

STUDIA TROICA

Band 19 · 2011

VERLAG
PHILIPP VON ZABERN
DARMSTADT





STUDIA TROICA

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



288 Seiten mit 81 Schwarzweißabbildungen und 23 Farbabbildungen

Herausgeber/Editors: Dr. Peter Jablonka, Prof. Dr Ernst Pernicka, Prof. Dr. Charles Brian Rose

Sigel der Studia Troica: StTroica

Redaktionelle Betreuung/Editorial staff: Dr. Hanswulf Bloedhorn, Dr. Stephan W. E. Blum

Layout und Satz/Layout and typesetting: Frank Schweizer, Göppingen

Adressen für Autoren-/Addresses for authors:

Dr. Peter Jablonka, Institut für Ur- und Frühgeschichte und Archäologie des Mittelalters der Universität Tübingen,
Schloss Hohentübingen, D-72070 Tübingen (deutschsprachige Artikel)

Prof. Dr. Joachim Latacz, Hauptstr. 58c, CH 4313 Möhlin (Artikel mit altphilologischem Hintergrund)

Prof. Dr. Charles Brian Rose, Dept. Classical Studies, University of Pennsylvania, Room 351B, 3260 South Str.,
Philadelphia PA 19104, USA (Articles in English)

Studia Troica ist eine Jahresschrift, in der die Leitung und die Mitarbeiter des Troia-Projektes über ihre Arbeit vor Ort in Troia und der Troas und die daraus resultierenden Forschungsergebnisse berichten. Manuskripte, die nicht unmittelbar mit diesen Arbeiten verbunden sind, werden von international renommierten Fachleuten auf ihre Druckwürdigkeit hin beurteilt. Deren Empfehlungen fühlt sich der Herausgeber verpflichtet.

Studia Troica is a periodical published annually in which the director and staff of the Troia project report on their fieldwork in Troia and the Troas and present the results of their research. Manuscripts submitted for publication which are not directly related to these studies are read by internationally renowned specialists in the relevant fields prior to publication. The editor will follow their recommendations.

© 2012 by Verlag Philipp von Zabern

ISBN: 978-3-8053-4578-1

Bilddaten: Troia-Projekt

Alle Rechte, insbesondere das der Übersetzung in fremde Sprachen, vorbehalten.

Ohne ausdrückliche Genehmigung des Verlages ist es auch nicht gestattet, dieses Buch oder Teile daraus auf photomechanischem Wege (Photokopie, Mikrokopie) zu vervielfältigen. Dies gilt insbesondere für die Einspeicherung und Verarbeitung in elektronischen Systemen.

Printed in Germany by Philipp von Zabern

Printed on fade resistant and archival quality paper (PH 7 neutral) · tcf

Inhalt – Contents

Peter Jablonka – Ernst Pernicka – Rüstem Aslan Vorbericht zu den Arbeiten in Troia 2009 und 2010 Preliminary Report on Work in Troia 2009 and 2010	7
Rüstem Aslan – Ali Sönmez Die Entdeckung und der Schmuggel des ›Priamos-Schatzes‹ von Hisarlık (Troia) nach Athen anhand osmanischer Quellen	43
William Aylward – William Marx – Donna Strahan Elemental Identification of Artifacts and Pigments from Ancient Ilion with X-ray Fluorescence	57
Stephan W. E. Blum – Rüstem Aslan – Faika Evrim Uysal – Sebastian Kirschner – Steffen Kraus Archäologische Untersuchungen zur voreisenzeitlichen Kultursequenz des Bozköy-Hanaytepe, Nordwesttürkei	119
Petya Ilieva The Sessile Kantharos of the Archaic Northeast Aegean Ceramic Assemblage: the Anatolian Connection	179
Magda Pieniżek Troianischer Schmuck im Kontext. Ein Vorbericht zu den Schmuckfunden des 2. Jahrtausends v. Chr.	205
Bernhard Herzhoff The Battlefield of the Trojan War. A New Philological and Geographical Analysis	219
Cătălin Pavel Recording the Excavations in Troy, 1855–2010	255

The Battlefield of the Trojan War. A New Philological and Geographical Analysis

Bernhard Herzhoff*

Abstract

At a significant point in the middle of his work, the Iliad poet previews the destruction of the wall of the ship enclosure on the Hellespont, a wall the Greeks had to erect to protect themselves after their most important troop leader Achilles had withdrawn from the war against Troy out of rancour. To erase all traces of this wall after the Trojan War ended, Apollo and Poseidon, according to this preview, unite eight rivers of the Troad in nine days of incessant rain from Zeus and, with this aid, wash the wall into the sea and cover the coast again with sand (Iliad M 10–35).

This article proposes to identify and localise the hitherto only partially determined rivers of the eight-river catalogue (M 20–22) to understand the geography around Troy and thus ascertain Homer's idea of the battlefield's location. It becomes evident that this portrayal reflects a geometrical spatial pattern in concentric half-circles around the coastal areas on the Hellespont near Parium and Lampsacus, the later core settlement of the Greeks from northern Ionia. Such a geographical alignment accords with the general, finely interconnected consistency of the hidden as well as open local colour of the Iliad, which can best be seen in the rich images of nature and which reveals traces of Homer's and his (contemporary) listeners' knowledge of the geography inherent in the work and still verifiable today.

Zusammenfassung

An zentraler Stelle in der Mitte des Werkes gibt der Dichter der Ilias eine Vorausschau auf die Zerstörung der Mauer um das Schiffslager am Hellespont, welche die Griechen zu ihrem Schutz errichten mussten, nachdem sich ihr wichtigster Truppenführer Achilleus aus Groll vom Kampf gegen Troia zurückgezogen hatte. Um nach Beendigung des Troianischen Krieges alle Spuren dieser Mauer zu beseitigen, vereinen laut dieser Vorausschau Apollon und Poseidon bei neuntägigem Dauerregen des Zeus acht Flüsse der Troas, spülen mit ihrer Hilfe die Mauer ins Meer und bedecken den Strand wieder mit Sand (Ilias M 10–35).

Dieser Artikel hat das Ziel, die bislang erst teilweise bestimmten Flüsse des Acht-Flüsse-Katalogs (M 20–22) zu identifizieren und zu lokalisieren, um so Homers Erfassung des geographischen Raums um Troia und damit seine Vorstellung von der Lage des Schlachtfelds zu ermitteln. Es zeigt sich, dass seine Darstellung ein geometrisches Räumuster in konzentrischen Halbkreisen um die Küstenstriche am Hellespont bei Parion und Lampsakos, dem späteren Siedlungskern der Griechen aus Nord-Ionien, widerspiegelt. Zu einer solchen geographischen Zentrierung passt die durchgängige feinvernetzte Stimmigkeit des verborgenen und offenen Lokalkolorits in der *Ilias*, das sich am deutlichsten in den zahlreichen Naturbildern fassen lässt und werkimmanente, noch heute verifizierbare Spuren der Landeskunde Homers und seiner (primären) Hörer verrät.

1 Background and Objectives

According to ancient tradition, Homer is considered to be the founder of geography¹ and »the forefather of geographic empiricism« (ἀρχηγέτης τῆς γεωγραφικῆς ἐμπειρίας).² Normally, however, Anax-

imander is credited with having begun scholarly geography;³ but, in the retrospective of one hundred years of productive research into the history of geography in 1924, Friedrich Gisinger stated that an »account of ancient geography spanning primarily the pre-analytical period as well« [FK] would be a

worthy project for the future.⁴ The most important aspect is to research the »cognitive strategies of spatial structuring«⁵ [FK] as far back as Homer, ones which then became the basis for Ionian cartography. In regard to the *Odyssey*, the high estimation of Homer by ancient geographers has been valued by more and more geography historians ever since Albin Lesky's assumption that the wanderings of Odysseus beyond Cape Malea (180–81) were lost in fable-like generalities was shown to be categorical and overstated.⁶ Moreover, it can be observed that the poet of the *Odyssey*, even if he probably did not have a map in front of him, was able to imagine, as it were, the individual forms of coastlines as seen from above in a mental map. Thus, long before Anaximander, Homer exemplified the first prerequisite of cartography: the ability to think abstractly, to free oneself from the simple frontal observation, to imagine borders of land and sea from a bird's eye view and to render them in images (for instance, shield, trident).⁷

Later, in the early 6th century BC, Anaximander most clearly demonstrated how good practical experience of everyday spatial orientation on water and on land determines the establishment and further development of scholarly geography and the geometric view of the world among the Ionian Greeks of Asia Minor. In the wake of the many colonial activities of his home city Miletus, he travelled to the colony Apollonia on the west coast of the Black Sea (Sozopol today).⁸ That is, he did not conduct pure »armchair cartography«⁹ when he drafted his map of the world, even though he employed geometric spatial structures throughout according to proportionality, congruence and analogy in the typically Greek belief in the mathematical order of the cosmos, an order which seemed to warrant being able to infer the unknown from the known. He relied on this principle especially with the placement of the rivers: These played a role not only in the general structuring of the continents, as exemplified in the corresponding flow of both the Nile and the Danube,¹⁰ but also in the structuring of the countries. In light of the fragmentary transmission, we can conclude this for Anaximander only from the map by Hecataeus. Despite all his invective against the rigid geometric schematics of his predecessors, Herodotus, in his *Scythian logos*, still used the large

rivers on the north coast of the Black Sea to delineate parallel strips of land in a north-south direction side by side more or less as rectangles and to arrange the tribes within them. With this arrangement, he followed the paths already travelled by Anaximander and Hecataeus. Constant comparison of the geometric construct with the concretely tangible space admittedly led to a gradually more detailed definition over time,¹¹ but the tendency to topographical schematics and the delight in symmetries remained preserved throughout Antiquity. Hermann Fränkel, for example, remarked on the depiction of the river system in Apollonius of Rhodes: »Ancient geography operated with schemata from beginning to end, partly from a theorising belief in simple and regular relationships and partly from practical intentions: to grasp and remember more easily the forms for an age that knew no mechanically reproduced maps«¹² [FK].

It has long since been observed that Homer, even about one hundred years before Anaximander, offered examples of complex empirical spatial structures both from the perspective of the periplus as well as that of the itinerarium.¹³

The river catalogue¹⁴ of the *Iliad* (M 20–23), however, has never been examined from this aspect, one which can be seamlessly adapted into the chorographical perspective of the entire work. In fact, this perspective displays an astounding hidden coherence and extends to the east noticeably beyond the neighbouring battlefield of the Scamander plain before Troy. Homer's poetic mastery comes to the fore and enthralls the audience: For authentication he emblematically weaves into the epic stories of heroes from the long ago, hidden everywhere or openly in similes or background descriptions, soberly exact observations of nature with local colour,¹⁵ observations any reader can verify even today. As far as I can see, the first to have clearly recognised this as an ingenious element of auctorial guidance of the listener on the basis of Homer's own local knowledge of the Troad was Friedrich Gottlieb Welcker, who himself travelled the Troad in the footsteps of Robert Wood in June 1842 and observed how well the *Iliad* was rooted in the local landscape.¹⁶ He remarked on the poet's use of topographical realities: »Through exactness, truth and probability, which it normally adheres to, the Homeric narrative succeeds in beguil-

which this investigation will reveal. This investigation aims to reinterpret the river catalogue of the Iliad in M 20–23 by reinterpreting the geographical area. Following a brief sketch of the context, this article aims to determine the identity of the eight rivers listed for the Troad, with whose help the gods Apollo, Poseidon and Zeus produced a great flood to wash away the wall sheltering the Greeks' ships after the destruction of Troy and to make it invisible for ensuing ages. The notorious false identification of the Granicus (M 21), all too well known through Alexander's military campaigns, was enough to block any comprehension, and it will prove difficult to convince the townspeople of modern Biga that the river flowing so acclaimed through the heart of their town and officially just named Biga Çayı is not the famous Granicus of Alexander's battle, after which they so proudly name their tea rooms and parks. Great confusion arises again and again because of the inconsistency of modern Turkish river names: One and the same river often bears different, and frequently, several names in its various sections.²⁷ However, sometimes today, the uniform ancient Greek or pre-Greek names have been preserved among the rural populace. But, unfortunately, the names have been officially suppressed since 1928, as is the case otherwise in topographical onomastics, and are replaced by artificial names, so that an almost 4000-year-old tradition has been consciously eradicated.²⁸ In the study of topographical as well as zoological and botanical names in Anatolia, it is thus important to try to find popular/traditional and older information, if possible from before 1922. But also for pragmatic reasons, I have oriented myself in the following on the map by Heinrich Kiepert from 1894 (Fig. 1), which is the most exact in the historical representation of the rivers but in questions of identification of ancient place names must be considered outdated and outpaced primarily by the masterful work of John M. Cook in 1973.²⁹

In a last section of the article, I will characterize the strategies of the literary spatial structuring by means of the identification results and arrange them in the poet's overall spatial visualizations as they can be seen everywhere from his topographical pointers and local colour.

2 The Theme: The Destruction of the Ship Wall by the Great Flood after the Fall of Troy (M 3–35)

Text and context M 10–35 read in translation:³⁰

- 10 *So long as Hektor was still alive, and
Achilleus was angry,
so long as the citadel of lord Priam was
a city untaken,
for this time the great wall of the
Achaians stood firm.
But afterwards when all the bravest among
the Trojans had died in the fighting,
and many of the Argives had been beaten down,
and some left,*
- 15 *when in the tenth year the city of Priam was taken
and the Argives gone in their ships to the beloved
land of their fathers,
then at last Poseidon and Apollo took counsel
to wreck the wall,
letting loose the strength of rivers upon it,
all the rivers
that run to the sea from the mountains of Ida,*
- 20 *Rhesos and Heptaporos, Karesos and Rhodios,
Grenikos and Aisepos, and immortal Skamandros,
and Simoeis, where much ox-hide armour
and helmets
were tumbled in the river mud, and many of the
race of the half-god mortals.
Phoibos Apollo turned the mouths of these
waters together*
- 25 *and nine days long threw the flood against the
wall, and Zeus rained
incessantly, to break the wall faster and wash
it seaward.
And the shaker of the earth himself holding in his
hands the trident
guided them, and hurled into the waves all
the bastions' strengthening
of logs and stones the toiling Achaians had
set in position*
- 30 *and made all smooth again by the hard-running
passage of Helle
and once again piled the great beach under sand,
having wrecked the wall, and turned the rivers
again to make their way down*

*the same channel where before they had run the
bright stream of their water.*

*Thus, afterwards, Poseidon and Apollo
were minded*

35 *to put things in place, but at this time battle and
clamour were blazing ...*

Friedrich Gottlieb Welcker subtly observed in the above-cited analysis of the still verifiable features of the local landscape that these features can be found en masse at the places where the boldness of poetic fantasy stands out. In particular, deeds of the gods seem to evoke realistic conceptions with autoptically verifiable local colour, and Ctesias of Cnidus, the most epic of all historians, followed the poet of the Iliad in this technique.³¹ One might think of the burlesque episode in Book XIV of the Iliad when Zeus is hoodwinked, or of the river battle in XXI.³² One of the most daring nature images of the Iliad the poet significantly placed in the middle of his work: It is the announcement of a great flood for whose orchestration the gods Zeus, Apollo and Poseidon summon up eight rivers of the Troad to destroy the makeshift defensive wall the Greeks had to erect round their fleet in the large, now dried up Scamander bay at the Hellespont as late as the tenth year of the war because of withdrawal of their main hero Achilles. These eight rivers, besides the well-known Scamander and the Simois in the western Troad and the Aesepus in the east, are also mentioned in the Iliad. In addition, however, five rivers not mentioned again in the epic still today³³ partially resist being convincingly identified: Rhesus, Heptaporus, Caresus, Rhodius, Granicus. Only one thing is certain today, that the rivers are real, and, as linguistic research has demonstrated, not simply fantasy names. In common for all of them is that they rise in the Mt. Ida range, but whether they flow into the sea, that is, Propontis or the Hellespont, or whether they are tributaries is disputed even among ancient Homer commentaries. Even the identity of the famous Granicus, known later because of Alexander's battle in May 334 BC, has always been debated.³⁴ Moreover, the entire narrative context »can be counted among the most controversial sections of the Iliad«³⁵ [FK]. Its originality within early Greek poetry has only recently again been challenged, however unjustifiably.³⁶ The building of the

ship wall as late as the tenth year of the war and its destruction following the fall of Troy and the retreat of the Greeks are by no means unmotivated but are clearly explained by the poet through his leitmotif of the anger of Achilles. Because Achilles had withdrawn from the battle out of rancour and thus failed to stand as a bulwark in the battle against the Trojans, a fortification to protect the Greek ships had to be erected – not until the tenth year of the war – as a substitution for the leading warrior, so to speak.³⁷ In the poet's depiction, the ships lay on the shore of the large bay of the Hellespont, where, according to Homer in E 774, the waters of the Scamander and the Simois »dash their waters together«.³⁸

