

Paweł Majewski

Textualization of Experience

Studies on Ancient Greek Literature



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The book is an analysis of Greek Hellenistic literature with the help of conceptual tools of cultural studies and media theory. Its main aim is to describe the cultural process during which Greek authors in the 4th and 3rd centuries B.C. made the “textualization of experience”, that is, transferred phenomenologically understood qualities of human sensory experience to the categories characteristic for textual description – as far as possible for them. This process is shown by examples from the works of Xenophon, Aristotle, Theophrastus, Philotas of Kos and Archimedes. The author also tries to show some of the consequences that the phenomenon of the Hellenistic textualization of experience had for the later epochs of European culture.

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Table of contents

Introduction	9
Chapter 1 The rhetors and the rhapsodes: notes on two modes of remembering	17
Chapter 2 Beginnings and development of technical writing: <i>Fachliteratur</i>	37
Chapter 3 Xenophon, Ischomachus, Kikkuli: the transparency of the message	41
Chapter 4 The putative empiricism of Aristotle	77
Chapter 5 Theophrastus: the world in the text	111
Chapter 6 The dried body of Philitas	137
Chapter 7 Archimedes and his <i>Sandreckoner</i>	153
Appendix. Two medieval traces of experience in the text	183
1) The structure of Isidore's of Seville <i>Etymologies</i> ; or, about the discontinuity of the European cultural remembrance	183
2) The copyist's suffering and the calligrapher's joy: on the psychodynamics of writing in medieval Europe	201
Bibliography of cited works	223

During his more than two thousand years of literacy, Western man has done little to study or to understand the effects of the phonetic alphabet in creating many of his basic patterns of culture. To begin now to examine the question may, therefore, seem too late.

Marshall McLuhan, *Understanding media.*
The Extensions of Man, chapter 9:
“*The Written Word. An Eye for an Ear*”
(*Routledge Classics edition*, 2002, p. 89)

Introduction

In the second book of his treatise *On the Nature of the Gods*, Cicero criticizes the views of the Greek atomists from the school of Epicurus:

At this point must I not marvel that there should be anyone who can persuade himself that there are certain solid and indivisible particles of matter borne along by the force of gravity, and that the fortuitous collision of those particles produces this elaborate and beautiful world? I cannot understand why he who considers it possible for this to have occurred should not also think that, if a countless number of copies of the one-and-twenty letters of the alphabet, made of gold or what you will, were thrown together into some receptacle and then shaken out on to the ground, it would be possible that they should produce the *Annals* of Ennius, all ready for the reader. I doubt whether chance could possibly succeed in producing even a single verse! (*De natura deorum* II, 37, 93)¹

Citing this passage of Cicero in a study on the ancient ideas concerning the notion of “element” (*stoicheion*), Hermann Diels emphasizes its similitude to the shape of fonts in the printing press invented by Johann Gutenberg, and points to the Democritean analogy between the atoms and the letters of the alphabet, enumerating other passages from ancient Greek and Latin texts, whose authors are using this representation too. But for Democritus or Lucretius, the comparison of the elements of matter to the letters of alphabet was nothing more than a visual illustration of their ontological and sometimes ethical views – and for Cicero such a comparison would be intolerable, since it is tantamount to a refutation of meaningfulness and purposefulness of the human world. It is very significant that Cicero mentions *The Annals* of Ennius – the most significant Roman historical epic before Virgil, of which he was also personally and intellectually fond – as an example of improbable coincidence which would be a random composition of scattered letters into just that poem. The vision of the world as a space of stochastic natural actions was utterly unacceptable for Cicero. In his terms, for the human mind desiring an order of things the world structured by

1 Cicero in twenty-eight volumes, vol. XIX, *De Natura Deorum, Academica*, with an English translation by H. Rackham, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd (Loeb Classical Library 268), MCMLXVII, p. 213.

chance from atoms and at the same time equipped with internal meaning is unbearable – equally as a text structured from aleatory letters and nevertheless equipped with internal meaning – because isolated atoms and isolated letters are equally nonsensical and meaningless. Through many centuries, in every culture of alphabetic writing, the users of this writing will look for sense and meaning in their world and in their texts, taking for granted – more or less consciously – that on some level of organization of the world and, respectively, of the text, the fundamental configuration of their components somehow obtains its internal cohesion, and that the discovery that cohesion is a crucial task of the human intellect. And when Marshall McLuhan in the middle of the twentieth century will stubbornly repeat that the alphabetic writing creates the modern man in a particular way because it consists of meaningless signs representing meaningless sounds – and at the same time, in its innumerable combinations, creates a canon of cultural texts defining the identity and self-consciousness of its users (who are also the users of culture) – he will also involuntarily repeat the idea of Cicero, though in an approbative context, like Lucretius in Roman antiquity.

