hecataeus' work – adding to *Periegesis Europes* and *Periegesis Asies* –, as Zimmermann believes, but rather document at least the special status of Egypt in the Greek eyes (compare Froidefond 1971), or the influence of later tradition, or – what would be more – an imminent suspicion that the continental matter is more complex, a suspicion expressed by Herodotus in the passage just quoted.

²² Gehrke (1998: 39); Hartog (2001: 88) speaks similarly about shift from "theoretical matrix" to "a more empirical construction".

continents (Bichler 2001: 18); Thomas (2000: 79) writes more generally: Herodotus shows "more understanding for a less balanced more messy world." Following these evaluations of Herodotus' skepticism, we can appraise in a similar – but only similar! – manner the approach of the author of On the Airs, Waters, Places. His division of the oikumene is twofold, as far as we can tell, because the passage at the end of 12th chapter, dealing with the Egyptians and Libyans is lost. In any case, due to the composition of the treatise, as well as the strategy of its argumentation, it seems that both countries were described as belonging to Asia. The central opposition between Europe and Asia is based there, as has been said, on the character of seasons, horai, and their nature, and on the principle of meson, the center, together with the principles of isomoirie and with the notion of nomos, custom: the attitude of the inhabitants toward warfare depends on the political constitution of their countries. But the dichotomous nature of the antithesis is permanently mitigated, when numerous regions and nations of both continents are being described, e. g. the Scythians and Phasians in Europe, or the Greek inhabitants of Asia Minor,²³ but often with no particular example quoted, and thus the thesis applies generally. But, if we indeed compare the explanations of such differences even among various regions of Europe, or Asia respectively, it is apparent, that they are based on certain components of the "grille of functionalization" mentioned above: especially on the character of seasons (which influences the character of the soil and of the waters as well), and on the opposition phusis – nomos. It is as if we were simply descending to a lower floor of this classificatory building, while repeating the same operations as before. The reason is obvious: after all, the author of the Hippocratic treatise is not able to abandon his construct.

Of course the very specific outlook constructed by the "grille of functionalization" reflects the particularity of the Europe – Asia antithesis, as proposed by the author of the treatise, only in one part. The "traditional" dimension of this antithesis, which is political-historical-ideological, is also at work here, and it too should be understood in a complex way. We can see here three oppositions and their successive metamorphoses: the first one is the opposition Greeks – barbarians (embedded in an inherited view of the distinction between Greeks and the rest of the world; such a selfish attitude is, however, characteristic for a majority of, if not for all, civilizations); the second opposition is Greeks – Persians (founded especially upon the dichotomy of the Greek-Persian Wars); the third one is Europe – Asia. The crucial importance of the Greek-Persian conflict is here beyond argument; even though Wilamowitz's famous statement, that without the Persian wars the Greek culture would undertake the same process of development as other archaic cultures of the Mediterranean, ²⁴ is exaggerated, it is evident that the war helped

Wilamovitz-Moellendorff (1910: 133). Compare to similar statement of J. S. Mill: "Even as an event in English history, the Battle of Marathon is more important than the battle of Hastings. Had the outcome of that day been different, the Britons and the Saxons might be still roaming the woods!" See J. S. Mill, *Discussions and Dissertations*, 11, 1859, 283; I quote from Hartog (2001: 84, n. 23).

²³ It is important to stress that the author of the treatise is supposed to be a Ionian from Asia Minor (as were Hecataeus or Herodotus); thus, the perspective is that of an Asian Greek, but is in no way Hellenocentric. Famous Hellenocentric attitude applies, on the contrary, Aristotle in his *Politics*, when arguing that the Hellenic race, settled inbetween the peoples of Europe (living in a cold climate, wanting in intelligence and lacking political organization) and the peoples of Asia (who are intelligent, but wanting in spirit, and thus subjected to slavery), is intermediate and best (Arist. *Pol.* VII 1327b23–31). It is quite obvious, that Aristotle's concept of *meson* here is the leading one.