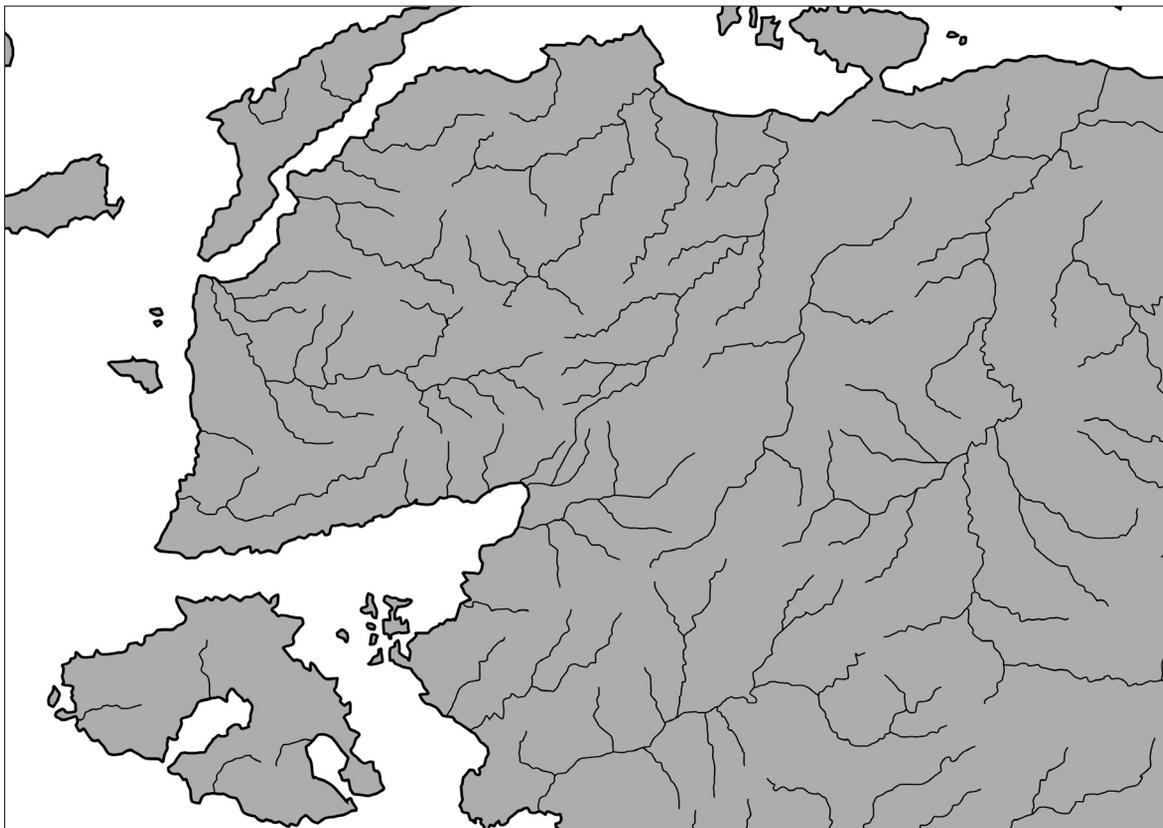
Achilles' significance is indirectly heightened all the more when the bulwark erected in great haste did not then fulfil the expectations placed in it but was stormed and overcome by Hector. The inventor of the menis episode – that is, probably Homer himself – thus also invented the ship wall erected only toward the war's end and seemed to interweave the imaginary of his fantasy with the real world of his listeners, who were certainly accustomed to encountering the so frequently named landmarks in the real landscape – but not that wall! And thus the poet believed he had to, as an exception, anticipate the future and had to insert a pointer toward the complete destruction of the fortification after the Trojan War. Because no sacrifice had been offered during construction, Apollo, Poseidon and Zeus³⁹ would then raze the structure by uniting all the rivers of Mt. Ida by a constant nine-day rain. Stylistically, the poet creates the pent-up rage of the rivers using polysyndeton with the Achtergewicht according to the »Law of Ascending Elements« with the rivers closest to the event, Scamander and Simois, providing the line of attack at the very end. This bold narrative was viewed as an unusual breach in the heroic past.⁴⁰ But it may not appear so unusual when the distinct historical interest of the poet and his listeners is taken into account.⁴¹ In any case, the preview of the time after the destruction of Troy and the departure of the Greek ships had already aroused the attention of ancient interpreters who explained the verses in such a way as if the poet had invented the motif and wanted to explain why no traces of the wall were to be seen anymore in his own time.⁴² Modern criticism is based on this premise. Von

Wilamowitz-Moellendorff, for example, remarked that the poet could have found the destruction by the gods necessary only »if he encountered the doubts of listeners who had travelled along the Hellespont and would be able to check the truth of the narrative: there were no traces of the fortification«⁴³ [FK]. Homer's readers may have had passages such as H 84–91 in mind, in which the world of heroes is expressly reflected in the eyes of those after them by associating the burial mound coming into view with the deeds of the epic heroes as the former sailed along Troy's coast. Schadewaldt reasons similarly to Wilamowitz, »That the poet so intensively emphasises the later complete annihilation of the wall leads us justifiably to the assumption that he lived and wrote in the Troad, where no trace of such a wall existed in his or his listeners' time«⁴⁴ [FK]. Whatever may have been the poet's true further intentions, walls need a special story if they are to have existed earlier, because the poet needed them

for his narrative and does not need them any longer. Obviously the listeners were to be seduced into believing Homer's depiction of the wall's disappearance through several real features from their own world which the poet cleverly interspersed in his narrative.

What first strikes the reader is the exact topographical information such as the embracing delineation marked by the »mountains of Ida« (M 19) to the south and the »mighty stream of the Hellespont« (M 30) to the north. The intrinsic »well fitting«⁴⁵ epithet »hard-running passage« (ἀγάρροος) used for the Hellespont a second time in the Iliad only in the Trojan battle order (Trojan Catalogue B 845) as the border of the territory of the Thracians from Aenus is doubtless here chosen intentionally in the depiction of the great flood because the powerful current of the strait at flood stage supports the annihilating effect of the eight rivers.⁴⁶ In verses M 20–23, a catalogue of their names is listed:

Fig. 2: Detail from the river network of the Atlas antiquus (Kiepert 1892, map 4).



20 Ῥῆσός θ' Ἐπτάπορος τε Κάρησός τε Ῥοδῖος τε
Γρήνικός τε καὶ Αἴσηπος δῖός τε Σκάμανδρος
καὶ Σιμόεις, ὅθι πολλὰ βοάγρια καὶ τρυφάλεια
κάππεσον ἐν κονίησι καὶ ἡμιθέων γένος ἀνδρῶν.

3 The Identity of the Eight Rivers

A renewed analysis of these often treated river names, of which the first four are considered as most debated, might seem moot, but recently the old discussion concerning access and location of the battlefield at Granicus, where Alexander won his first victory over the Persians in May 334 BC, has led to an unfortunately hitherto almost unnoticed result that casts a new light on the ancient hydronymy of the Troad. New research shows that, in his ingenious way, Homer drafted with a few strokes an admittedly schematic but astoundingly clear image of the complicated river system of the landscape north of the Ida range (Fig. 2).

Of the names mentioned in the cited verses only the Aesepus, Scamander and Simois occur several times in the Iliad; the last two, which are the only ones honoured with an epithet and which receive a special »Achtergewicht« through the added locative relative clause in M 22–23, serve as important topographical orientation marks for the epic event in reference to the ship enclosure, to the town wall and to Mt. Ida. Naturally the Scamander, 124 km/77 mi long, as the main river of the Trojan plain, is the most frequently mentioned and in research since antiquity the »one most discussed of all«⁴⁷ among all the river names. It is the only river of the Troad that has always been known⁴⁸ or has been able to keep its name up to the present and, in a transformation compliant with Turkish vocalism, is called »Menderes« in Turkish.⁴⁹ It rises at the highest elevations of the Mt. Ida range, there where, according to Homer, Zeus had his seat while watching the battles before the gates of Troy. Thus the river appears in E 434 and in other places as the son of Zeus and thus bears the epithet »Zeus-fed« [FK], διοτρεφής (Φ 223), »Zeus-descended« [FK], διπετής (P 263; Φ 326), here in M 21 only as divine (δῖος) and in Y 74 characterised by the poet as the only river with a god's name, namely Ξάνθος.⁵⁰ In the river battle in Φ, it even receives its own aristeia as a river god in

the battle against Achilles. The named epithets with the virtues of the river indicate that Homer interpreted its headwaters upriver from Skepsis (Kuşunlu Tepe) differently from what Demetrius had already done and from what is indicated on our maps today: The Scamander for Homer is not the longer course flowing from Karaköy straight westward toward Skepsis but the shorter Ayazma Dere rising further south in the massive rocky mountain landscape directly under the highest summit. The name Ayazma derives from the Greek Ἁγίασμα and designates the site of a holy spring, as is frequently the case in Turkey and in Greece.⁵¹ On Kiepert's map from 1894 (Fig. 1), the sources of the Scamander are entered on this place in the landscape, in keeping with Homer's intentions, and this is how the local populace interpret it still today. And still today the Judgment of Paris is re-enacted annually on 15 August on the bizarrely romantic rest area next to the waterfall that rushes loudly, even in mid-summer. And people come a long distance from Çanakkale and Balıkesir⁵² to marvel at the natural wonder of the warm and cold double spring that the poet of the Iliad (X 147–152) relocated in a bold topographic projection to the town wall of Troy.

In the river battle in Book XXI (verse 308), the Simois (the Dümrek⁵³ today) is called as »brother« by the river god Scamander to help against Achilles, as that river also rises on the Mt. Ida range.⁵⁴ It then reaches the sea in the eastern part of the plain as a separate stream, only to reunite its current with the Scamander in E 774 in the impenetrable coastal swamps of the former large bay of Troy, silted up today. The »uniting«, expressed with the dual συμβάλλετον,⁵⁵ is thus not to be understood as an intrinsic contradiction in terms of the analysis, as if, according to this passage, the Simois flowed into the Scamander, but then, according to M 19, into the sea.⁵⁶ Even Walter Leaf, a strong supporter of Homer's realistic description, was not able to find any other way to preserve the idea of absolute credibility of Homer's landscape descriptions than to remove the verse E 774.⁵⁷

Equating the Aesepus, mentioned several times in the Iliad, with today's Gönen Çayı is unchallenged. For Homer, it formed the eastern border of the Troad; the people of Zeleia drink its »dark water« (ὑδωρ μέλαν, B 825)⁵⁸ »below the foot of

Mount Ida« (ὑπαὶ πόδα νεΐατον Ἴδης B 824), people who in B 826 are expressly called »Trojan« (Τρῶες). Pandarus, portrayed as having a close relationship to the god Apollo and who breaks the peace treaty at the instigation of Athena in Δ 86–147 by wounding Menelaus, comes from Aesepus (B 825–827; Δ 91) from the town Zeleia (B 824; Δ 103, 121). Its identification with the ancient ruins near the village Sariköy was just recently confirmed by the systematic research of the Granicus Valley.⁵⁹ The ruins lie directly on the old king's road leading from Pegai (Biga) and Priapos (Karabiga) to the residence of the Persian satraps in Dascylium (Manyas).⁶⁰ In E 105 and 173, Pandarus names his homeland on the lower Aesepus in the vicinity of Zeleia »Lycia«.

Just as the Scamander is paired with the Simois in the west, the Aesepus is paired in the east of the Troad with the all too well-known Granicus, not mentioned anywhere else in the Iliad, but only in later testimony. Both pairs are joined respectively by »both ... and« (τε ... καί) and, in fact, in such a way that the Granicus corresponds chiastically to the Simois. If we may infer a geographical arrangement of the rivers from the stylistic form which localises the two larger rivers outside as mirror images and the two smaller ones as neighbours inside, we must, according to Homer, identify that river with the Granicus, which flows as the first in the west parallel to the Aesepus, that is, the »Caresus« on Heinrich Kiepert's map (Fig. 1), normally named Kocadere (»large brook«) on modern maps, and we will thus call it that. According to traditional opinion, however, the longer Biga Çayı named after the town of Biga (with the Greek name »Pegae« on the Kiepert map) and named Çan Çayı in its headwaters, is considered to be the ancient Granicus. Now, however, in his innovative article on Alexander the Great's battle at the Granicus, Nicholas G. L. Hammond has demonstrated⁶¹ through his own topographical observations in the terrain that the traditional identification cannot be correct and that the Kocadere must be the ancient Granicus and not the Biga Çayı, as is generally assumed and is marked as such on maps. Hammond's assessment is so convincing because, after the removal of the inconsistencies in the centuries-long discussion on the location of the battlefield at the Granicus, it now corresponds to the topographically very exact information given by the

Alexander biographers, primarily Arrian. Many of the identification attempts up to now were glibly inferred from improbable assumptions at the outset, namely, that the courses of today's rivers in the alluvial plain on the Sea of Marmara are identical with those of antiquity. Even Heinrich Kiepert had doubts,⁶² and it is noteworthy that the Prussian Colonel A. Janke stated, after detailed examinations at the original location in 1902, »that it is possible the Granicus in the plain between Biga and Tschinar Köprü Köi has altered its course, as backwaters indicate, as at the mouth as well, particularly since Pliny reports »Granicus diverso tractu in Propontida fluit.«⁶³ And, recently, Hammond was able to show the course of the backwater through his own observations that the battlefield must have been located at the very place where the Kocadere enters the plain near Dimoteka (Greek Didymotiche on Kiepert's map) from the eastern hill country rising 150 m/500 ft. It did not flow westerly into the Biga Çayı as it does today but to the formerly closer coast on the eastern side of the plain separated from the Biga.⁶⁴ It is thus logical when Hammond identifies the Kocadere as the ancient Granicus, which he calls the »river of Dimetoka« and to which he ascribes »a more violent nature in flood time« than to the Biga Çayı.⁶⁵ This identification, gained independently of Homer, fits splendidly with the river catalogue of the Iliad (M 21–22), which puts the Aesepus and Granicus in the east as a mirror image to the Scamander and Simois in the west.

The poet not only portrays in M 21 an association in the stylistic connection through the contact position in chiasmus, but both rivers, Scamander and Aesepus also have important geographical properties in common. They are the longest of all those named and flowed at that time into large bays with silted-up zones and rose only a few miles apart from each other on either side of a prominent mountain ridge, uniformly over 1,000 m/3,300 ft high, which extends straight from the high Mt. Ida range with the Kara Dağı (1,774 m/5,820 ft) and the other only marginally lower summits to the northeast into the heart of the Trojan peninsula (Biga peninsula). On its ridge today, amidst a still almost inaccessible high mountainous landscape, it bears an unpaved forestry path and borders the section of the Ida range to the southeast, called »Kotylos«⁶⁶

in Demetrius. The ridge forms the water divide between the two rivers, which flow from there in opposite directions to the west and east, then, however, bend to the north on to the sea and thus embrace the entire Troad, so to speak. Caused by the orographic relationships, the rivers sketch the analogous course of the smaller rivers flowing between the two; the smaller two can be arranged in concentric half circles. Taking into consideration such geometric spatial structures which the poet reflects in the chiasmus in M 21–22, let us see whether the rivers in M 20 can be determined. At any rate, it would not be surprising if, as early as Homer, who generally had a fondness for thinking in »circular images«,⁶⁷ the Ionic-archaic bent to symmetries could be found in his geography, as is sufficiently known later from Ionian cartography. The group of four rivers mentioned in M 21–22 is prefixed four times by an additional polysyndetically interlinked τε, comprising the river names which, like the Granicus in M 21, are not otherwise mentioned again in the Iliad. Even Demetrius of Skepsis had difficulty assigning them to the complicated network of the Troadic rivers,⁶⁸ and Pliny the Elder stated blandly: »Ceteri Homero celebrati, Rhesus, Heptaporus, Caresus, Rhodius, vestigia non habent.«⁶⁹ The modern Homer analysis has generally been very critical of the beginning of the teichomachy, and the criticism has not spared the river catalogue, either. Up to the present, a significant approach has been provided by the question of priority between the Homeric river list and the Oceanids in Hesiod's Theogony 337–345, in which seven of the eight rivers named in the Iliad turn up without any recognisable order:⁷⁰

*And Tethys bare to Ocean eddying rivers,
Nilus, and Alpheus, and deep-swirling Eridanus,
Strymon, and Meander, and the fair stream
of Ister,
340 and Phasis, and Rhesus, and the silver eddies
of Achelous,
Nessus, and Rhodius, Haliacmon, and
Heptaporus,
Granicus, and Aesepus, and holy Simois,
and Peneus, and Hermus, and Caicus fair stream,
and great Sangarius, Ladon, Parthenius,
345 Euenus, Ardescus, and divine Scamander.⁷¹*

Whereas von Wilamowitz-Moellendorff takes the Homeric river catalogue for his idea of the genuinely Homeric Iliad of the 8th century BC, all the while remarking expressly, however, that he does not wish to lose himself in rivers and brooks which the poet calls on to destroy the ship wall,⁷² Rudolf Hercher declared the verses M 3–35 to be a later, however pre-Hesiod interpolation in which the four rivers in M 20 were complete inventions by the interpolating poet. Hesiod had taken over, out of »love for Homer and on Homer's recommendation« seven rivers into his Oceanid catalogue, but omitting the Caresus because he did not need any more »unknown stop gaps«. ⁷³ Then Erich Bethe even claimed a dependency of the entire foreword of the teichomachy (verses M 3–33) on Hesiod and remarked especially about the rivers »that the poet of M 20 picked out for himself the non-localised river names Rhodius, Rhesus, Heptaporus from that Hesiod quotation because he needed as many rivers as possible«⁷⁴ [FK]. Based on the above quotation from Pliny, he had earlier pointed out numerous ambiguities and inconsistencies in the Homeric list of rivers. The answer to the following question is of great significance for every possible identification, a question Hercher had already asked:⁷⁵ Do the words referring to »streams«, »all the rivers that run to the sea from the mountains of Ida« (ὅσσοι ἀπ' Ἰδαίων ὀρέων ἄλαδε προρέουσιν, M 19) prove that the poet regarded these rivers as independent streams and not as tributaries? Hercher and Bethe answered this question affirmatively and accuse Demetrius of Skepsis of ignoring the wording of the text, when, in Strabo 13,1,44/C 602–603, he equated the Rhesus, Heptaporus and Rhodius with the tributaries of the Aesepus and the Granicus. The question thus arises whether this Greek quotation means »flow into the sea«, as Hercher and Bethe assume, or whether simply »flow toward the sea«. But the pre-verb προ- in Homer in connection with ῥέω, independent of a discharge into the sea, indicated simply the forward movement of water flow such as the flowing of a water-filled ditch for irrigation (Φ 260), the springing forth of the cold Scamander spring (X 151) or the flowing of the Scamander that in the river battle was hindered by the hot blast of Hephaestus (Φ 366).