* * *

This book is a separate intellectual enterprise, but it is also, to some extent, a continuation of my previous book, *Writing, text, literature. The writing practices of ancient Greeks and the matrix of European cultural memory* (Warszawa 2013), where, using achievements of diverse schools of the modern humanities, I try to sketch a scenario of the development of ancient Greek literacy to show how the mutual influences of the two main media of cultural communication, speaking and writing (in its alphabetical form), shaped the evolution of European culture. I was interested particularly in such influence that exists beyond intentional attitudes of creators and participants of cultural circulations of symbolic representations and nevertheless is not apprehended under the categories of “structure” and “system.” In that book, I considered various cultural phenomena, from Presocratic gnomas to the philological works of Alexandrians. But I omitted great number of textual phenomena, whose presence in ancient times may still contribute to the better understanding our present culture.

Here, I would like to partially fulfil this gap by showing how the people from Greek antiquity have been undertaking the task of the textualization of experience.

The notion of “experience” becomes now very popular after a long time of oblivion in the epoch when anti-subjective modes of thinking about human world prevailed in the humanities. It is a very problematic and multifaceted term, a term which has – just in its scope affirmed today – a long history dating from David Hume or even Francis Bacon. In this book, I understand “experience” as a resource of sensual data reaching to the consciousness of a human being by his or her sensorium based on the biological apparatus of perception and further subjected to volitional, emotional, and reflexive categorization in his or her mind. The data processed in such a way are connecting with sets of symbolic representations and resources of cultural memory, from which every human being draws his or her knowledge of lifeworld and to which he or she can add his or her own particle of data as a member of a community that is endowed with history, tradition, and identity – and all that finally becomes the content of “experience”. It is not hard to see that this account diverges far from the division between naturalist and culturalist methods of anthropological thinking. Indeed, this divergence is fully intentional. As a matter of research, the most important stuff for me are the forms of cultural communication and its media: above all, the alphabetic writing, mainly in its social and cultural dimension of writing practices, and the text, mainly as product of these practices functioning between senders and recipients of messages. To some extent, also speech is a subject of my interest – but only insofar as its momentality allows any research about its practices – because the speech is always actually correlated with writing practices in literate cultures.

“Text” is a term ubiquitous in this book. Usually, it has no connection with any particular specimen of any concrete notation, but also it has no relations with semiotic and structural theories of the sign. “Text” is meant here as a historically determined medium of cultural communication, similarly to e.g. the phone in modern times. Because I am concerned mainly with the culture of ancient Greece, it is obvious that “text” almost always means here a chirographic notation, a manuscript written in a book in the shape of a roll. In many cases, however, its chirography and the form of its material medium play a minor role as it is not always possible nor desirable

to have reasonable deliberations about the contribution of chirography in the epistemological and communicational functions of the text, which are the most important subject of my interest. I was trying not to hypostatize this term, not to make “The Text” from just “a text,” or turn it into some kind of interpretational fetish or a skeleton key in my inquiries. It is only a few times that I have decided to capitalize this word. And as for the difference between the text and writing, one may put it as follows: writing is a consequence of writing or sending practices, while the text is a consequence of the reading or receiving practices. In a purely material aspect, the text and writing are often, but not necessarily, the same thing.

In ancient Greece, these three media: speech, writing, and text – which, alongside image and performance, are the most fundamental media of communication in the human history hitherto – have determined, with their numerous mutual relations and influences, not only self-consciousness of man in his world of life, his understanding of his own existential position, but also the modes of articulation of that self-consciousness and understanding (together with experience as defined above, which is its crucial component) in symbolic messages that have informed subsequent phases of the development of the European culture. This statement is apparently self-evident, since it is hard to imagine any articulation of the human existential or symbolic data contained in a form other than verbal. In this case, there are only two possible alternatives: the image, a category which constitutes the second great field of symbolic communication, and the spectacle or performance which constitutes the third and last of these fields. It would be extremely difficult to indicate a phenomenon of any human culture in their historically recorded entirety, which in its intersubjective appearance and transmission would not be articulated in one of these fields or their various combinations – this is the only possible mode of making these data present in the reflective consciousness of human beings who participate in the system of culture. From my perspective, the most interesting issue is the evolutional and dynamical change of proportions between the “verbal” and “scribal” components in the process of transmission of experience between human beings. In this book, I have decided to analyze these ancient forms of this process (“ancient” means here also: primordial for our cultural circle, for our civilization), in which writing definitely prevailed over speech.