establish Greek national identity by constituting a cultural memory, i.e. by re-forming and re-shaping its own institutions of "remembering" and "not forgetting", and by being confronted with the image and mere existence of an enemy, who is always "different". This differentiating gave birth to the whole "rhétorique d'altérité" present in Greek literature.²⁵ The conflict, being followed quite naturally by a re-interpretation of ancient history (the new political vision "was projected retroactively onto the Trojan war, turning the Trojans into Asiatics and Barbarians," Hartog 2001: 82), helped establish the strong self-reflecting consciousness of the Greek identity seen in comparison with other nations, especially (but not exclusively) with the Persians. Such a re-interpreting attitude can also be clearly seen in Herodotus' account of the conflicts between the two continents in the beginning of his Histories. Although he sharply criticizes the continental division of the world, as we have seen, he also stresses the importance of a boundary between Europe and Asia; when the Bosporus is crossed by the Persian kings, he designates the deed unequivocally as hubris, which destroys the balance between the continents and which must be - and in fact is - rightly and deservedly punished: a real drama is going on before the reader's eyes. Thus, the sharp antagonism between the Greeks and the Persians, as representatives of opposite continents, shows itself to be a necessary device for constructing the narrative and the plot of his Histories.26

When considering all that has been discussed up until now, the persistence of earth's division into the two continents - which in fact form one huge continental mass - can be seen as remarkable, but not surprising. It prevailed during the classical age and lasted even into Roman times.²⁷ The main exceptions are Herodotus and Pindarus (*Pyth.* IX, 7). But the force of this dichotomous image was so strong that it was of no importance which continent Africa was a part of: in the "traditional" view it belonged to Asia, but according to some other authors it was attached to Europe (Sallust. Bell. Iug. 17, 3; Lucan, Phars. IX, 411–413); even the Christian authors, like Augustin, divided the earth in a similar way: Si in duas partes orbem dividas Orientis et Occidentis, Asia erit una, in altera Europa et Africa; If you divide the earth into two parts, East and West, in the first there will be Asia, in the second Europe and Africa (Civ. Dei XVI, 17); Isidor of Sevilla speaks in a similar manner (De nat. rerum XLVIII, 2, Etym. XIV, 2, 3). This dichotomous division of the earth is even alive during the days of Procopius of Caesarea, when a rival view of the earth, based on the Old Testament story of the tripartite division of the world among the sons of Noe: Shem, Cham, and Jafet, becomes the victorious paradigm of the Christian world and is only centuries later, after Columbus' discoveries, replaced by a new world scheme.

²⁵ The term is Jacob's (1991: 64). "Otherness" has become a popular theme in the scholarly discourse during the last few decades; see especially Harrison (2002), Bichler (2001), Hartog (2001), Luraghi (2001), Hall (2004), Calame (2005), etc.

^{26 &}quot;Herodotus is esentially an artist," comments in a similar way Fornara. "Herodotus' work, especially the last three books, is neither narrative nor 'drama', but something of both" (Fornara 1971: 61). A few pages later: "Herodotus' method is artistic, not historical" (Fornara 1971: 65). See also Dewald – Marincola (2006).

²⁷ Soph. Tr. 100; Aesch. Pers. 181; Eurip. Ion 1356, 1585, Tr. 927; Plat. Tim. 24E, Crit. 112E; Isocr. Paneg. par. 179, 210; Call. Del. 168; Aristid. XLVIII [Dindorf II, 472]; Arr. An. III, 30, 9; Plin. h. n. III par. 5; Procop. bell. Vand. I, 1. Among the later geographers, Dicaearchus and Eratosthenes were pioneers of the twofold division of oikoumene; for detailed analysis see old, but still invaluable Berger (1887).