In connection with ἄλαδε, προρέω occurs, besides in the Iliad in M 19, also in the simile in E 598

when Diomedes, flinching from Hector, is compared to (E 597–600):

ὥς δ' ὅτ' ἀνήρ ἀπάλαμνος ἰὼν πολέος πεδίοιο
στήη ἐπ' ὠκυρόω ποταμῷ ἄλαδε προρέοντι
ἀφρῶ μορμύροντα ἰδῶν, ἀνά τ' ἔδραμ' ὀπίσσω
600 ὥς τότε Τυδείδης ἀνεχάζετο ...

*a man who, crossing a great plain, stands at the
edge
of a fast-running river that dashes seaward,
and watches it thundering into white water, and
leaps a pace backward,
600 so now Tydeus' son gave back ...*

The wide plain and the foam on the water imply at least the direct vicinity of the sea.⁷⁶ What then does ἄλαδε mean exactly? According to Eduard Schwyzer,⁷⁷ it is a compound of the accusative of direction and an original directional post-position that has ultimately been reduced to an enclitic and then to a suffix. The word gives only the general direction »toward the sea« – as in Homer's frequent use of οἴκαδε, which expresses the target only broadly. The words ἄλαδε προρέοντι would thus indicate only generally a distant target, which, of course, all running water seeks and, in this respect, the combination ἄλαδε προρέοντι would seem to appear only formulaic here as well. But if we understand the words as a popular Homeric complementary supplement to the exact specification of origin, ἀπ' Ἰδαίων ὀρέων, ἄλαδε can only be taken concretely, so that Hercher and Bethe are correct in excluding tributaries.⁷⁸ We may certainly forgive Demetrius, for he was unfortunately moved by civic pride to the unholy endeavour of discovering as many Homeric toponyms as possible in the direct vicinity of his hometown Skepsis (Kurşunlu Tepe), a fault that brought him Strabo's censure⁷⁹ as well as Hercher's verdict that he had done wonders »in perpetrating scholarly lies«⁸⁰ [FK].

Hercher and Bethe are utterly incorrect, however, when they assume fantasy names for the river names in M 20. In contrast, Johann Tischler has shown in his »Kleinasiatische Hydronymie« that, above all, the Rhesus und Caresus are firmly anchored in Asia Minor onomastics, that Heptaporus and Rhodius are well explainable hydronomically and that all four names surely indicate real rivers.⁸¹

We thus are thoroughly justified in seeking them in the Homeric area of the Troad.

Now that we have discovered with Hammond the Granicus in the Kocadere, we must look for a new name in the Homeric river network for the Biga Çayı, traditionally identified with the Granicus. Strabo 13,1,44/C 602 describes the landscape very exactly which is named »Caresene« after the river Caresus:

Συμπίπτει δ' εἰς αὐτὸν (i. e., τὸν Σκάμανδρον) ὁ Ἄνδιρος ἀπὸ τῆς Καρησιῆς, ὀρεινῆς τινὸς πολλαῖς κάμαις συνοικουμένης καὶ γεωργουμένης καλῶς, παρακειμένης τῇ Δαρδανικῇ μέχρι τῶν περὶ Ζέλειαν καὶ Πιτύειαν τόπων. ὠνομάσθαι δὲ τὴν χώραν φασὶν ἀπὸ τοῦ Καρήσου ποταμοῦ ὃν ὠνόμακεν ὁ ποιητής
(the quotation from M 20 follows).

The Scamander is joined by the Andirus, which flows from Caresene, a mountainous country settled with many villages and beautifully cultivated; it extends alongside Dardania as far as the regions of Zeleia and Pityeia. It is said that the country was named after the Caresus River, which is named by the poet (the quotation from M 20 follows).⁸²

The plural φασίν in the last sentence points to a source other than Demetrius, to whom the report returns in the directly following passage with the words πάλιν δ' οὗτός φησιν.⁸³ If, as is customary,⁸⁴ the Andirus is equated with the Kursak Çayı, which discharges into the Scamander coming from the northeast near Bayramiç (Fig. 3), then the Caresene landscape must extend northeast of the source of this tributary, as Cook has plotted in his map sketches,⁸⁵ in the west parallel to the Dardanis, which stretches from the Hellespont via Gergis (Karıncalı) to Skepsis (Kurşunlu Tepe);⁸⁶ whereas, in the east, the region of Zeleia in the area of today's Kocadere, our Granicus, forms the border.⁸⁷ According to this concept, the river Caresus can be only the Biga Çayı (Çan Çayı in its headwaters), traditionally mistakenly taken for the Granicus.

If the Caresus is then associated with the Rhodius in Homer (and its identification with the Koca Çayı near Çanakkale is considered »well founded«⁸⁸), we would have, according to the above-conjectured geometrical arrangement, the Scamander and Aesepus



Fig. 3: The Bayramiç valley with the densely forested Kaz Dağı (Höhfeld 2009, 22).

on the outside and the Simois and Granicus on the inside as the subsequent inward half circle of rivers, both of which actually flowed directly into the sea at the time. The next half circle is formed by the Rhodius and the Caresus as Biga Çayı (Çan Çayı in its headwaters), still separated at the time from the Granicus, the Kocadere today, which nowadays unites with the Biga Çayı downriver from Biga after the river was regulated over 100 years ago.

If we now continue to think in terms of the geometric schema of concentric half-circles, the Rhesus and Heptaporus are to be sought further inside. It proves to be convenient that the Rhesus has always been identified with more or less certainty with the Karaatlı Çayı,⁸⁹ which today, downriver from Biga, flows into the river we equate with the Caresus but which probably did not do so in Homer's time. It is quite conceivable that the bay at that time extended into the country's interior nearly as far as Biga; but only archaeogeographical examinations, as in the

Scamander delta, will be able to prove this (Fig. 4).⁹⁰ Evidence for this assumption could perhaps be provided by the post-Homeric tradition of the bard whose recital Hesiod had heard in his Boeotian homeland. At that time, as a result of the increased felling of trees, to which the Iliad bears eloquent witness even if we consider only the many woodcutter similes,⁹¹ the silting up of the bay on its innermost southern edge must have already progressed so far that both rivers had already merged with each other and both appeared together in Hesiod's above cited Oceanid catalogue as a single river »Rhesos« – regardless of the earlier coastline in the Homeric age with two still separate mouths. The counterpart of the Rhesus in the west, the Heptaporus, should then be the river that flows into the Hellespont near ancient Percote (Bergas), traditionally given the ancient name Praktios and which today is called Bergas Çayı or Umurbey Çayı.⁹² Günter Neumann considers the hydronymic appellative »Heptaporos« for



Fig. 4: The Scamander plain and the delta (Höfeld 2009, 112).

»good Greek« and interprets it to be »the one with the seven paths/arms«⁹³ [FK]. Johannes Tischler renders the name more precisely as »river with seven fords«⁹⁴ [FK], which is also the interpretation in Demetrius of Skepsis in Strabo 13,1,10/C 587: »Now near Zeleia is the Tarsius River, which is crossed [διαβάσεις] twenty times by the same road, like the Heptaporus, which is mentioned by the poet, which is crossed seven times« [translated by Horace Leonard Jones]. Of course, according to ancient thought, the number »seven« is interpreted symbolically, just as the number 40 in modern names of two northern Greek rivers »Sarandaporos«, which means »river with forty« of simply »many crossings«.⁹⁵ Homer could have created the name of the river Heptaporus as a second name to facilitate the verse and transformed it from another name for this river. In any case, however, all four river names in M 20 contained the onomatopoeic »rho«, and, in the intervocalic position in »Heptaporus«, it stands out. Objectively, this name for the envisioned river near

the ancient Percote, named Bergas Çayı today, would fit well: Riding through its narrow valley on the headwaters, the Prussian Colonel A. Janke had to »cross the river repeatedly«⁹⁶ in 1902. In general, it is known that people in the Troad also »followed the foot paths along the river valleys« before the development of the highway network in the Roman era, paths »that were easily traversed with mules or horses«⁹⁷ [FK].

Homer even knew the Selleeis emptying between Heptaporus and Rhodius near Arisbe,⁹⁸ but this river was naturally not respectable enough for the gods' action. The result of the determination of the eight rivers is represented in Fig. 5.

It can clearly be seen in the result that the structuring of the complicated Troadic river system, ingeniously simplifying and thus well arranged, cannot have been obtained merely from a periplus perspective and thus does not accord with Martin West's opinion that the river list refers to Hesiod's seafaring father.⁹⁹ Just as the list cannot have come

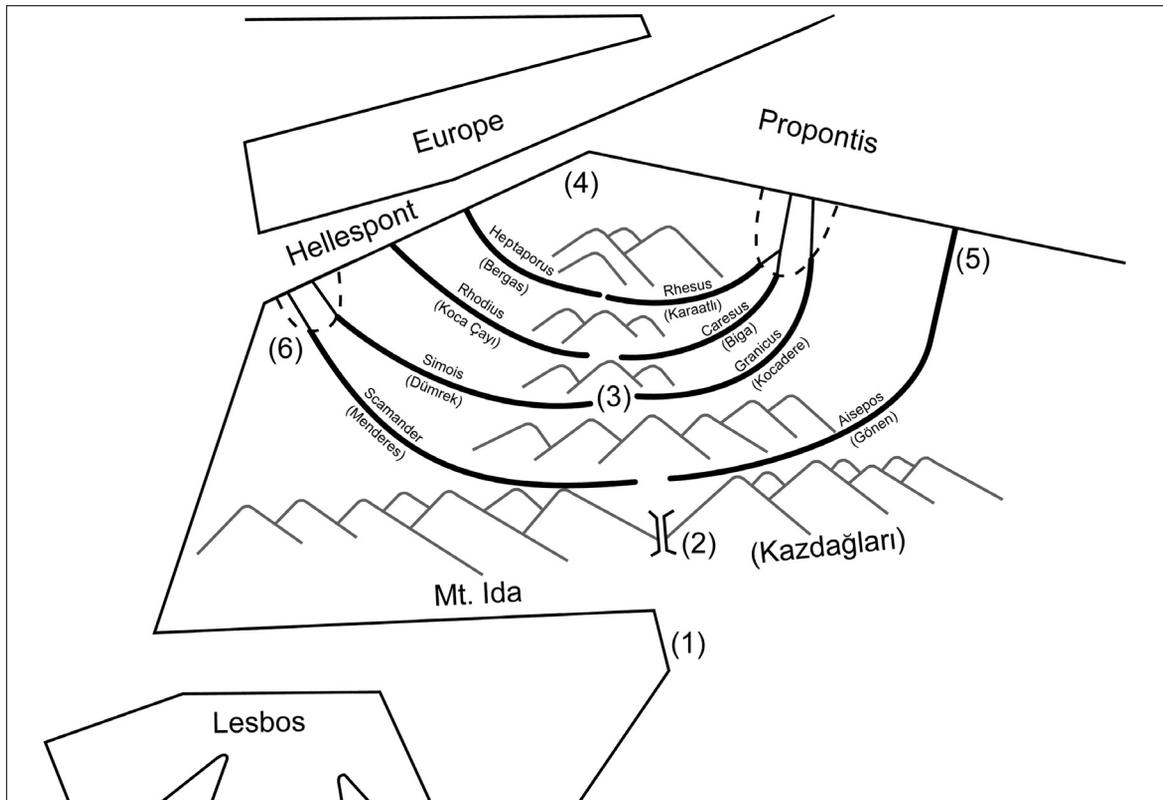


Fig. 5: Sketch of the eight rivers of the Troad as created by Homer in M 20–21: 1. Adramyttion (Ören) 2. Portai (Kapi, 1300 m/4265 ft) 3. Palaiscepsis (İkizce) 4. Lampsacus (Lapseki) 5. Zeleia (Sarıköy) 6. Troy/Ilios (Hisarlık).

from an allegedly elder Hesiod, neither can it have come from a common source, as Bryan Hainsworth assumes.¹⁰⁰ Indeed, it must be Homer's original creation, as it corresponds wholly to his knowledge of the Troad and, moreover, to his poetic aspirations.

Just as the Trojan rivers have their »place in the life« of Homeric people and cannot possibly have come from an external »source«, it is equally the case with the subsequent narrative of the great flood: In all his obsession with details and his pronounced striving for descriptiveness (ἐνάργεια), which Homer was famous for even in ancient literary criticism,¹⁰¹ it must be asked first of all what the poet captured in his narrative from the living world of his listeners, for example, in the similes or in the background descriptions, insofar as epic convention permitted. It can definitely be assumed that legends of a deluge were known from pre-Homeric, even indigenous tradition.¹⁰² Perhaps the poet even alludes here to the burlesque narrative about Augeas, whose cattle stable Heracles mucked out by diverting the two

rivers from Olympia, Cladeus and Alpheus, which washed out the dung.¹⁰³ Even if the poet has mirrored such myths at this point, they become exciting only when they can be connected to experiences in reality. For example, over a century ago, Frank Calvert, the person with the best knowledge of the Homeric Troad, impressively described from his own experience the frequent floods caused by heavy rains and overflowing rivers. Among these floods was the Hellespont's own natural spectacle of backed-up water occurring periodically from winds blowing inland, torrential rains or overflowing rivers, all of which he was able to observe at the Hellespont several times during his lifetime.¹⁰⁴

The interpretation presented here, concentrating on the environment of the poet and his listeners, can be supplemented by a detail pointed out by Barbara Patzek, namely, the exact information on the construction of the ship wall (M 4–6, 28–29); for, according to recent archaeological insights, it was customary in the 8th century BC to secure harbouring

ships in enemy territory with a wall and ditch.¹⁰⁵ Thus we now may consider even the ship wall as historical testimony in the poet's imagination which could certainly have been given a connecting function for older myth motifs.

In an era when people became increasingly curious about the remains of an earlier epoch and an historical consciousness was awakening,¹⁰⁶ it is understandable that the epic poet did not wish to disappoint listeners' expectations of what they themselves could examine topographically, and he thus carefully erased fabricated events. In fact, Homer's listeners demanded plausibility in the area of their own everyday reality, and great freedom for poetic fantasy lay solely in the realm of epic illusion, the heroic world.¹⁰⁷ This fantasy is demonstrated here in the unnatural and miraculous uniting of rivers by the gods to destroy the bulwark as Homer arbitrarily and boldly makes use of authentic elements to underline his poetic intent.

4 Recording Geographical Space in the Iliad

In the greatest possible concentration of language and mastery of verse,¹⁰⁸ Homer succeeds in arranging the rivers in four pairs in such a manner that, with the first two pairs in verse M 20, a western river corresponds to the respective first-named eastern river from inside to outside, two rising not far apart from each other on the same geographical latitude, but flowing in the opposite direction and, in a quarter circle, yet flowing into one and the same sea (Hellespont and Propontis). In contrast, the two latter pairs (M 21–22) are chiasmatically arranged in such a fashion that the two smaller ones, located chorographically to the inside, the Granicus and the Simois, stand in chiasmus on the outside, whereas the two larger ones located on the outside, the Aesepus and the Scamander, have been moved into the interior position. In this way, the poet succeeds in creating a stylistic interdependence among all eight rivers, one which paints their miraculous union by Apollo and Poseidon in a common bed and thus amplifies the impression of their destructive effect, in addition to the nine-day's rain sent by Zeus, on the Achaeans' ship wall. However, the Scamander

and the Simois, corresponding to their great significance in the whole of the epic events, are accorded considerable »Achtergewicht«: The Scamander receives the surely context-oriented epithet »divine« (δῖος),¹⁰⁹ as it rose directly beneath the highest summit of the Ida range (on today's Ayazma, upriver from Evciler), where according to Homer Zeus has his seat and was accustomed to observing the battles for Troy. The locative relative clause introduced by »where« (ὅθι) refers to both rivers, between whose lower reaches the poet imagined the battlefield,¹¹⁰ a clause which creates the link to the epic hostilities from the perspective of the post-heroic era: »where much ox-hide armour and helmets were tumbled in the river mud, and many of the race of the half-god mortals.«

The stylistic arrangement of the rivers in their normal course, to where they return after the divine act (M 32–33), implies the existence of Homer's mental map: The quarter circles complement one another concentrically to half circles, and a clear geometrical spatial pattern emerges such as the map sketch Fig. 5 illustrates. If the Iliad river catalogue is an original creation by Homer and if our identifications are correct, we would have, in fact, therein the oldest literary example of arrangement of geometrical structures. Hans-Joachim Gehrke has pointed out that hodological experience in description leads to the straightening of lines and to schematising topological information, as it is also familiar from modern Underground maps, for example.¹¹¹ Through mental networking of linear figure schemata, a certain complexity became possible, which then later actually led to the construction of maps.

All this presupposes that the poet of the Iliad already had the ability to see the landscape from a bird's eye view.¹¹² Even the ancient commentators felt the need to explain this ability, and so the legend arose that Homer had acquired the knowledge of the story of Troy in Kenchreai. Cook convincingly identified this place with the ruins on the summit of Kayalı Dağı (877 m/2877 ft) near the ancient Gergis (Karıncalı) in the heart of the Troadic mountainous area, from whose impressive, constantly wind-blown rock dome a splendid panoramic view can be enjoyed from a bird's-eye perspective onto the entire Troad, including all of the main ridge of Mt. Ida,

weather permitting.¹¹³ In reality, the poet naturally must have known the even more magnificent view onto the entire northern Troad from the Ida massif (Kazdağı today), rising to 1774 m/5,820 ft and visible from almost everywhere in the Troad, in whose steep valleys all the major rivers rise. Homer's extremely exact, inherently consistent floral, geographical and environmental information demonstrates this, none of which could have been obtained except through seeing it for himself.¹¹⁴

But the river catalogue may also reveal text-based traces of a biography of the poet and his listeners. It is noticeable that, on the one hand, the four rivers in the east – Aesepus, Granicus, Caresus and Rhesus – and, on the other hand, the four in the west – Scamander, Simois, Rhodius and Heptaporus – are located in concentric half circles around what later became the settlement of the Ionian Greeks from Phocaea around the town of Lampsacus (Lapseki today),¹¹⁵ which is assumed to lie in the region of the town of ancient Pityeia listed in the Trojan catalogue B 829.¹¹⁶ It is exactly in the landscape surrounded by the eight rivers that he has the Dardanians, the brother people in Ilios, live at the time of the epic events. Starting from their settlement Dardania, founded in the »foothills of Ida«¹¹⁷ by Dardanus, the ancestor of all Trojans, Troy was reputedly founded by his great-grandson Ilus in the Scamander plain only three generations later. Thus it was called Ilios afterwards¹¹⁸ (see Y 215–232). It has hitherto remained unnoticed that, already known in the ancient Alexandrian Homer philology debates of the 3rd and 2nd centuries BC, there was an interpretation of the river catalogue with reference to Dardanus, the forefather of both, the Dardanians and the Trojans. In the third book of his *Dionysiaca*, probably following scholarly information from a Hellenistic source,¹¹⁹ Nonnus of Panopolis reports that Dardanus left his home island Samothrace during a deluge and created a new residence named after him in the foothills of Ida, as had already been narrated in the *Iliad* (Y 216–218): »So he drank the water of Heptaporus and the flood of Rhesus« (καὶ ῥόον Ἑπταπόρου πῶν καὶ χεύματα Ῥήσου).¹²⁰ Rhesus and Heptaporus, however, are the rivers forming the innermost half circle of the Homeric river catalogue and surround the mountains of the region of gold-rich Lampsacus, settled later by the Phocaeans.

We can formulate the following conclusion: The river catalogue now falls splendidly into place with the individual conditions of the text generation and the quite selectively subjective chorographical total perspective of the Troad, recognisable everywhere in the topographical information and nature details of the *Iliad*. It reflects the specifically Ionic hodological view which excludes the Mediterranean coastal regions of the peninsula settled by the Aeolians, geographically and climatically sealed off from the comparatively Pontic-tinged northern Troad by the still virtually impassable, almost Alpine main ridge of Mt. Ida.¹²¹ The northern Ionians, and with them Homer, obviously passed by on the innermost coast of the Bay of Adramyttium, whose exact topographical record by Homer J. Stauber has made clearly visible in his research results.¹²² The Ionians then continued straight east of the highest summit of the Ida range, across the pass (about 1,300 m/4,265 ft) near Portai (Kapı, today),¹²³ across Gürgen Dağı, named Cotylus in Strabo 13,1,43/C 602, from where forestry roads fork to the north and east into the river valleys of the Scamander, Aesepus, Granicus and Caresus.¹²⁴ The mountain ridge stretching from Gürgen Dağı, with a more or less uniform height of over 1,000 m/3,300 ft to the northeast with only a forestry road today, marks approximately the middle line between the concentric half-circles of Homer's imagined river courses, which lead straight to the coast from Hellespont and Propontis between Abydos and Parium, first settled by the northern Ionians. The poet speaks of it in the Trojan catalogue (B 828–839) and reveals otherwise detailed knowledge as well.¹²⁵ Lampsacus was located in the centre, founded by the Phocaeans, favourably located as a traffic hub in the classical era and, because of its gold mines, one of the richest cities in Asia Minor.¹²⁶ It was surely not only the shortest land route from northern Ionia to Europe, which led via Lampsacus, or whose good natural harbour that lured in the Phocaeans but doubtless the coveted metal trade that drove them as the first among the Ionians to the south coast of the Black Sea and in the west to as far as the Atlantic, to Tartessos. Recently Stauber linked the numerous locations of metal finds from the eastern Ida range, especially in the upper Aesepus Valley, to Homeric geography.¹²⁷ Luring in settlers was naturally also the hardwood for ship building grow-

ing in the high elevations of the Ida range, wood such as the black pine and especially fir, which otherwise does not occur in Ionia and not at all in western Anatolia.¹²⁸ Here we can comprehend the topographical, social and chronological background against which the Iliad was created, a background which makes taking the river catalogue so far to the east comprehensible in the first place.¹²⁹ Unfortunately, this section of the Troad is archaeologically

and palaeogeographically largely unexamined and is still awaiting interdisciplinary investigation, an investigation Rüstem Aslan and his colleagues have finally now begun as the Korfmann team has done for the small section of the Ancient Troya National Park and the Granicus Survey has now achieved for a small section in the east – for a landscape whose historical wealth was already legendary in Antiquity: »Nullum est sine nomine saxum.«¹³⁰

Notes

- * Translated from the German by Frankie Kann. Revised version of the chapter of a planned work on local colour in the descriptions of nature in the Iliad, a chapter submitted for discussion in the seminar given by Georg Wöhrle at the University of Trier during the winter semester 1996/97. The more expansive objective of this article will probably be recognisable in this paper, hopefully not to its disadvantage. I wish to thank Klaus Geus (Berlin), Oliver Hellmann and Paul Dräger (both Trier) for important information and corrections. Paul Dräger has just competently summarised the above-mentioned Trier research on local colour in the Iliad, refuting the absurd thesis that Cilicia was the homeland of Homer (Dräger 2009). I thank Frankie Kann (Trier) for the excellent English translation; she also translated into English all quotations from German literature (each time noted by »FK«). The English version differs from the German publication (Herzhoff 2008) in that some new literature has been integrated. Without suggestions and assistance by Joachim Latacz (Basel), this English version could not have been achieved and published. I owe him special thanks. To simplify matters, I have quoted the Books of the Iliad in Greek majuscules and the Odyssey in minuscules. The Greek text of the Iliad will be quoted according to the Teubner Edition by West 1998 and West 2000 and the English translation according to Lattimore 1951.
- 1 See Dilke 1985, 20; Luce 1998, 30–31; Hübner 2000, 22.

- 2 Strabo 1,1,2/C 2; in the first chapter, Strabo begins the series of the earliest geographers with Homer, directly followed by Anaximander and Hecataeus, both from Miletus.
- 3 Erathosthenes supported this opinion in his *Geographika*; he harshly rejected Homer's merits as a geographer; see Geus 2002, 264–266. See Agathemerios, *Geographiae informatio* 1,1 (Fragments of the Greek Historians I 1, Hecataeus of Miletus T 12a). Gisinger 1924, 532 lines 42–50. Heilen 2000, 34–38.
- 4 Gisinger 1924, 525 lines 21–26; 532 lines 30–53. Hübner 2000 took up Gisinger's proposal, on Homer especially pp. 22–29; also Gisinger 1924, 532–536.
- 5 Meyer 1998, 198.
- 6 See Lesky 1948; Fränkel 1968 reasons as does Lesky 1948, 593; Hölscher 1989, 135–158, however, criticises correctly. He states that the interweaving of the myth and reality is conducted throughout, confirmed by Erbse 1989 in his review, especially p. 486: »In some places, genuine geography is superimposed on fantasy-laden mythology« [FK]. See now Gehrke 2007, 19–21.
- 7 See Wolf 1992, 35. On »shield« as a geographic term E 281, see Langholf 2010, 39 lines 22–33; on »trident«, see Mader 1991b, 1062. Gehrke 2007, 27 shows how such images evolve into maps.
- 8 See Isaac 1986, 241–247; Roebuck 1984, 120–121.
- 9 Cook 1973, 21 (»arm-chair cartography« for modern topographical research in the Troad without having been there). Hypothetical reconstruction sketches are not possible before Hecataeus, see Heilen 2000, 50 fig. 1; Stückelberger 1994, 48 fig. 22, who gives an overview of the entire ancient geo-

- graphical visual material (pp. 47–73). Anaximander most certainly knew the fixed schematic principle of Babylonian pictures of the Earth. See the late Babylonian *mappa mundi*, perhaps from Borsippa, in Haas 1994, 139–140 fig. 41 with the interpretation. Meissner 1925 established the relationship to Anaximander, Babylonian and Greek maps. In general on the oriental predecessors, see Dilke 1985, 11–17, on Anaximander, also pp. 22–24. An excellent discussion on the character and roots of the pioneering spirit of the colonisation policies of the Milesians and especially on the geography of the Milesians is presented by Latacz 1998, 512–523.
- 10 Herodotus 2, 33–34 proceeds in this manner despite all the criticism of the world maps he aims at his predecessors (4, 36). Sallmann 1971, 221–224 has shown the great significance of rivers for structuring geographical spatial visualisation.
- 11 See especially Gehrke 1998, 188 und Gehrke 2007, 29. Herodotus 4, 101,1 noted that Scythia was a »rectangle« (τετράγωνον); on his use of rivers to describe the land of the Scythians (4, 46–58), see Gehrke 1998, 181. Jacoby 1913, 432 lines 42–46 rightly assumes Hecataeus as the source: »Without a map, the section on the nature of the [Scythian] land (lines 46–58) is unthinkable, a section based essentially on a representation of the river system. Hecataeus is probably the source« [FK]. On the symmetrical design of pinakes in the ancient Orient and in Ionia, see Olshausen 1991, 91–94.
- 12 Fränkel 1968, 257 note 287; see pp. 258–259 for his geometrical-symmetrical reconstruction of the mouths of 96 arms and channels of the Terme River (Thermodon, Turkish: Terme Çayı) in Apollonios; see p. 582 for his remarks on the seven arms and channels of the Rhône (»the overall image is understandable in the symmetrical schema« [FK]).
- 13 See Janko 1992, 186–187 on N 225–230. On the itineraries of the ambassador groups, assumed to be the basis of the formation of the Achaeans in the ship catalogue (Iliad B 484–760), see Visser 2003a, 153–154; Latacz 2010, 289–297; Kullmann 2002, 18–19; Gehrke 1998, 165–166. In general, see Hübner 2000, 28. Gisinger as early as 1924, 536 lines 23–29 remarked: »The ship catalogue appears to be a periegesis of Greece« [FK]. On the critical assessment of the geographical knowledge, see Visser 1997, 746–750; Danek 2004, 68–69 (p. 69: Homer had already »extensively recorded the geographical area in his visualisation as a two-dimensional surface. With that, he anticipated the idea of a map for several generations« [FK]). Examples of landscape images from a bird's eye view in the Iliad are offered by Luce 1998, 45–48. On Hera's way from Olympus to Mt. Ida in the 14th Book of the Iliad, see Gehrke 1998, 165–166; Gehrke 2007, 21–22.
- 14 I will adhere to the term »river catalogue«, as it has become established. Kühlmann 1973, 61.
- 15 Leaf 1912, 8, 12, 49 already speaks of »local colour«; he visited the Troad three times between 1903 and 1911. See *ibid.* 3, 5 as well as Cook 1973, 42. Wood 1775, 29, 330 (and elsewhere) misses with good reason local colour (»the circumstance, which I call local«) in Vergil, who never visited the Troad (Wood 1769, p. xii; Wood 1775, 29).
- 16 See Cook 1973, 34.
- 17 Welcker 1845, p. lxxxiii.
- 18 Welcker 1861, 21
- 19 Welcker 1845, pp. lxxxv–lxxxvi note 78. In the same vein, Kullmann 2002, 42 has recently commented: »The great art of the poet makes [the reader] forget the difference between reality and fiction« [FK]; and Richardson 1993, 34: »Homer's exceptional skill in creating plausible fictions, which is based on the building-up of enough realistic circumstantial detail to make his fantasies credible.« He does not fail to allude to Aristotle's *Poetics* 24, 1460a 18–19. Especially on the Homeric realism of topographical information in catalogue form, see Gaertner 2001, 302: »The reference to towns und regions familiar to or inhabited by the audience establishes a closer relation between the events of the epic fiction and the audience.« Brigitte Mannsperger 1992b, 261 aptly notes: »The fascination of Homer's epic is based, however, not only on the poetic ›invented‹ reality but also on the poetic ›inserted‹ reality. It must be verifiable at the time and thus credible« [FK]. Even ancient literature criticism admired the Iliad poet's use of autopsy and eyewitness as an important instrument to enthrall his audience. See now Nünlist 2009, 185–193.
- 20 See Herzhoff 1994, 398–403.
- 21 See as early as von Wilamowitz-Moellendorff 1916, 516 the places listed in the index under »Stoffliches: Ortskenntnis in der Troas« and most recently the summarising report by Luce 2003. Unfortunately, he

- positions his observations in the time of an assumed Trojan War around 1250–1200 BC (p. 22) instead of in the time of the poet, around 700 BC, but for the reader familiar with the area that means only a small reduction in the value of his topographical observations. For thorough readers of the epic, however, it was always clear that Homer did not imagine the ship enclosure in the Beşik Bay but in the former large bay of the Scamander estuary on the Hellespont and that the term Hellespont for Homer was limited to the Dardanelles and not encompassing the Aegean. (Of a different opinion is Brügger 2009, 194–195 on Ω 544–545). A geological map showing the reconstructed coastline with the deep Scamander Bay at the poet's time is offered by Kayan 1995, fig. 8: »Paleogeographical Reconstructions of the Karamenderes Plain.« See the line »3000–2500 B[efore] P[resent]«; (see also fig. 1); Kayan 2009.
- 22 See, for example, Mannsperger 2001b. West 2001, 7 remarks about the poet: »It is clear from his detailed knowledge of the landscape around Troy that the poet of the Iliad was well acquainted with the area and probably composed at least part of the poem there.« Kirk 1990, 39 remarked soberly: »The Troad and the south coast of the Hellespont toward the Propontis are evidently known in some detail.« With numerous examples of natural history and topographical documentation, Dräger 2009 argues for exact local knowledge as opposed to the theses by Raoul Schrott on Homer's alleged Cilician homeland (especially pp. 19–27; see also now Latacz 2010, 156–159). Luce 1998 presents countless examples of exact local knowledge by the poet in the Troad and disputes the fictionalists (see, for instance, pp. 9–10, 32–34). Without his own knowledge of the Troad and only with the aid of text-based interpretation, Elliger as well assumes the poet's autopsy of the Troad. Elliger 1975, 43–62 succeeds in devising a coherent image of the Troad topography from the poet's perspective.
- 23 See Latacz 2010, 230–231, 242, 353; Latacz 2011, 21
- 24 This is inferred from the saga of the founding of Lampsakos by the Phocaeans, handed down by Charon of Lampsakos (FGrHist III Nr. 262 F7 [Jacoby 1940, 45]): According to the story, the King of Phocaea was asked by the local king to give military support; as thanks, he received a part of the country for settlement. See the meticulous historical interpretation in the commentary by Jacoby 1943, 11–17.
- 25 On economic considerations, see Herzhoff 1994, 398–403 and the end of this article below; see also Dräger 2009, 24–25.
- 26 Parium is considered to be the oldest settlement by the Ionians on the Hellespont, and namely by the Phocaeans with the cooperation of the residents of Erythrai. (On the close alliance between both northern Ionian towns, see Pausanias VII 3,10); then Lampsakos was said to have been founded from Parium (see Jacoby 1943, 13–14 on Charon von Lampsakos; Olshausen 1970, especially col. 983). Even Roebuck 1984, 113 assumes the founding date of 708/707 BC for Parium to be probable from the evidence in the Chronicle of Eusebius 91b. In general, it is recognized that the colonization of the southern coast of the Hellespont and Propontis occurred earlier than that of the northern coast and that the colonization must have been preceded by a phase of contacts between the local inhabitants and the Ionian Greeks of Asia Minor, especially since their colonies were established in older Thracian settlements (see, for example, Roebuck 1984, 118–19; Isaac 1986, 201). There are convincing reasons for assuming the early dating of a first phase of Ionian colonization on the northern coast of Asia Minor as early as the 8th century BC, although further archaeological research is necessary. See Graham 1958; Olshausen 1991, 212 note 311, 317. Luce 1998, 35–36 justifies his early dating of the Iliad (»around 735 BC«) by pointing out, among other reasons, that the poet seems »to have been inspired by the spirit of Greek colonial expansion« [FK]. On the dating of the Iliad in the late 8th century BC, which is also shared by me, see the brief overview of the research in Visser 1997, 12 note 29.
- 27 See Kannenberg 1897, 219–220; Leaf 1923, 208.
- 28 Tischler 1977, 15 speaks of »multiple official alterations« of the Turkish river names, »primarily after 1928« [FK].
- 29 He included only the western Troad, however.
- 30 Lattimore 1951.
- 31 Lenfant 2004, 297 note 795: »C'est quand il [Ctesias] dit les choses les plus énormes que l'historien invoque le témoignage de ses yeux.«
- 32 Just recently, Luce 1998, 23–24 has again shown that the inclination of the Iliad poet to realistic natural descriptions was not an end in itself but the expression of the close relationship between himself and