Let me now summarize my argument: the continental outlook of the Greeks, that prevailed in the Europe-Asia dichotomy for centuries, has proved itself to be one of the most influential constructs in the history of ideas. Today, we are indeed the heirs of the continental prism, although there appears to be a strong objection to this way of dividing the earth: this approach has been designated as "mythical" and authors even speak about "the myth of continents" (Lewis - Wigen 1997). But this "myth" is "mythical" only in part, as I have tried to argue; above all, it is the result of a very special way of geometrical constructivism and of a dichotomic manner of reasoning, both as ways of ordering things. The dichotomic reasoning, though embedded in the preceding tradition of Greek thought, is decisively transformed by a specific way of argumentation, which is present in the treatises of the Corpus Hippocraticum. There are phenomena focused through a "grille of functionalization", constituted by the following mutually interconnected categories: mixture and its disturbance, supremacy and the necessity of its removal, similarity and dissimilarity, excess and default, filling up and depleting; furthermore, the opposites: part – whole, inside – outside, more – less, minimum – maximum, up – down, and the notions of nature (phusis) – custom (nomos), necessity and chance. This kind of discourse is a construction constituting a paradigm to remain obligatory in medical thought – but not only there – for centuries. Even Philipp-Johan von Strahlenberg, an 18th century Swedish military officer, when locating the border between Europe and Asia in the Ural mountains, followed Greek steps. But still, a strong suspicion that things are not so simple has been present nearly from the beginning: even though the author of On the Airs, Waters, Places recognizes a variety within both continents he describes, he is still captive of his own constructivist "optics" - he is trapped in his "grille of functionalization". It is ultimately Herodotus, who shows a sense for the complexity (or messiness?) of phenomena, when confronted with the force of construct - and of myth as well, at least in his geographical digressions; however, in his narrative of the Greek-Persian conflict, he still seems, for the purpose of the story and its plot, to share the dichotomous vision of the strongly divided continents.

REFERENCES

Allen, J. P., 2003. The Egyptian Concept of the World. In: D. O'Connor, S. Quirke (eds.), *Mysterious Lands*. London, UCL Press, 23–30.

Alonso-Núñez, J. M., 2003. Herodotus Conception of Historical Space and the Beginnings of Universal History. In: P. Derow, R. Parker (eds.), *Herodotus and his world. Essays from a Conference in memory of George Forrest*. Oxford, Oxford University Press, 145–152.

Assmann, J. 1997. Das kulturelle Gedächtnis. Schrift, Erinnerung und politische Identität in frühen Hochkulturen. München, C. H. Beck.

Backhaus, W., 1976. Der Hellenen-Barbaren-Gegensatz und die hippokratische Schrift Περὶ ἀέρων ὑδάτων τόπων. Historia 25, 170–185.

Berger, H., 1887. Geschichte der wissenschaftlichen Erdkunde der Griechen. Leipzig, Veit & Comp. Bichler, R., 2001. Herodots Welt. Berlin, Akademie Verlag.

Boudouris, K. J. (ed.), 1989. *Ionian Philosophy*. Athens, International Association for Greek Philosophy. Calame, C., 2005. *Masks of Authority. Fiction and Pragmatics in Ancient Greek Poetics*. Ithaca/London, Cornell University Press.

Couprie, D. L., 2003. A last exercise in early Greek astronomy: Anaximander's map of the world. In: D. L. Couprie, R. Hahn, G. Naddaf, *Anaximander in Context. New Studies in the Origins of Greek Philosophy*. Albany, State University of New York Press, 194–201.