- his audience in the oral recital (see the early example of Patzer 1971–72, 45–48; Herzhoff 1994, 402–403). Precisely the repeatedly inserted vegetation images are telling: Their extraordinary accuracy confirmed by botanists familiar with the locality and mainly their finely networked coherence demonstrates that Homer and his listeners knew the Troad from their own observations, see Herzhoff 1984; Herzhoff 1990; Herzhoff 1994; Luce 1998, 183–185. The mere mention of the fir (ἐλάτη) in this context and the exact botanical, geographical and ecological information in Ξ 287–289 – the tree is *Abies equitrojani* Aschers. et Sint., a species endemic to the Troad (see Herzhoff 2002; Höhfeld 2009, 85–86) – is a botanical-geographical sensation not hitherto appreciated. Then, as now, fir trees occur exclusively in western Anatolia where Homer mentions them. See the area map in Davies 1965, 69 map 5. Homer’s world of fauna is also locally determined, see Herzhoff 2000, especially p. 279. Until recently, leopards (*Panthera pardus* subspecies *tulliana*, see Borner 1977) still existed in the Ida range (Cook 1973, 306; on April 11, 1981, hunters in the village of Avçilar confirmed this to me). On the jackal in the simile in Λ 474–481, von Wilamowitz-Moellendorf 2008, 261 made the appropriate statement. As late as the most recent literature, Homer’s flora and fauna names have been translated notoriously incorrectly, so that understanding of the local colour details is destroyed and the view toward the poetic mastery of guiding his listeners is clouded, see the examples in Herzhoff 2008, 108 note 26; Dräger 2009, 25 note 22.
- 33 See Visser 2003b, 268–269: The Ida mentioned in B 821 (Kazdağı today) is rightly called »the mountain source of all the rivers that run through the Troad.« Then he adds in parentheses: »the listing is in 12,19–22; of them identifiable: Aesepus, Granicus, Scamander and Simois« [FK]. As early as 1923, Leaf 1923, 208 gave up and stated about verse M 20: »I know of no other literature on the subject.«
- 34 Finally Hammond 1980 was correct; but as early as von Richter 1822, 424–425 (the native coastal dwellers called »the river of Demotika« the Granicus); afterwards Forbiger 1843, 117 note 71; further details below.
- 35 See Kühlmann 1973, 61 on this passage. He correctly speaks of the »river catalogue« and convincingly establishes Homer as the model for Hesiod’s Theogony 337–345, an idea that will be supported with further arguments in this article. Homer is thus at the beginning of a great poetic chain of tradition: see Dräger 1997a, especially pp. 435–437.
- 36 See Blümer 2001, 117–119, especially 117 note 37. See below for the old debate on the priority or common source of Homer’s and Hesiod’s river catalogues.
- 37 The poet expressly establishes the frequently ignored connection between Achilles’ anger and the fortification of the ship enclosure in M 10–12 – as already seen in I 349–355 with Achilles’ own words. Latacz 1997, 54 formulates admirably: »Thus the poet makes Achilles’ absence the basso ostinato of everything that has happened. So the listener always understands: ›What happens happens only because Achilles is not there.‹ [...] Achilles’ non-action becomes the strongest action of the epic. [...] For the first time during the nine years of the siege, the Greeks have a grave military emergency. The Trojans had already become stronger; they knew now that the strongest ally had turned his back on the action. For the first time, the Achaeans had to protect their ships, with a ditch and with a wall« [FK]. In the same vein, Welcker 1845, p. xxiv.
- 38 On localising the ship enclosure on the Hellespont (and not in the Beşik Bay), see Kirk 1990, 49–50 (with a review of the archaeological research concerning the Iliad by M. O. Korfmann); Janko 1992, 130–131 (on N 675); p. 154 (on Ξ 33–36). Luce 1998, 165–169 holds the view that Homer imagined the ship enclosure at the southwest bank inside the then Scamander bay, which is silted up today (see the map p. 152; on the not yet concluded discussion about the exact course of the silting up process, see 275 note 17). Korfmann 2004, 21–22 has subscribed to Luce’s solution for the Homeric perspective (in his assessment of Luce’s work on the topography of the Iliad, pp. 19–23).
- 39 On the joint action of the three gods and the background for this action, see Erbse 1986. 104–105.
- 40 This is an example of an »external prolepsis«, that is, a reference to events after the end of the narrative (according to Nünlist – de Jong 2000, see p. 168 on this passage). The altered time perspective in the narrative also explains the choice of the (in Homer) singular term »the race of the half-god mortals, ἡμιθέων« (M 23): see Schadewaldt 1966, 118 note 1; Kullmann 2002, 30–31.

- 41 From this new attitude toward life arose the extensive insertions from all the events surrounding Troy, long familiar to the public, events both before and after the brief episode on the anger of Achilles, which in the tenth year of the war lasted only 51 days; thus the epic could be called »Iliad« and not only »Achilleis«. In contrast, the epigone Quintus Smyrnaeus describes the destruction of the ship wall at the chronologically »correct« place, namely, the conclusion of his *Posthomerica* 14, 632–655.
- 42 See Strabo 13,1,36, C 598 (in the discussion on the location of Homeric Troy in Demetrius of Skepsis in the 2nd century BC): According to Homer in H 436–441, the ship wall had been built only shortly before »or it had not existed before, and the poet who invented it erased it again, as Aristotle says« [FK] (Aristoteles, *Fragmenta* no. 162); in the same vein, the bT-Scholia on H 445 (Erbse 1971, 291 lines 81–83) and to M 3–35 (Erbse 1974, 294 lines 30–32), and Eustathios on M 3–5 (van der Valk 1979, 341 lines 8–9) – the purpose is always added: »so that no one will look for the wall later« [FK].
- 43 von Wilamowitz-Moellendorff 1916, 210; see Kullmann 1960, 345 (»Autoschediasma«); West 1995, 212 (»an invention of the Iliad poet himself«); Luce 1998, 174–178.
- 44 Schadewaldt 1966 note 125; in the same vein as Erbse 1986, 112; Patzek 1992, 183–185.
- 45 Mader 1991a, 557; see also Olshausen 1998, 325–326.
- 46 Hainsworth 1993, 321 even gives on the passage the measurement of the Hellespont flow at 5.5 km/3.3 mi per hour toward the Aegean (Wood, as early as 1775, 320: »about three knots in an hour«). Through the epithet ἀγάρροος (M 30, Catullus translates 64,358 with »rapidus«), the reference to the Dardanelles is clearly expressed, see Mader 1991a, 557. The problem of the irritating difficulties associated with the long waiting time caused by the Dardanelles current linked with the almost constant northeast winds at the time of sailing ship traffic and how they were to be mastered are beautifully illustrated in the travel descriptions of the 18th and 19th centuries in Delage 1930, 87–88. Statistics are offered by Neumann 1991.
- 47 Tischler 1977, 137. Rosenkranz's 1966 observations on almost 4000 years of Asia Minor hydronymy (for example, p. 140) establishes the rule: The names of the larger rivers undergo fewer fluctuations with changes in peoples and languages than do those of smaller rivers.
- 48 This is true at least for the lower reaches from Ezine downriver; see Wood 1775, 324–332, here 327–328 for the report of the natives on the heavy floods in the winter which Wood associates appropriately with M 3–33. Schliemann 1881, 116 also speaks of these floods; see pp. 93–94. On the Scamander and Simois floods over the course of the centuries until today, see Aslan 2002, 923–924; as well as Kayan 2002.
- 49 Research into river names in central Europe has established and verified the staying power of Central European river names; see Tischler 1977, 14–15. This is typically different for all of Asia Minor. However, the continuity of Homeric rivers in Anatolia applies at least to the Parthenius (B 854, Bartın Çayı today) and the Sangarius (Γ 187; Π 719, Sakarya today).
- 50 On the use of dionymia, see Heubeck 1984, 95–99; see Schliemann 1881, 104, 109, who collated the Homeric epithets of the Scamander and the ancient texts about the river (pp. 109–111).
- 51 See Webb 1844, 45; Kannenberg 1897, 218; Leaf 1912, 51–52.
- 52 The place is enthusiastically described by Webb 1844, 44–47 in the report on his Troy journey in the autumn of 1819; see also Clarke 1812, 143–146; Schliemann 1881, 69–70; Virchow 1892, 972–973; Leaf 1923, 200; Cook 1973, 291–293 with pl. 52a–b; Luce 1998, 53, 55, 96; Höhfeld 2009, 131. Regrettably, the pair of springs was diverted into pipes during road building and no longer appears at the original site. Space does not permit discussing the complex problem of the cold and warm springs of the Scamander on the Troy town wall: Webb 1844, 46, whom we must thank for so many fine first-hand nature observations on the Troad, was in any case the first to have interpreted appearances correctly: »On serait tenté de croire qu'en chantant ses rhapsodies, le barde a pu confondre ces eaux avec les fontaines de la plaine, parce qu'elles répondent parfaitement à sa description, qui peint l'une froide comme la neige, l'autre brûlant comme le feu« – but it was not a mistake, only a conscious poetic projection to captivate the listeners! Leaf 1912, 50–51 judges reservedly. The thorough investigations by Christian Wolkersdorfer and Jana Göbel on hydrogeology demonstrated that, contrary to the evidence in the *Iliad* X 147–156, a

- warm spring can never have existed in Troy or its immediate vicinity since the Homeric period; Wolkersdorfer – Göbel 2004 (I wish to thank Joachim Latacz for pointing out this article to me).
- 53 The identity was determined by Webb 1844, 47–49 and is considered assured today. Neumann 1999, 273–274 succeeded in convincingly interpreting the etymology of the river name Simois from the Greek. Unfortunately, no one has succeeded in identifying the »flat-nosed fish« (Greek σιμός, expanded in the river name with Indo-European went-suffix, meaning »rich in something«). See Fajen 1999, 366 (on verse 1,170). However, in the context of the river names of the Troad, it can only be the wels catfish, genus *Silurus*, which had ideal living conditions in the lower reaches of the then Simois with its »very fine-grained muddy sediments« (according to Kayan 2002, 994) and has actually been archaeologically documented for Troy VIII. See Uerpmann – van Neer 2000, 162–163.
- 54 It is visible here to what extent the poet conceived the term *Ida*: He uses this name for the entirety of the wooded mountain range of the Troad peninsula – as appellative it means »wood«, »woodland«. (Frisk 1960, 709 with the remark: »vorgriechisches Wort ohne Etymologie«; rather than attributing it to the Semitic (according to Herzhoff 2008, 115 note 49), it should be associated with the Indo-European *uidhu-* »tree« (Pokorny 1989).
- 55 The same verb form in the same verse position also appears in the river simile in Δ 453 – Homer loved the wildness of the mountain rivers. The *Iliad* lines are beautifully presented by Tozer 1882, 84–86.
- 56 See Elliger 1975, 43–62 and, about him, Herzhoff 1990, 262 note 22; Cook 1973, 89–90 with note 6), with a brief insight into the state of research. Elliger 1975, 49 (see p. 51) refers to the old *aporia* of the analysis.
- 57 See Leaf 1912, 41. On this subject, Joachim Latacz remarks in his private correction notes on Herzhoff 2008, 115: »I don't know whether the discrepancy between E and M is of such great significance: both rivers flow relatively close to each other in the southern part of the northern Troad; that's without question. The question whether a poet sees them flowing together just shortly before or not until in the bay (then just indirectly) seems too fussy. If we take the two descriptions literally (and assume that both descriptions are based on autopsy), then the poet of M would have seen the situation long before the poet of E (silted up!).« On the difficulty with »realism through autopsy« concerning the course of both rivers, see now Stoevesandt 2008, 14 on Z 4. Markwald 2010, 136 lines 26–27: »Flows with the waters of the Simoeis together (in the area of the mouth?)« [FK].
- 58 Grasberger 1888, 219, who took it for one of the poet's many etymologising plays on words and interpreted the doubtless non-Greek river name *Aesepus* as »black water« (on other etymologies, see Tischler 1977, 22; Gindin 1999, 72–73). In fact, upriver from Gönen there is a place named »Karasu«, i. e. »black water«. Hütteroth 1982, 130 points out the frequency of »black water rivers« with the name »Karadere« (»black brook«) in the northern forested mountains of Turkey, whose dark colour arises from humus particles, in contrast to the »white water« rivers of the »Kızılırmak« (»reddish river«) type, whose name derives from the light-coloured particles from the riverbed. This applies as well to the *Scamander*, which the poet also calls »*Xanthus*«, (»the clay-yellow«).
- 59 See Rose et al. 2007, 99–100 with fig. 21; Leaf 1912, 180–183; Leaf 1923, 64–67.
- 60 See the map with the ancient road network by Wiegand 1904, 279 fig. 14. The complicated orography is most clearly visible on the satellite map in Bieg et al. 2006, 148 fig. 1 with the large plain for the Persian troop deployment near *Zelesia/Sariköy*.
- 61 See above, note 34. Hammond has not yet been able to incorporate his new identification of the *Granicus* with the *Kocadere* in his atlas: Hammond 1981, Map 13 (still with the traditional name *Granicus*, i. e., *Biga Çayı* and *Caresus*, i. e., *Kocadere*; also in Talbert 2000, Map 52, however, with the *Caresus* as the only one of the eight catalogue rivers with a question mark).
- 62 See Kiepert 1877, 263–264: »Such shifts in the stream's course in the alluvial coastal plain are so well known as common occurrences that there cannot be the least doubt about such a process« [FK]. His opinion of the battlefield location was gained, however, under unfavourable weather conditions during a visit in February 1842: »The river flooded by the sudden snow melt from Mt. *Ida* covered the lower sections of the plain and prevented directly

- following its banks« (p. 263) [FK]. See the clarification by Janke 1904a, 132–133.
- 63 Janke 1904b, 520–521. The quotation comes from Pliny's *Naturalis Historia* 5, 124: Janke obviously interpreted »diverso tractu« as »with different courses« [FK]. That can be well substantiated and makes sense, whereas the translation by G. Winkler and R. König does not: »The Granicus flows from another region into the Propontis« [FK] (Pliny *ibid.*).
- 64 The separate courses of the Kocadere and the Biga Çayı are clearly visible on Kiepert's map. In the 1890s, the courses of the rivers in the western part of the plain, ones meandering to the Sea of Marmara, were united to form a straight canal. Rose et al. 2007, 116–117 note in the chapter »The Granicus Battlefield and Geophysical Investigation« that »The river [Biga Çayı] had previously approached the sea in a meandering line, but floods began to occur in the late nineteenth century due to the circuitous path. Because of this, the stream bed was redirected towards the west and a straighter line to the sea was created. None of this appears to have been incorporated into recent scholarship on the topography of the battle.« The authors regrettably do not mention Hammond's opinion that the Kocadere is the Granicus.
- 65 See Hammond 1980, 76–80 with map 76, fig. 1 and topographical sketch of the battlefield (fig. 2).
- 66 See the map supplement I in Stauber 1996; Strabo 13,1,43/C 602 treats the Cotylus. The river network map in Leaf 1923, 213 (»The River Systems round Kotylos«) does not correspond to reality. It is correct, however, in Asan 1984, 61 (map showing the range of the endemic Trojan fir in the Cotylus region). On the meaning of the word, see Markwald 1991. On the exact elevations, see Müller 1997, 845 with photos.
- 67 The term comes from the excellent interpretation of the lion simile in Γ 23–29 by Herder 1903, 253. On concentric structures in the *Iliad*, see, for example, the schema in Friedrich 1975, 125. On the circular composition in the speeches in the *Iliad*, see Lohmann 1970, 12–30. Dräger 1997a has shown how important structural analysis for geographic name determination can be with the tributary catalogue in the Mosella of Ausonius (V. 349–380).
- 68 Strabo 13,1,44–45/C 602–603.
- 69 Pliny, *Naturalis Historia* 5, 124.
- 70 See West 1966, 259 in his commentary on these lines: »The catalogue of rivers shows a lack of order and proportion which suggests that its author had only the vaguest sense of geography.«
- 71 Evelyn-White 1964, 103–105.
- 72 von Wilamowitz-Moellendorff 1916, 209–210.
- 73 See Hercher 1881, 72 (both citations).
- 74 Bethe 1922, 304 note 2. Blümer 2001 is again today of similar opinion (as above, note 36). A brief overview on the state of research is offered by Dräger 1997b, 20 note 93 (Homer's priority). In general, contrary to »the fashion for dating Homer after Hesiod«, see Janko 1992, 14 note 20. I hope to prove here that the river catalogue of the *Iliad* must be an original achievement by Homer, see now Latacz 2011, 11.
- 75 See Hercher 1881, 72.
- 76 The wording appears as a set phrase in κ 351 (... ποταμῶν, οἳτ' εἰς ἄλαδε προρέουσι) and h. Ap. 23 (ποταμοὶ δ' ἄλαδε προρέοντες). The basic meaning of the prefix προ- in verbs of movement is »forward« (see Latacz et al. 2000, 17 on A 3: προίαψεν).
- 77 See Schwyzer 1939, 624.
- 78 The term »mouths« (στόματα in M 24) also confirms their interpretation, as the word normally is used for the mouths into the sea. Germane to the subject is the commentary by Ameis – Hentze 1921, 98 on this passage: ὁμόσε ... ἔτραπε is translated: »turned toward the same point, that is, united« [FK].
- 79 This concerns the evident mistaken localisation of Alybe in B 857 with the town Argyria on the headwaters of the Aesepus: see Strabo 13,1,45/C 603, who, in spite of all criticism, had to confess that, on the whole, he had to rely on Demetrius as a source. After all, he himself had never been to Troy.
- 80 Hercher 1881, 47. In all fairness, however, it must be said that civic pride in problems of Homeric geography has had a long tradition; a less well-known example is the absurd localisation of the Asian meadow of B 461 in Tmolus by the Nysaeans, whose pride Strabo knew all too well from his own experience (14,1,45/C 650).
- 81 See Tischler 1977, 125 (Rhesus); 74, 164 (Caresus); 60–61, 158 (Heptaporus); 126, 160 (Rhodius).
- 82 Jones 1960, 87.
- 83 Cook 1973, 51 has correctly seen Demetrius' identification of the Caresus with the upper left tributary of the Aesepus, the Koca Çayı today (Strabo 13,1,44–

- 45/C 603; see the map in Asan 1984, 61, as a contradiction of the just cited lines in Strabo 13,1,44/C 602.
- 84 See Cook 1973, 284–285, 320 note 2; Tischler 1977, 28.
- 85 See Cook 1973, 273.
- 86 See Xenophon, *Hellenika* 3, 1,10–15 and, on that, Cook 1973, 366.
- 87 An etymological link to the Slavic »granica« (»corner, border«) would fit well semantically with the topography understood in this manner, with its almost impassable mountainous barrier (Armutcu Dağı), its length cut through by the river from south to north. See Kluge 1975, 269, see entry »Grenze«. In fact, a border stone from Cyzikus was found in the mountainous barrier directly east of the Kocadere near Inova; Wiegand 1904, 276 fig. 12 offers a photo of the stone in the middle of the primeval forest of beeches (*Fagus spec.*) in his description of his travels in Mysia; see also the inscription p. 277 fig. 13.
- 88 Stauber 1996, 342; Cook 1973, 55 is more cautious, as he always is in questions of Homeric geography. The name Ῥοδῖος fits well because of the perceptible rose colouring of the riverbed in the middle reaches caused by iron hydroxide (my own observation with Hans-Jörg Dethloff on 15 August 1987; see Cook 1973, 290 and Höhfeld 2009, 206–207] on the ancient mine works from Astyra nearby.) The name Ῥοδῖος thus belongs to the category of river names according to the colour of the water, not »according to plants in the surroundings« [FK], as Tischler 1977, 160 assumes in his *Hydronymie*. Höhfeld 2009, 134, 188 (and elsewhere) offers the Turkish name Sarı Çayı, i. e. »red-yellow river« for the Rhodius, a loan translation of the ancient Greek river name. On the fold-out map included in the book, only the lower reaches are labelled Sarı Çayı, the upper reaches labelled Kocadere. The funnel-like mouth of this river, still used as a harbour today, must be the one Thucydides (VIII 106, 1) meant in the description of the sea battle of Kynossema: The river's name in the oldest manuscript is handed down as Ἰνυδῖος (without accent!); that could be altered, palaeographically readily intelligible and factually quite appropriate, into Ῥοδῖος.
- 89 See Tischler 1977, 125; in Kiepert 1892, map V, the Rhesus is listed with a question mark as Karaathı Çayı.
- 90 Silting up of the river mouth as with the Scamander »surely applies to other river mouths in the Troad« [FK] (Bieg 2006, 364). The almost similar current could have been expressed in the relationship of the names Rhesus and Caresus as »brother rivers«, even if we know nothing about the etymologies. However, Günter Neumann wrote me on 10 March 2002: »I would advise not linking Caresus with Rhesus« and »Whether the river name Ῥῆσος is connected to the Thracian king's name is uncertain, at least to me. (The king's name is certainly not connected to Latin rex and its family but is Greek, [as many names from Asia Minor in the Iliad]; it belongs to Ῥῆσι »speak«)« [FK]. Janke 1904b, 518 remarks about Biga Çayı: »Its upper reaches in the plain extend from Bigha to where the rather important Kara-atly Tschai, the Ancients' Rhesus, flows into it, bearing almost the same amount of water« [FK]. P. 518 has a geographical description of the entire Çan Çayı or Biga Çayı, which can be identified here with the Caresus.
- 91 Especially the eastern Troad comes to mind with metal smelting and its great need for charcoal (see Meiggs 1982, 97); see below. The verses P 742–745 should be added to the woodcutter similes, where woodcutting is mentioned expressly for ship building, named by Fränkel 1921, 35–39.
- 92 Details on this river in Leaf 1912, 189–192; Leaf 1923, 111–114. The river is drawn as the Ulu Dere between Umurbey and the ruins of Percote on the uppermost northern edge of the historical geographical map of the Troad by Höhfeld. On Praktios and Percote, see Visser 2003, 273 on B 835.
- 93 Günter Neumann in a letter 10 March 2002, in which he rejects the interpretation by Gindin 1999, 70–72, who relates the river name to Thracian theophoric personal names.
- 94 Tischler 1977, 158, in the category »naming according to the form and depth of the brook bed« [FK].
- 95 Today, there are two rivers in Greece named »Sarıdaporos«: The one discharges on the Albanian border into the Aoös (Albanian: Vjosë); the other flows east of Mt. Olympus, and its valley used to be a »main nomadic shepherds' trail« (Philippson 1950, 81). The name seems to come from local shepherds' language and names a river that must be crossed »frequently« on a valley path. See Kannenberg 1897, 218: »Kyrkgetchid ›the 40 fords‹ [›40‹ Turkish ›many‹, ›large number‹], frequent name for rivers with many bends in whose valleys a path fords the river many

- times« [FK]). On the symbolic meaning of numbers in Homer, see Fränkel 1968, 580.
- 96 Janke 1904b, 514.
- 97 Bieg 2006, 363; see Ψ 114–123, especially 116! As late as 1898, during his ride along the Pozantı Çayı through the Cilician Gates, von der Nahmer 1904, 152 speaks of the »customary path in the bed of the stream and of the two dozen times back and forth through it« [FK].
- 98 See B 839; M 97 (probably the Yapıdag Çayı today; see Leaf 1912, 196 with pl. 18. The etymology of the name Selleeis is considered as »currently not interpreted«, according to Neumann 1999, 277).
- 99 West's 1995, 208 opinion is completely beside the point: »They all [i. e., the rivers in II. 12,20–22] belong in a larger group that Hesiod [Th. 337–345] presumably learned of from his father, the erstwhile sailor based at Cyme: they occupy the gap between the Aeolian Hermos, Kaikos, and Euenos (Th. 343, 345) and the Bithynian Sangarios and Parthenios (344). It looks as though the poet of the Iliad has drawn on this specifically Hesiodic list.« See, however, for example, Nickau 1977, 235 note 13: »But the naming of those unimportant Asia Minor rivers is motivated only in Homer, not in Hesiod, where they appear alongside the Nile, Eridanus, Ister [Danube]« [FK]. Aristarchus (see the A scholium on M 22a) was already of this opinion; in the testimony apparatus of his scholia edition on the passage, Erbse 1974, 300–301 bears Aristarchus out against Martin L. West.
- 100 On M 20–22, see Hainsworth 1993, 319.
- 101 See Herzhoff 1990, 261 and now Nünlist 2009, 185–193.
- 102 On the legends of floods of Dardanus and in the Troad, see Usener 1899, 45–46; Caduff 1986, 39–43, 133–142 (on the flood narratives of the Dardanus myth cycle).
- 103 He seems to presuppose that the legends surrounding Heracles in Elis are known. See Kullmann 1960, 161–162; on Λ 701 see von Wilamowitz-Moellendorf 2008, 292: »Augeas, introduced here as a well-known figure of legend« [FK]. One does not need to refer to Sennacherib's destruction of Babylon in 689 BC (West 1997, 378–380); if oriental models are sought: Hittite rituals tell abundantly of gods' diverting rivers to destroy places, specifically by the storm god of the town of Nerik. See Haas 1994, 605–606, who mentions nine rivers, also the Marassantiya, Greek: Halys, Turkish: Kızılırmak.
- 104 See Calvert 1880, 38 (with citing of M 17–33). In July 1750, when the Scamander had only little water, Wood 1775, 328 observed the traces of heavy flooding in the winter and remarked in reference to the destruction of the ship wall: »He [i. e. Homer] could not have employed a more effectual power for the total demolition of the Greek entrenchment, than the same river in its state of violence: and perhaps the furious ravages, and sudden devastations of the Scamander, may have furnished the hint of that very bold allegory.« The amount of water borne by the rivers at Homer's time was definitely much greater than today owing to the natural forest vegetation and the heavier rainfall resulting from those circumstances. Therefore »during the period between 1000 BC and AD 500, the climate was humid and cool« [FK]. (Höhfeld 2002, 953; see Riehl 1999, 1–5 and Riehl 1999a). Sommer 2005, 46 ascertains that »Anthropogenic alterations in the ecosystem cause occasional long-lasting alterations in the hydrology« [FK] for the entire ancient Near East (with the most recent literature, pp. 45–47). At any rate, the opinion held by West 1997, 378 is absurd: »Where did the poet of the Iliad get the idea of diverting rivers against a wall to wash it away? This could never be a natural idea in Greece, where rivers were small.« Correct now: Luce 1998, 176, on M 24–30; see also Ruge 1939, 579 lines 10–21.
- 105 Patzek 1992, 128, 184–185. On the building technology in M 28–29, see Mannsperger 1998, 289–290; Luce 1998, 177–178.
- 106 See Graf 1991, 76–78. The »Homeric realism« resulting from this historical interest is rightly designated as »unusual« in comparison to later epic narration (p. 76).
- 107 Strasburger 1953, 105 had already clearly pointed out this idea.
- 108 Latacz 1994 has duly recognized the achievement of uniting four proper names in one verse (M 20) on the basis of Edzard Visser's new studies on epic verse technique (on M 20, see Visser 1997, 8 note 23). Especially on the catalogue as the highest form of virtuoso artistic phrasing combined with the greatest linguistic concentration, see Danek 2004, 72.
- 109 Especially on this popular epithet, see Visser 1997, 110, 112: It is used both relating to the context as well

- as in a neutral manner and then expresses only a general amelioration. See Nünlist – de Jong 2000, 162. According to Ξ 434 Zeus is the father of the Scamander; the epithet here probably alludes to that. Latacz has warned me, however, about context-sensitive interpretation with reference to Latacz 2000, 40 note 4; 56 note 25). In his river catalogue, Hesiod (Theogony 342 and 345) sets the Scamander and the Simois far apart and places the epithet $\theta\epsilon\acute{\iota}\omicron\nu$ before the names.
- 110 Details on this subject in Elliger 1975, 43–52, especially p. 45 note 7. Both river courses are understood correctly as »lateral boundaries of the battlefield« [FK].
- 111 Gehrke 1998, 184. Brigitte Mannsperger has now represented Homer's topographical vision of the area around Troy in a map of this stark schematism but without considering the region of the rivers east of the Simois (Mannsperger 2001a, 81). Cook 1973, 50 fig. 2 covers the entire Troad schematically according to Strabo's information (with Strabo's famous epsilon schema of the mountain ridges around Troy [13,1,34/C 597]. See the sketch in Leaf 1923, 175). The Troad on the Tabula Peutingeriana is recorded in Bieg et al. 2006, 150 fig. 3).
- 112 According to modern narratology, the ability to see an object from a bird's-eye view is only one of many possible spatial standpoints of a narrator, see de Jong – Nünlist 2004, 63–83 (pointer from Joachim Latacz).
- 113 See Cook 1973, 286–290, quoting Stephanus of Byzantium, see entry *Κεγχρεαί πόλις Τρωάδος, ἐν ἣ διέτριπεν Ὀμηρος μανθάνων τὰ κατὰ τοὺς Τρωας*; see as early as Webb 1844, 35–36 note 4. I have been there several times, most recently on 26 August 2005, primarily for botanical reasons, for the splendid wealth of *Paeonia mascula* (wild peony) directly under the rocky summit in the wind-swept stunted oak forests, where the Cornelian cherry (*Cornus mas*) occurs in the wild; see Homer Π 767 (and on that topic, Meiggs 1982, 111).
- 114 Just as Clarke 1812, 136–138 saw in March 1801; see above, note 32. On the ancient pass across the Porta that forks at 1,300 m/4,265 ft and, in one part, leads down to the north into the Scamander Valley, in another part to the northeast into the »Cotylus«, and climbs in the third part to the west upwards through the fir forests (*Abies equi-trojani*, an endemic species, see Ξ 286–289) into the higher elevations, see below.
- 115 Even Percote and Coloniae in the interior south of Lampsakos can no longer be said with certainty to have been founded by settlers from Miletus; here as well, the Phocaeans were probably the pioneers (see Ehrhardt 1983, 35–36). The early Phocaeen foundations on the south coast of the Black Sea such as Amisus (Samsun today) fell into the same competitive situation. See Olshausen 1996, 592. On dating before 700 BC, see Drews 1976, 22, 25 (on the founding of Cyzikus; on that subject, see also Ehrhardt 1983, 40–44). Especially on the colonies of Phocaea, Bilabel 1920, 238–246, is still worth looking into.
- 116 See Visser 2003b, 271 on B 829.
- 117 The Aeolian founding of Dardania on the Hellespont at the Mal Tepe near present-day Kepez (see Cook 1973, 57–60) can, of course, not be meant; see Leaf 1912, 178–179). Welcker 1845, p. lv–lvi suggests name transferral. On the character of the settlement founded by Dardanus in the mountains, Leaf 1912, 180 notes, probably rightly: »Dardania was not a town, but a district inhabited by dwellers in villages« and differed even in that respect from Ilios, a fortified town: The poet has made this clear through the different verbs $\kappa\acute{\tau}\iota\sigma\sigma\epsilon$ (Y 216) and $\pi\epsilon\pi\acute{o}\lambda\iota\sigma\tau\omicron$ (Y 217). In Homer's vision, the settlement was in the form of wooden houses such as those still built in the region today (see Achilles' wooden house in Ω 448–456). On the reed-thatched log cabins made of fir still to be found in the Phrygian mountainous country, see Robert 1980, 287–289. Wiesner 1963, 37–38 That is probably why the archaeologists were not able to find any settlement from the Age of Geometric Art in the mountainous landscape of the central Troad, an area traditionally later called Dardania, south of the Hellespont, which the poet and his time may have considered to be Dardania (see Y 218: $\acute{\upsilon}\pi\acute{\omega}\rho\epsilon\iota\alpha$ [...] $\pi\omicron\lambda\upsilon\pi\acute{\iota}\delta\alpha\kappa\omicron\varsigma$ Ἰδης; see Plato, *Nomoi* 681 E–682 C; Pseudo-Scymnus, 687–689). But Erbse 1991, 136 has thought of Scepasis (Kurşunlu Tepe). Or is it Palaiscepasis (İkizce), which is of the required age, enthroned on a summit of 815 m/2,674 ft, offering a far-reaching panorama and located exactly on the mountain path from northern Ionia across the eastern shoulder of Mt. Ida, the upper Scamander Valley and the Troad mountains to Lampsakos (see Cook 1973, 300–304, with a photo bird's eye view pl. 46b; on Palaiscepasis, see now Höhfeld 2009, 226–227).

- 118 On the myth of the founding, see Apollodor, *Bibliothēke* 3, 138–143. On the double naming of Troy/Ilios and the reasons, see Latacz 2002, 1107–1112; on the Dardanians, see *ibid.* 1117 note 59.
- 119 See Visser 1997, 41–42. Presumably Aristarchus himself is the source; because of his origins, he likely had a special interest in the Samothracean cycle but in turn himself referred to older sources such as the *Troica* by Hellanicus of Mytilene.
- 120 Nonnus, *Dionysiaca* III 193 (Rouse 1962, 115).
- 121 Leaf 1912, 201–204 has most vividly described the basic experience of all travellers; he also notes the poet's neglect of this region (p. 203): »The four lines of the Homeric Catalogue which we have referred to this district are extremely brief.« See Ruge 1939, 532 lines 27–45.
- 122 See Stauber 1996, 28–71, especially on Chryse, Killa, Thebe and Lyrnessus, even though he expressly excludes »the difficult subject matter of Homeric criticism« [FK] (p. 29); it is important here to point out the convincing new identification of Lyrnessus with the Ala Tepe (pp. 66–71). Perhaps Pausanias 7, 3, 8 can be interpreted as an historical clue to the cooperation of the northern Ionians from Colophon and Phocaea during the development of Ida in the earliest time of settlement. The only certain knowledge that research has provided on Homer's biography up to the present is that he was, in any case, at home in northern Ionia. See Huxley 1977; Dräger 2009, 24–25.
- 123 See Müller 1997, 845, with photo. He notes rightly: »On the eastern flank of the summit region, a punishing road leads through dense forest area across a pass about 1,300 m/4,265 ft high into the upper Scamander Valley over to the village of Çırpılar« [FK]. As late as the beginning of the 1980s, I myself walked along this trail several times and found it to be as Virchow and Schliemann had described it. See Schliemann 1881a, 43–52, with an excellent description of the overwhelming summit panorama (pp. 44–45); also in Virchow 1892, 972; on the Portai, see *ibid.* pp. 978–982, with photo; Ruge 1939, 581 lines 3–20. Today (most recent personal visit 30 August 2005) the pass trail has been replaced by a wide forestry road located lower down, the one which Dietram Müller was probably thinking of; the trail threatens to disappear under the vegetation. That is why Stauber 1996, 339–341 could not find it and doubted, wrongly, the travel reports of Virchow und Schliemann. See also the photos in Cook 1973, pl. 50–51; pl. 50b offers a view to the summit region from the east (that is, from »Cotylus« in the area of Yedi Kardeşlar) from the Pine forests (*Pinus nigra* subsp. *pallasiana*, see N 390 and II 483) with the mention of the other trees as still today (*Populus tremula*/Aspen and *Quercus petraea* subsp. *iberica*/Sessile oak).
- 124 The photo in Müller 1997, 845 gives a view onto this section of the mountains toward the east from Sarıkız Dağı.
- 125 He knows a tavern near Arisbe on the road from Abydos to Lampsacus (Z 12–15) as well as the way from Abydos to Troy through the Simois Valley (Δ 475; Y 53; according to Herodotus VII 43,2, Xerxes marched this very same route from Troy to Abydos, and not along the coast). On older maps, the upper reaches of the Simois (Dümrek Su today) are called »Ortağetschid Dere«, meaning »brook with a ford in the middle of the stream«, and thus points to the old route network (this network as well as the river name can be found, for example, on the maps of the Troad from 1890 in Blum et al. 2004, 204 fig. 2).
- 126 See Leaf 1923, 92–97; Frisch 1978, 142–149 (with the Attic tribute lists, p. 143); Treister 1996, 290 with the map of finds, fig. 2.1.; Dietrich Mannsperger 1992a on Phocaea and Lampsacus, see especially pp. 142–146. On 4 September 2005, near the village Balciler in the mountains south of Lapseki, the forester Aziz Oztürk spontaneously said to me that much lead was found in the area »and a little gold«. The ancient gold mines of Lampsacus were expressly mentioned as early as Theophrastus, *De Lapidibus* 32; on that, see the commentary by D. E. Eichholz (*ibid.* pp. 110–111).
- 127 See Stauber 1996, 93 and as early as Schliemann in 1881, 286–292; recently Pernicka et al. 2003, 148–157. The noticeable concentration of metal finds and mines in the eastern section of the Troad is demonstrated clearly by the entries on the map in Bieg 2002, 378 fig. 1. See now also Bieg et al. 2009, 205 (on the extraction of ore in the hinterland of the Troad, also south of Lampsacus, and the consequences for the settlement since pre-historic times). Unger – Schütz 1982 have vividly demonstrated how the development of mineral deposits in the mountains are to be envisioned in pre-historical and ancient times. On the great significance of metals in Homer, see Patzek 1992, 188–192.