- Der Neue Pauly. Enzyklopädie der Antike, 1996–2003. Hrsg. von H. Cancik, H. Schneider. Stuttgart/Weimar, J. B. Metzler.
- Dewald, C., Marincola, J. (eds.), 2006. *The Cambridge Companion to Herodotus*. Cambridge, Cambridge University Press.
- Diller, H. 1971. Die Hellenen-Barbaren-Antithese im Zeitalter der Perserkriege. In: H. Diller, *Kleine Schriften zur antiken Literatur.* München, C. H. Beck, 419–450.
- Fornara, C., 1971. Herodotus. An Interpretative Essay. Oxford, Clarendon Press.
- Foucault, M., 1969. L'archéologie du savoir. Paris, Gallimard.
- FrGrHist = Jacoby, F. (ed.), 1923. Die Fragmente der griechischen Historiker I. Genealogie und Mythographie. Berlin, Weidmann.
- Fritz, K. von, 1936. Herodotus and the Growth of Greek Historiography, Transactions of American Philological Association 67, 315–340.
- Fritz, K. von, 1967. Die griechische Geschichtsschreibung I. Von den Anfängen bis Thukydides, Berlin, Walter de Gruyter.
- Froidefond, Ch., 1971. Le Mirage Égyptien. Aix-en-Provence, Orphys.
- Gauer, W., 1995. Europa und Asien. Die Entdeckung der Kontinente und die Einheit der Welt. *Saeculum* 46, 204–215.
- Gehrke, H.-J., 1998a. Die Geburt der Erdkunde aus dem Geiste der Geometrie. Überlegungen zur Entstehung und zur Frühgeschichte der wissenschaftlichen Geographie bei den Griechen. In: W. Kullmann, J. Althoff, M. Asper (eds.), Gattungen wissenschaftlicher Litteratur der Antike. Tübingen, Narr, 163–192.
- Gehrke, H.-J., 1998b. Raumbilder in der griechischen Geographie. In: T. Mantos, G. A. Lehmann (eds.), Althistorisches Kolloquium aus Anlass des 70. Geburtstag von Jochen Bleicken 29.-30. November 1996 in Göttingen. Stuttgart, F. Steiner, 29–41.
- Graham, D., 2006. Explaining the Cosmos: The Ionian Tradition of Scientific Philosophy. Princeton, Princeton University Press.
- Hall, E., 2004. *Inventing the Barbarian: Greek Self-Definition through Tragedy*. Oxford, Clarendon Press. Harrison, T. (ed.), 2002. *Greeks and Barbarians*. New York, Routledge.
- Hartog, F., 2001. Memories of Odysseus. Transl. by J. Lloyd. Edinburgh, Edinburgh University Press.
- Horowitz, W., 1998. Mesopotamian Cosmic Geography [Mesopotamian Civilisations 8]. Winona Lake, Eisenbrauns.
- How, W. W., Wells, J., 2002. A Commentary on Herodotus. Oxford/New York, Oxford University Press.
- Hruška, B., 2002. Babylonská mapa světa a mezopotamské představy o Zemi. *Univerzitní noviny: List Masarykovy univerzity a Nadace Universitas Masarykiana* 9, no. 5, 50–56.
- Hussey, E., 1972. The Presocratics. London, Duckworth.
- Jacob, C., 1991. La géographie et l'ethnographie d'Hérodote. In: C. Jacob (ed.), Géographie et Ethnographie en Grèce ancienne. Paris, Armand Colin, 49–72.
- Jacob, C., 1997. Premières géographies. Poésie, cartes et périegèse en Grèce (VIIIe/VIe s.). In: Des Sumériens aux Romains d'Orient. La perception géographique du monde. Espaces et territoires au proche-Orient ancien. Paris, J. Maisonneuve, 157–176.
- Jones, W. H. S., 1923. *Hippocrates*. With an English Translation by W. H. S. Jones. London, William Heinemann LTD (reprinted 1957).
- Jouanna, J., 1994. L'image de l'Europe chez Hérodote et Hippocrate: essai de comparaison. In: M. Perrin (ed.), L'idée de l'Europe au fil de deux millénaires. Paris, Beauchesne, 21–38.
- Jouanna, J., 1996. *Hippocrate. Tome II. 2^e partie. Airs, eaux, lieux.* Texte établi et traduit par J. Jouanna. Paris, Les Belles Lettres.
- Kahn, C. H., 1970. On Early Greek Astronomy. Journal of Hellenic Studies 90, 99-116.
- Kirk, G. S., Raven, J. E., Schofield, M., 1983. *The Presocratic Philosophers*. Cambridge, Cambridge University Press.
- Kočandrle, R., 2011. Anaximandros z Mílétu. Červený Kostelec, Pavel Mervart.
- Lévi-Strauss, C., 1996. Anthropologie structurale. Paris, Plon.
- Lewis, M. W., Wigen, K. E., 1997. *The Myth of Continents. A Critique of Metageography*. Berkeley/Los Angeles/London, University of California Press.
- Lloyd, G. S., 1966. Polarity and Analogy. Cambridge, Cambridge University Press.