- Asan 1984 Ü. Asan, Kazdağı göknarı (*Abies equi-trojani* Aschers. et Sinten.) ormanlarının hasilat ve amenajman esasları üzerine araştırmalar. *Orman Fakültesi Dergisi*, İstanbul University A 34 (İstanbul 1984) 58–85.
- Aslan 2002 R. Aslan, Die Beziehungen zwischen Mensch und Umwelt in osmanischer Zeit. In: R. Aslan – S. Blum – G. Kastl – F. Schweizer – D. Thumm (eds.), *Mauerschau. Festschrift für Manfred Korfmann III (Remshalden-Grunbach 2002)* 923–934.
- Bethe 1922 E. Bethe, *Homer. Dichtung und Sage II. Odyssee, Kyklos, Zeitbestimmung* (Leipzig 1922).
- Bieg 2002 G. Bieg, Troas und Gallipoli. Landschaft und Geschichte. In: R. Aslan – S. Blum – G. Kastl – F. Schweizer – D. Thumm (eds.), *Mauerschau. Festschrift für Manfred Korfmann I (Remshalden-Grunbach 2002)* 377–399.
- Bieg 2006 G. Bieg, Archäologie und Geschichte einer Landschaft. Die Troas von der griechischen Kolonisation bis in die byzantinische Zeit. In: M. O. Korfmann (ed.), *Troia. Archäologie eines Siedlungshügels und seiner Landschaft (Mainz 2006)* 361–372.
- Bieg et al. 2006 G. Bieg – B. Tekkök – R. Aslan, Die spätrömische Besiedlung der Troas. Ein Überblick. *Studia Troica* 16, 2006, 147–170.
- Bieg et al. 2009 G. Bieg – S. W. E. Blum – R. Körpe – N. Sevinç – R. Aslan, Yeşiltepe. Eine Siedlung der frühen Bronzezeit am Oberlauf des Skamander. *Studia Troica* 18, 2009, 199–227.
- Bilabel 1920 F. Bilabel, Die ionische Kolonisation. Untersuchungen über die Gründungen der Ionier, deren staatliche und kultische Organisation und Beziehungen zu den Mutterstädten. *Philologus, Supplement* 14 (Leipzig 1920).
- Blümer 2001 W. Blümer, Interpretation archaischer Dichtung. Die mythologischen Partien der *Erga* Hesiods I. Die Voraussetzungen: Autoren, Texte und homerische Fragen (Münster 2001).
- Blum et al. 2004 S. W. E. Blum – R. Aslan – S. Bocher, Ethnoarchäologische Untersuchungen zum funktionalen und strukturellen Wandel dörflicher Architektur: die ›Eski Cami‹ von Zeytinli. *Studia Troica* 14, 2004, 201–218.
- Borner 1977 M. Borner, Leopards in Western Turkey. *Oryx* 14, 1977, 26–30.
- Brügger 2009 C. Brügger, *Homers Ilias. Gesamtkommentar (Basler Kommentar/BK)*; hg. v. Anton Bierl – Joachim Latacz. VIII. Vierundzwanzigster Gesang (Ω). 2. Kommentar (Berlin – New York 2009).
- Caduff 1986 G. A. Caduff, Antike Sintflutsagen. *Hypomnemata* 82 (Göttingen 1986).
- Calvert 1880 F. Calvert, Über die asiatische Küste des Hellespont. *Zeitschrift für Ethnologie* 12, 1880, 31–39
- Cook 1973 J. M. Cook, *The Troad. An Archaeological and Topographical Study* (Oxford 1973).
- Danek 2004 G. Danek, Der Schiffskatalog der *Ilias*. Form und Funktion. In: H. Heftner – K. Tomaschitz (eds.), *Ad fontes! Festschrift für Gerhard Dobesch zum fünfundsiebzigsten Geburtstag am 15. September 2004, dargebracht von Kollegen, Schülern und Freunden* (Wien 2004) 59–72.
- Davies 1965 P. H. Davies, *Flora of Turkey and the East Aegean Islands I* (Edinburgh 1965).
- Delage 1930 E. Delage, *La géographie dans les Argonautiques d'Apollonios de Rhodes. Bibliothèque des universités du midi* 19 (Bordeaux 1930).
- Dilke 1985 O. A. W. Dilke, *Greek and Roman Maps* (London 1985).

- Dräger 1997a P. Dräger, Alisontia: Eltz oder Alzette? Der Nebenflußkatalog und ein unentdecktes Strukturprinzip in Ausonius' Mosella. *Gymnasium* 104, 1997, 435–461 [expanded version: *Kurtrierisches Jahrbuch* 37, 1997, 11–38].
- Dräger 1997b P. Dräger, Untersuchungen zu den Frauenkatalogen Hesiods. *Palingenesia* 61 (Stuttgart 1997).
- Dräger 2009 P. Dräger, [Review of] Raoul Schrott: Homers Ilias and Homers Heimat. *Göttingische Gelehrte Anzeigen* 261, 2009, 1–27.
- Drews 1976 R. Drews, The Earliest Greek Settlements on the Black Sea. *The Journal of Hellenic Studies* 96, 1976, 18–31.
- Ehrhardt 1983 N. Ehrhardt, Milet und seine Kolonien. *Vergleichende Untersuchungen der kulturellen und politischen Einrichtungen* (Frankfurt am Main 1983).
- Elliger 1975 W. Elliger, Die Darstellung der Landschaft in der griechischen Dichtung. *Untersuchungen zur antiken Literatur und Geschichte* 15 (Berlin 1975).
- Erbse 1971 H. Erbse, Scholia Graeca in Homeri Iliadem II. Scholia ad libros E–I continens (Berlin 1971).
- Erbse 1974 H. Erbse, Scholia Graeca in Homeri Iliadem III. Scholia ad libros K–Ξ continens (Berlin 1974).
- Erbse 1986 H. Erbse, Untersuchungen zur Funktion der Götter im homerischen Epos. *Untersuchungen zur antiken Literatur und Geschichte* 24 (Berlin – New York 1986).
- Erbse 1989 H. Erbse, Rez. zu Hölscher, *Odyssee* (1989): *Gnomon* 61, 1989, 481–493.
- Erbse 1991 H. Erbse, Aineias in der Ilias Homers. *Hermes* 119, 1991, 129–144 [Reprint in *Studien zur griechischen Dichtung* (Wiesbaden 2003) 59–74].
- Fajen 1999 F. Fajen, Oppianus, *Haliutica*. Einführung, Text, Übersetzung in deutscher Sprache, ausführliche Kataloge der Meeresfauna (Stuttgart 1999).
- Forbiger 1843 A. Forbiger, *Handbuch der alten Geographie, aus den Quellen bearbeitet* II. Politische Geographie der Alten: Asia, Africa (Leipzig 1843) 110–167 [Reprint Graz 1966].
- Fränkel 1921 H. Fränkel, *Die homerischen Gleichnisse* (Göttingen 1921) [Reprint 1977].
- Fränkel 1968 H. Fränkel, *Noten zu den Argonautika des Apollonios* (München 1968).
- Friedrich 1975 R. Friedrich, Stilwandel im Homerischen Epos. *Studien zur Poetik und Theorie der epischen Gattung. Bibliothek der klassischen Altertumswissenschaften* II 55 (Heidelberg 1975).
- Frisch 1978 P. Frisch, *Die Inschriften von Lampsakos. Inschriften griechischer Städte aus Kleinasien* 6 (Bonn 1978).
- Frisk 1960 Hj. Frisk, ἴδη. In: *Griechisches Etymologisches Wörterbuch* I. A–Ko (Heidelberg 1960) 709.
- Gaertner 2001 J. F. Gaertner, The Homeric Catalogues and their Function in Epic Narrative. *Hermes* 129, 2001, 298–305.
- Gehrke 1998 H.-J. Gehrke, Die Geburt der Erdkunde aus dem Geiste der Geometrie. Überlegungen zur Entstehung und Frühgeschichte der wissenschaftlichen Geographie bei den Griechen. In: W. Kullmann – J. Althoff – M. Asper (eds.), *Gattungen wissenschaftlicher Literatur in der Antike. ScriptOralia* 95, A. *Altertumswissenschaftliche Reihe* 22 (Tübingen 1998) 163–192.

- Gehrke 2007 H.-J. Gehrke, Die Raumwahrnehmung im archaischen Griechenland. In: M. Rathmann (ed.), *Wahrnehmung und Erfassung geographischer Räume in der Antike* (Mainz 2007) 17–30.
- Gennett – Gifford 1982 J. A. Gennett – J. A. Gifford, Pollen Analysis. In: G. Rapp – J. A. Gifford, *Troy. The Archaeological Geology. Troy, Supplementary Monograph 4* (Princeton 1982) 105–116.
- Geus 2002 K. Geus, Eratosthenes von Kyrene. *Studien zur hellenistischen Kultur- und Wissenschaftsgeschichte. Münchener Beiträge zur Papyrusforschung und antiken Rechtsgeschichte* 92 (München 2002).
- Gindin 1999 L. A. Gindin, *Troja, Thrakien und die Völker Altkleinasiens. Versuch einer historisch-philologischen Untersuchung. Innsbrucker Beiträge zur Kulturwissenschaft, Sonderheft* 104 (Innsbruck 1999).
- Gisinger 1924 F. Gisinger, *Geographie*. In: *Realencyclopädie der classischen Altertumswissenschaft, Supplementband IV* (Stuttgart 1924) 521–685.
- Graf 1991 F. Graf, *Griechische Mythologie. Eine Einführung* (München – Zürich ³1991).
- Graf et al. 2000 Homers *Ilias*. *Gesamtkommentar. Prolegomena* von F. Graf – I. de Jong – J. Latacz – R. Nünlist – M. Stoevesandt – R. Wachter – M. L. West (München – Leipzig 2000).
- Graham 1958 A. J. Graham, The Date of the Greek Penetration of the Black Sea. *Bulletin of the Institute of Classical Studies of the University of London* 5, 1958, 25–42.
- Grasberger 1888 L. Grasberger, *Studien zu den griechischen Ortsnamen* (Würzburg 1888).
- Haas 1994 V. Haas, *Geschichte der hethitischen Religion. Handbuch der Orientalistik I* 15 (Leiden 1994).
- Hammond 1980 N. G. L. Hammond, The Battle of the Granicus River. *The Journal of Hellenic Studies* 100, 1980, 73–88.
- Hammond 1981 N. G. L. Hammond (ed.), *Atlas of the Greek and Roman World in Antiquity* (Park Ridge 1981).
- Heilen 2000 S. Heilen, Die Anfänge der wissenschaftlichen Geographie: Anaximander und Hekataios. In: W. Hübner (ed.), *Geschichte der Mathematik und der Naturwissenschaften in der Antike II. Geographie und verwandte Wissenschaften* (Stuttgart 2000) 33–54.
- Hercher 1881 R. Hercher, Vier homerische Flüsse. In: ders., *Homerische Aufsätze* (Berlin 1881) 70–92.
- Herder 1903 J. G. Herder, *Kritische Wälder*. In: ders., *Herders Werke I*. Herausgegeben von Theodor Matthias I (Leipzig – Wien [1903]) 199–278.
- Herzhoff 1984 B. Herzhoff, Lotos. *Botanische Beobachtungen zu einem homerischen Pflanzennamen. Hermes* 112, 1984, 257–271.
- Herzhoff 1990 B. Herzhoff, ΦΗΓΟΣ. Zur Identifikation eines umstrittenen Baumnamens. *Hermes* 118, 1990, 257–272, 385–404.
- Herzhoff 1994 B. Herzhoff, Kriegerhaupt und Mohnblume. Ein verkanntes Homergleichnis (© 306–308). *Hermes* 122, 1994, 385–403.
- Herzhoff 2000 B. Herzhoff, Homers Vogel Kymindis. *Hermes* 128, 2000, 275–294.
- Herzhoff 2002 B. Herzhoff, Tanne. In: *Der Neue Pauly XII 1* (Stuttgart 2002) 10.
- Herzhoff 2008 B. Herzhoff, Der Flußkatalog der *Ilias* (M 20–23). Ältestes literarisches Beispiel geometrischer Raumerfassung? *Antike Naturwissenschaft und ihre Rezeption* 18, 2008, 101–138.
- Heubeck 1984 A. Heubeck, *Kleine Schriften zur griechischen Sprache und Literatur. Erlanger Forschungen A. Geisteswissenschaften* 33 (Erlangen 1984).
- Höfeld 2002 V. Höfeld, Siedlungsprozesse in türkischen Waldbergländern seit der Antike. In: R. Aslan – S. Blum – G. Kastl – F. Schweizer – D. Thumm (eds.), *Mauerschau. Festschrift für Manfred Korfmann III* (Remshalden-Grunbach 2002) 935–956.

- Höhfeld 2009 V. Höhfeld, Stadt und Landschaft Homers. Ein historisch-geografischer Führer für Troia und Umgebung (Mainz 2009).
- Hölscher 1989 U. Hölscher, Die Odyssee. Epos zwischen Märchen und Roman (München ²1989).
- Hübner 2000 W. Hübner, Mythische Geographie. In: ders. (ed.), Geschichte der Mathematik und der Naturwissenschaften in der Antike II. Geographie und verwandte Wissenschaften (Stuttgart 2000) 19–32.
- Hütteroth 1982 W.-D. Hütteroth, Türkei. Wissenschaftliche Länderkunden 21 (Darmstadt 1982).
- Huxley 1977 G. Huxley, Homer's Perception of his Ionian Circumstances. *Maynooth Review* 3/1, 1977, 73–84.
- Isaac 1986 B. Isaac, The Greek Settlements in Thrace until the Macedonian Conquest. *Studies of the Dutch Archaeological and Historical Society* 10 (Leiden 1986).
- Jacoby 1913 F. Jacoby, Herodotos. In: *Realencyclopädie der classischen Altertumswissenschaft*, Supplement II (Stuttgart 1913) 205–520.
- Jacoby 1940 F. Jacoby, Die Fragmente der griechischen Historiker (FGrHist) III. Geschichte von Städten und Völkern (Horographie und Ethnographie) A. Autoren über verschiedene Städte (Länder) [Text Nr. 262–296] (Leiden 1940).
- Jacoby 1943 F. Jacoby, Die Fragmente der griechischen Historiker (FGrHist) III. Geschichte von Städten und Völkern (Horographie und Ethnographie) a. Kommentar zu Nr. 262–296 (Leiden 1943).
- Janke 1904a A. Janke, Das Schlachtfeld am Granikus. *Globus. Illustrierte Zeitschrift für Länder- und Völkerkunde* 86, 1904, 129–133.
- Janke 1904b A. Janke, Die Ergebnisse einer historisch-geographischen Studienreise in Kleinasien im Jahr 1902. *Zeitschrift der Gesellschaft für Erdkunde* 1904, 498–521.
- Janko 1992 R. Janko, *The Iliad. A Commentary* IV. Books 13–16 (Cambridge 1992).
- de Jong – Nünlist 2004 I. J. F. de Jong – R. Nünlist, From Bird's Eye View to Close-up. The Standpoint of the Narrator in the Homeric Epics. In: A. Bierl – A. Schmitt – A. Wille (eds.), *Antike Literatur in neuer Deutung* (München – Leipzig 2004) 63–83.
- Kannenberg 1897 K. Kannenberg, *Naturschätze Kleinasiens. Seine wichtigsten Tiere, Kulturpflanzen und Mineralschätze vom wirtschaftlichen und kulturgeschichtlichen Standpunkt* (Berlin 1897).
- Kayan 1995 İ. Kayan, The Troia Bay and Supposed Harbour Sites in the Bronze Age. *Studia Troica* 5, 1995, 211–235.
- Kayan 2002 İ. Kayan, Paleogeographical Reconstructions on the Plain along the Western Foothlope of Troy. In: R. Aslan – S. Blum – G. Kastl – F. Schweizer – D. Thumm (eds.), *Mauerschau. Festschrift für Manfred Korfmann III* (Remshalden-Grumbach 2002) 993–1004.
- Kayan 2009 İ. Kayan, Kesik Plain and Alacalıgöl Mound. An Assessment of the Paleogeography around Troia. *Studia Troica* 18, 2009, 105–128.
- Kiepert 1877 H. Kiepert, Das Schlachtfeld am Granicus. *Globus. Illustrierte Zeitschrift für Länder- und Völkerkunde* 32, 1877, 263–264.
- Kiepert 1892 H. Kiepert, *Atlas antiquus. Zwölf Karten zur alten Geschichte* (Berlin ²1892).
- Kiepert 1894 H. Kiepert, *Formae orbis antiqui. 36 Karten mit kritischem Text und Quellenangaben* (Berlin 1894).
- Kirk 1990 G. S. Kirk, *The Iliad. A Commentary* II. Books 5–8 (Cambridge 1990).
- Kluge 1975 F. Kluge, Grenze: In: *Etymologisches Wörterbuch der deutschen Sprache* (Berlin ²¹1975) 269.

- Korfmann 2004 M. O. Korfmann, Von den Ruinen Troias zur ›Landschaft Homers‹. In: A. Bierl – A. Schmitt – A. Wille (eds.), *Antike Literatur in neuer Deutung* (München – Leipzig 2004) 3–31.
- Kühlmann 1973 W. Kühlmann, *Katalog und Erzählung. Studien zu Konstanz und Wandel einer literarischen Form in der antiken Epik* (Diss. Freiburg i. Br. 1973).
- Kullmann 1960 W. Kullmann, Die Quellen der Ilias (Troischer Sagenkreis). *Hermes*, Einzelschriften 14 (Wiesbaden 1960).
- Kullmann 2002 W. Kullmann, *Realität, Imagination und Theorie. Kleine Schriften zu Epos und Tragödie in der Antike* (Stuttgart 2002).
- Langholf 2010 V. Langholf, ῥήσις. In: *Lexikon des frühgriechischen Epos IV. P–Ω* (Göttingen 2010) 37–39.
- Latacz 1994 J. Latacz, Neuere Erkenntnisse zur epischen Versifikationstechnik. In: ders., *Erschließung der Antike. Kleine Schriften zur Literatur der Griechen und Römer* (Stuttgart – Leipzig 1994) 235–255.
- Latacz 1997 J. Latacz, Achilleus. Wandlungen eines europäischen Heldenbildes. *Lectio Teubneriana* 3 (Stuttgart 1995/21997).
- Latacz 1998 J. Latacz, *Die griechische Literatur in Text und Darstellung I. Archaische Periode* (Stuttgart 21998).
- Latacz 2000 J. Latacz, Formelhaftigkeit und Mündlichkeit (FOR). In: J. Latacz (ed.), *Homers Ilias. Gesamtkommentar. Prolegomena* (München – Leipzig 2000) 39–59.
- Latacz 2002 J. Latacz, Troia – Wilios – Wilusa. Drei Namen für ein Territorium. In: R. Aslan – S. Blum – G. Kastl – F. Schweizer – D. Thumm (eds.), *Mauerschau. Festschrift für Manfred Korfmann III* (Remshalden-Grunbach 2002) 1103–1121.
- Latacz 2010 J. Latacz, Troia und Homer. Der Weg zur Lösung eines alten Rätsels (Leipzig 62010).
- Latacz 2011 J. Latacz, Zu Homers Person. In: A. Rengakos – B. Zimmermann, *Homer-Handbuch. Leben – Werk – Wirkung* (Stuttgart 2011) 1–25.
- Latacz et al. 2000 J. Latacz – R. Nünlist – M. Stoevesandt, *Homers Ilias. Gesamtkommentar I. Erster Gesang (A) 2. Kommentar* (München – Leipzig 2000).
- Lattimore 1951 R. Lattimore, *The Iliad of Homer. Translation with an Introduction* (Chicago 1951).
- Leaf 1912 W. Leaf, *Troy. A Study in Homeric Geography* (London 1912).
- Leaf 1923 W. Leaf, *Strabo on the Troad. Book XIII, Chap. 1. Edited with Translation and Commentary* (Cambridge 1923).
- Lenfant 2004 D. Lenfant, *Ctésias de Cnide, La Perse. L'Inde. Autres fragments. Texte établi, traduit et commenté* (Paris 2004).
- Lesky 1948 A. Lesky, Aia. *Wiener Studien* 63, 1948, 22–68 [= reprinted: *Gesammelte Schriften* (Bern 1966) 26–62].
- Lohmann 1970 D. Lohmann, *Die Komposition der Reden in der Ilias. Untersuchungen zur antiken Literatur und Geschichte* 6 (Berlin 1970).
- Luce 1998 J. V. Luce, *Celebrating Homer's Landscapes. Troy and Ithaca Revisited* (New Haven – London 1998).
- Luce 2003 J. V. Luce, The Case for Historical Significance in Homer's Landmarks at Troia. In: G. A. Wagner – E. Pernicka – H.-P. Uerpmann (eds.), *Troia and the Troad. Scientific Approaches* (Berlin 2003) 9–30.

- Mader 1991a B. Mader, Ἑλλησποντος. In: Lexikon des frühgriechischen Epos II. B–Λ (Göttingen 1991) 557.
- Mader 1991b B. Mader, Θρινακίη. In: Lexikon des frühgriechischen Epos II. B–Λ (Göttingen 1991) 1062.
- Mannsperger 1992a D. Mannsperger, Das Gold Troias und die griechische Goldprägung im Bereich der Meerengen. In: I. Gamer-Wallert (ed.), Troia. Brücke zwischen Orient und Okzident (Tübingen 1992) 124–151.
- Mannsperger 1992b B. Mannsperger, Troia und das Skäische Tor bei Homer und Heinrich Schliemann. In: I. Gamer-Wallert (ed.), Troia. Brücke zwischen Orient und Okzident (Tübingen 1992) 230–263.
- Mannsperger 1998 B. Mannsperger, Die Mauer am Schiffslager der Achaier. *Studia Troica* 8, 1998, 287–304.
- Mannsperger 2001a B. Mannsperger, Das Stadtbild von Troia in der Ilias. Gebäude und Befestigungssysteme. In: Archäologisches Landesmuseum Baden-Württemberg et al. (eds.), Troia. Traum und Wirklichkeit [Begleitband zur Ausstellung in Stuttgart, Braunschweig, Bonn 2001/02] (Stuttgart 2001) 81–83.
- Mannsperger 2001b B. Mannsperger, Landschaft, Tier- und Pflanzenwelt in der Ilias. Der geographische Rahmen. In: Archäologisches Landesmuseum Baden-Württemberg et al. (eds.), Troia. Traum und Wirklichkeit [Begleitband zur Ausstellung in Stuttgart, Braunschweig, Bonn 2001/02] (Stuttgart 2001) 319–322.
- Markwald 1991 G. Markwald, κοτύλη*, κότυλος. In: Lexikon des frühgriechischen Epos II. B–Λ Göttingen 1991) 1504.
- Markwald 2010 G. Markwald, Σκάμανδρος. In: Lexikon des frühgriechischen Epos IV. P–Ω (Göttingen 2010) 135–136.
- Mayer – Aksoy 1986 H. Mayer – H. Aksoy, Wälder der Türkei (Stuttgart 1986).
- Meiggs 1982 R. Meiggs, Trees and Timber in the Ancient Mediterranean World (Oxford 1982).
- Meissner 1925 B. Meissner, Babylonische und griechische Landkarten. *Klio* 19, 1925, 97–100.
- Meyer 1998 D. Meyer, Hellenistische Geographie zwischen Wissenschaft und Literatur. Timosthenes von Rhodos und der griechische Periplus. In: W. Kullmann – J. Althoff – M. Asper (eds.), Gattungen wissenschaftlicher Literatur in der Antike. *ScriptOralia* 95, A. Altertumswissenschaftliche Reihe 22 (Tübingen 1998) 193–215.
- Müller 1997 D. Müller, Topographischer Bildkommentar zu den Historien Herodots [II.] Kleinasien und angrenzende Gebiete mit Südostthrakien und Zypern (Tübingen 1997).
- von der Nahmer 1904 E. von der Nahmer, Vom Mittelmeer zum Pontus (Berlin 1904).
- Neumann 1991 J. Neumann, Number of Days that Black Sea Bound Sailing Ships were Delayed by Winds at the Entrance to the Dardanelles near Troy's Site. *Studia Troica* 1, 1991, 93–100.
- Neumann 1999 G. Neumann, Zwei altgriechische Flußnamen in der Troas. *Historische Sprachforschung* 112, 1999, 273–278.
- Nickau 1977 K. Nickau, Untersuchungen zur textkritischen Methode des Zenodotos von Ephesos. *Untersuchungen zur antiken Literatur und Geschichte* 16 (Berlin 1977).
- Nünlist 2009 R. Nünlist, The Ancient Critics at Work. Terms and Concepts of Literary Criticism in Greek Scholia (Cambridge 2009).

- Nünlist – de Jong 2000 Nünlist, René – Irene de Jong, Homerische Poetik in Stichwörtern (P). In: J. Latacz (ed.), Homers Ilias. Gesamtkommentar. Prolegomena (München – Leipzig 2000) 159–171.
- Olshausen 1970 E. Olshausen, Parion. In: Realencyclopädie der classischen Altertumswissenschaft, Supplement XII (Stuttgart 1970) 982–986.
- Olshausen 1991 E. Olshausen, Einführung in die Historische Geographie der Alten Welt (Darmstadt 1991).
- Olshausen 1996 E. Olshausen: Amisos. In: Der Neue Pauly I (Stuttgart 1996) 592.
- Olshausen 1998 E. Olshausen, Hellespontos. In: Der Neue Pauly V (Stuttgart 1998) 325–326.
- Patzek 1992 B. Patzek, Homer und Mykene. Mündliche Dichtung und Geschichtsschreibung (München 1992).
- Patzer 1971–72 H. Patzer, Dichterische Kunst und poetisches Handwerk im homerischen Epos. Sitzungsberichte der wissenschaftlichen Gesellschaft an der Johann Wolfgang Goethe-Universität Frankfurt/Main 10, 1971–72, 3–49.
- Pernicka et al. 2003 E. Pernicka – C. Eibner – Ö. Öztunalı – G. A. Wagner, Early Bronze Age Metallurgy in the North-East Aegean. In: G. A. Wagner – E. Pernicka – H.-P. Uerpman (eds.), Troia and the Troad. Scientific Approaches (Berlin 2003) 143–172.
- Philippson 1950 A. Philippson, Griechische Landschaften I 1. Thessalien und die Spercheios-Senke. (Frankfurt am Main 1950).
- Pokorny 1989 J. Pokorny, *uidhu-* ›Baum‹. In: Indogermanisches etymologisches Wörterbuch I (Bern – Stuttgart ²1989) 1177.
- von Richter 1822 von Richter, Otto Friedrichs, Wallfahrten im Morgenlande. Aus seinen Tagebüchern und Briefen dargestellt von Johann Philipp Ewers (Berlin 1822).
- Riehl 1999 S. Riehl, Bronze Age Environment and Economy in the Troad. The Archaeobotany of Kumtepe and Troy. BioArchaeologica 2 (Tübingen 1999)
- Riehl 1999a S. Riehl, Archäobotanik in der Troas. Studia Troica 9, 1999, 367–409.
- Robert 1980 L. Robert, A travers l'Asie Mineure. Poètes et prosateurs, monnaies grecques, voyageurs et géographie. Bibliothèque des Écoles Françaises d'Athènes et de Rome 239 (Paris 1980).
- Roebuck 1984 C. Roebuck, Ionian Trade and Colonization. Monographs on Archaeology and Fine Arts 9 (New York 1959) [Reprint 1984].
- Rose et al. 2007 Ch. B. Rose – B. Tekkök – R. Körpe et al., Granicus River Valley Survey Project, 2004–2005. Studia Troica 17, 2007, 65–150.
- Rosenkranz 1966 B. Rosenkranz, Fluß- und Gewässernamen in Anatolien. Beiträge zur Namenforschung NF 1, 1966, 124–144.
- Ruge 1939 W. Ruge, Troas. In: Realencyclopädie der classischen Altertumswissenschaft II 13 (Stuttgart 1939) 525–583.
- Sallmann 1971 K. G. Sallmann, Die Geographie des älteren Plinius in ihrem Verhältnis zu Varro. Versuch einer Quellenanalyse. Untersuchungen zur antiken Literatur und Geschichte 11 (Berlin 1971).
- Schadewaldt 1966 W. Schadewaldt, Iliasstudien (Darmstadt ³1966).
- Schliemann 1881 H. Schliemann, Ilios. Stadt und Land der Trojaner. Forschungen und Entdeckungen in der Troas und besonders auf der Baustelle von Troja. Mit einer Selbstbiographie des Verfassers, einer Vorrede von Rudolf Virchow und Beiträgen von P. Ascherson, H. Brugsch-Bey, E. Burnouf, Frank Calvert, A. J. Duffield, J. P. Mahaffy, Max Müller, A. Postolaccas, A. H. Sayce und R. Virchow (Leipzig 1881).

- Schliemann 1881a H. Schliemann, Reise in der Troas im Mai 1881 (Leipzig 1881).
- Schwyzler 1939 E. Schwyzler, Griechische Grammatik auf der Grundlage von Karl Brugmanns Griechischer Grammatik I. Allgemeiner Teil, Lautlehre, Wortbildung, Flexion. Handbuch der Altertumswissenschaft II 1,1 (München 1939/⁶1990).
- Sommer 2005 M. Sommer, Roms orientalische Steppengrenze: Palmyra, Edessa, Dura-Europos, Hatra. Eine Kulturgeschichte von Pompeius bis Diocletian. *Oriens et Occidens* 9 (Wiesbaden 2005).
- Stauber 1996 J. Stauber, Die Bucht von Adramytteion I. Topographie (Lokalisierung antiker Orte/Fundstellen von Altertümern). *Inchriften griechischer Städte aus Kleinasien* 50 (Bonn 1996).
- Stoevesandt 2008 M. Stoevesandt Homers Ilias. Gesamtkommentar (Basler Kommentar/BK); hg. v. Anton Bierl – Joachim Latacz. IV. Sechster Gesang (Z). 2. Kommentar (Berlin – New York 2008).
- Strasburger 1953 H. Strasburger, Der soziologische Aspekt der homerischen Epen. *Gymnasium* 60, 1953, 97–114.
- Stückelberger 1994 A. Stückelberger, Bild und Wort. Das illustrierte Fachbuch in der antiken Naturwissenschaft, Medizin und Technik. *Kulturgeschichte der antiken Welt* 62 (Mainz 1994).
- Talbert 2000 R. J. A. Talbert (ed.), *Barrington Atlas of the Greek and Roman World* (Princeton 2000).
- Tischler 1977 J. Tischler, Kleinasiatische Hydronymie. Semantische und morphologische Analyse der griechischen Gewässernamen (Wiesbaden 1977).
- Tozer 1882 H. F. Tozer, *Lectures on the Geography of Greece* (London 1882).
- Treister 1996 M. Y. Treister, *The Role of Metals in Ancient Greek History*. *Mnemosyne, Supplementum* 156 (Leiden 1996).
- Uerpmann – van Neer 2000 M. Uerpmann – W. van Neer, Fischreste aus den neuen Grabungen in Troia (1989–1999). *Studia Troica* 10, 2000, 145–179.
- Unger – Schütz 1982 H. J. Unger – E. Schütz, Pangaion. Ein Gebirge und sein Bergbau. In: B. Hänsel (ed.), *Südosteuropa zwischen 1600 und 1000 v. Chr. Prähistorische Archäologie in Südosteuropa* 1 (Berlin 1982) 145–172.
- Usener 1899 H. Usener. *Religionsgeschichtliche Untersuchungen* III. Die Sintfluthsagen (Bonn 1899).
- van der Valk 1979 M. van der Valk, *Eustathii archiepiscopi Thessalonicensis Commentarii ad Homeri Iliadem pertinentes* III. Praefationem et commentarios ad libros K–II complectens (Leiden 1979).
- Virchow 1892 R. Virchow, Über den troischen Ida, die Skamander-Quelle und die Porta von Zeitunlü. *Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften zu Berlin* 1892, 969–982.
- Visser 1997 E. Visser, *Homers Katalog der Schiffe* (Stuttgart – Leipzig 1997).
- Visser 2003a E. Visser, Die Aufstellung der Achaier-Kontingente (sog. Schiffskatalog). In: Homers Ilias. Gesamtkommentar II. Zweiter Gesang (B) 2. Kommentar von Claude Brügger – Magdalene Stoevesandt – Edzard Visser unter der Leitung von Joachim Latacz (München – Leipzig 2003) 145–246.
- Visser 2003b E. Visser, Die Aufstellung der Troer und ihrer Verbündeten (sog. Troer-Katalog). In: Homers Ilias. Gesamtkommentar II. Zweiter Gesang (B) 2. Kommentar von Claude Brügger – Magdalene Stoevesandt – Edzard Visser unter der Leitung von Joachim Latacz (München – Leipzig 2003) 263–288.

- Webb 1844 Ph. B. Webb, *Topographie de la Troade ancienne et moderne* (Paris 1844).
- Welcker 1845 F. G. Welcker, Über die Lage des Homerischen Ilion. In: ders., *Kleine Schriften zur Griechischen Litteraturgeschichte II* (Bonn 1845) pp. i–lxxxvi.
- Welcker 1861 F. G. Welcker, Alte Autoren in Bezug auf die Lage Ilions. In: ders., *Kleine Schriften zur Griechischen Litteratur III* (Bonn 1861) 17–26.
- West 1966 M. L. West, *Hesiod, Theogony*. Edited with Prolegomena and Commentary (Oxford 1966/21997).
- West 1995 M. L. West, The Date of the Iliad. *Museum Helveticum* 52, 1995, 203–219.
- West 1997 M. L. West, The East Face of Helicon. *West Asiatic Elements in Greek Poetry and Myth* (Oxford 1997).
- West 1998 M. L. West, *Homeri Ilias I. Rhapsodias I–XII continens. Recensuit, testimonia congescit* (Stuttgart – Leipzig 1998).
- West 2000 M. L. West, *Homeri Ilias II. Rhapsodias XIII–XXIV continens. Recensuit, testimonia congescit* (Stuttgart – Leipzig 2000).
- West 2001 M. L. West, *Studies in the Text and Transmission of the Iliad* (München – Leipzig 2001).
- Wiegand 1904 Th. Wiegand, Reisen in Mysien. *Athenische Mitteilungen* 29, 1904, 254–339.
- Wiesner 1963 J. Wiesner, *Die Thraker. Studien zu einem versunkenen Volk des Balkanraumes* (Stuttgart 1963).
- von Wilamowitz-Moellendorff 1916 U. von Wilamowitz-Moellendorff, *Die Ilias und Homer* (Berlin 1916).
- von Wilamowitz-Moellendorff 2008 U. von Wilamowitz-Moellendorff, *Homers Ilias* (Vorlesung WS 1887/1888 Göttingen). Nach der Mitschrift von stud. phil. Alfred Züricher (1867–1895) aus Bern; herausgegeben und kommentiert von Paul Dräger. *Spudasmata* 109 (Hildesheim 2008).
- Wolf 1992 A. Wolf, Hatte Homer eine Karte? Zu einer poetischen Weise, Küstenlinien und Länderformen darzustellen. *Antike Naturwissenschaft und ihre Rezeption* 1–2, [1992], 3–36.
- Wolkersdorfer – Göbel 2004 Ch. Wolkersdorfer – J. Göbel, Hydrogeologie der troianischen Landschaft. Eine Bestandsaufnahme. *Studia Troica* 14, 2004, 157–167.
- Wood 1769 Wood, Robert, *An Essay on the Original Genius and Writings of Homer* (London 1769) [Reprint in Wood 1976].
- Wood 1775 Wood, Robert, *An Essay on the Original Genius and Writings of Homer, with a Comparative View of the Ancient and Present State of the Troade* (London 1775). [Reprint in *Anglistica et Americana* 174 (Hildesheim – New York 1976)]

Dr. Bernhard Herzhoff
Waldweg 18
D-54306 Kordel