Lloyd, G. S., 1970. Hot and Cold, Dry and Wet in Early Greek Thought. In: D. J. Furley, R. E. Allen (ed.), *Studies in Presocratic Philosophy* I. London, Routledge & Kegan Paul, 255–280.

Luraghi, N. (ed.), 2001. Historian's Craft in the Age of Herodotus. Oxford, Oxford University Press.

Ninck, M., 1945. Die Entdeckung von Europa durch die Griechen. Basel, Benno Schwabe & Co.

Norden, E., ²1909. *Die antike Kunstprosa* I, Leipzig/Berlin, Teubner.

Pagden, A. (ed.), 2002. The Idea of Europe. From Antiquity to the European Union. Cambridge, Cambridge University Press.

Schadewaldt, W., 1978. Die Anfänge der Philosophie bei den Griechen. Tübingen, Suhrkamp.

Schubert, C., 2000. Konstruktionsprizipien des Weltbildes. Medizinhistorisches Journal 35, 201-218.

Sélincourt, A. de, 1972. *Herodotus: The Histories*. Translated by Aubrey de Sélincourt, revised, with an introduction and notes by A. R. Burn. Harmondsworth, Penguin Books (reprinted 1986).

Sérandour, A. (ed.), 1997. Des Sumériens aux Romains d'Orient. La perception géographique du monde. Espaces et territoires au proche-Orient ancien. Paris, J. Maisonneuve.

Souček, J., 2008. Geografické chápání Evropy v nejstarší řecké tradici. Auriga. Zprávy Jednoty klasických filologů 50, 27–36.

Thomas, R., 2000. Herodotus in Context. Cambridge, Cambridge University Press.

Wilamowitz-Moellendorff, U. von, 1910. Staat und Gesellschaft der Griechen. In: U. von Wilamowitz-Moellendorff, B. Niese, Staat und Gesellschaft der Griechen und Römer. Berlin/Leipzig, Teubner, 1–207.

Zimmermann, K., 1997. Hdt. IV, 36 et le développement de l'image du monde d'Hécatée a Hérodote. Ktema 22, 285–298.

THE EUROPE-ASIA ANTITHESIS IN THE HIPPOCRATIC TREATISE ON THE AIRS, WATERS, PLACES AS SCIENTIFIC IMAGE AND MYTHICAL HERITAGE. A SHORT CHAPTER FROM THE HISTORY OF IDEAS

Summary

The article tries to interpret the different characteristics of Europe and Asia and their inhabitants in the Hippocratic treatise *De aëre, aquis, locis*. It attempts to introduce the dichotomous outlook of the author of the treatise as embedded in the preceding tradition of Greek thought (philosophical, historical, cartographical and geometrical as well), but decisively transformed by a specific way of argumentation, which is present in the treatises of the *Corpus Hippocraticum*. The study also reflects Herodotus' critique of the continental division of earth and his own, mutually conflicting treatment of the topic in the geographical passages of *Histories* and in his narrative of the Greek-Persian Wars.

ANTITEZE EVROPA-ASIE V HIPPOKRATOVSKÉM SPISE O VZDUCHU, VODÁCH A MÍSTECH JAKO VĚDECKÝ OBRAZ A MÝTICKÉ DĚDICTVÍ. KRÁTKÁ KAPITOLA Z DĚJIN IDEJÍ

Shrnutí

Článek podává interpretaci rozdílného představení Evropy a Asie a jejich obyvatel v hippokratovském spisu *O vzduchu, vodách a místech.* V návaznosti na dosavadní "způsoby četby" usiluje vyložit dichotomickou optiku autora spisu jako zakotvenou v předcházející tradici (filosofické, historické a zejména kartograficko-geometrické), avšak výrazně transformovanou specifickým způsobem argumentace, jaký nacházíme ve spisech *Corpus Hippocraticum* a jaký je zde analyzován. Studie také reflektuje Hérodotovu kritiku rozdělení země na kontinenty a jeho vlastní, rozdílné pojednání tématu v geografických pasážích *Historií* a v jeho podání řecko-perského konfliktu.