Speech and writing report human experience for humans and toward humans. Here is another statement which seems to be trivial, but after a more detailed inspection becomes no less problematic than the antecedent one. For it quickly becomes clear that the word, spoken or written, communicates experience in a very ambiguous manner, and that is because – again, it is apparently trivial – neither the spoken nor written word is identical with the content and experiencing of real experience, unless it is experience of the word as such (the “power of the living word” or “intensely experienced lecture of a novel”), which, in turn, requires advanced reciprocal reflection concerning the medium of language or, on the contrary, a total lack of such a reflection, when the word and the thing designated by it are the same for the speaker and the listener (viz. the writer and the reader). The problems of mimesis, of reference of the signs of language or of relation “word-object,” and the historical and cultural motives such as “inexpressible,” “unnameable,” “the limits of language,” “Aleph” from Borges’ stories and its cabalistic provenance, “zaumny yazik” (“zaum,” “the language beyond the mind”) of the Russian avant-garde, “universal language” as a goal of inquiries of whole cohorts of intellectuals and maniacs or “metalang” featured by Stanisław Lem in his *Imaginary Magnitude* – all these concepts and much more emerge from a fundamental, essential difference between experience as it is meant in this book and each possible expression of this experience regardless of the time, place, and mode of its articulation.

The textualization of the resource of immediate data of consciousness is a mean which enables their symbolical transmission toward the consciousness of others, who were beyond the scope of physical propagation of these data. To put it more simply, thanks to their writings and texts human beings are able to recount for other human beings their own sensual and existential experiences, observations, perceptions, and intellectual reflections derived from all this stuff. Furthermore, there is no need for personal interaction – as distinct from the use of living words, articulated with all riches of nonverbal means of communication. Conscious living, observation, and action – three great domains connecting and engaging the mental realm of the human being with his or her body, movements, and operations, which, taken as a whole, form the entire body of experience: in their verbal, reflective expressions, mediated by an apparatus of

hierarchically structured notions and categories of language, they create what we are used to call “knowledge.”

In the European culture – and indeed all other human cultures, which accepted writing and its accompanying practices as the main medium for the transmission of cultural messages – the possibility of the transmission of experience (resulting from conscious living, observations and actions) at a distance, or the possibility of the creation of **textual knowledge** is so obvious that, for members of these cultures, it is extremely hard to imagine any alternative for such a state of human affairs. But, I repeat it once again, there is not a single element of this medial situation that would be obvious or self-evident; instead, all of these elements are the results of cultural processes which, at initial phases of their development, were only faintly made aware by human beings, while at more advanced phases were often just taken for granted by them – as phenomena which are natural, transparent, and neutral for the process of expression and the transfer of experience.

In order to stress the divergence between lived and transferred experience, I use in this book a term coined by Edmund Husserl in 1936 – *Lebenswelt* (*lifeworld*) – which became popular among philosophers and sociologists from the phenomenological school. Husserl’s term is especially helpful for my inquiries because it determines a whole complex of sensual experiences and feelings, together with their accompanying mental reactions and intellectual processes evoked in every human being by his or her immediate “here-and-now” experienced material environment. “Experience” which I am talking about is embedded exactly in *Lebenswelt*.

It must be strongly stressed that we draw each one element of our knowledge of the external world, which exceeds beyond *Lebenswelt*, from the communicational media. Before radio, cinema, and TV became globally widespread, the only medium suitable for the extension of human *Lebenswelt* – besides the living speech of others and a limited number of visual images that proliferated only in the era of their mechanical reproduction – was writing, which down to the middle of the fifteenth century circulated in the western civilization only in the form of manuscripts. That said, the main goal of this book is to answer the question how “experience,” as described above, has transformed into so conditioned forms of message.

In the twentieth century, the problem of the linguistic framing of experience preoccupied many thinkers from the phenomenological and

hermeneutic schools. It also proved interesting for the structuralists and poststructuralists, even though they approached it from another, not subjective, standpoint, in which the object of deep thoughts becomes the problem of reference of linguistic signs in abstraction from the subjective-experiential realm.

In turn, the inheritors of positivism developed distinct theories of knowledge, founded on their obvious certitude about the “naturalness” and absolute, non-relative status of its linguistic, especially textual, expressions. At the end of the previous century, besides the further development of all these modes of thinking, there was a rapid growth of new methods of thought concerning both experience as such and its linguistic expressions. Now these questions are dealt with by researchers from so different areas as: post-colonial studies, gender and queer studies, grounded theory in social sciences, cultural studies, memory studies, sensory studies, and so on. We are observing an intense reflection especially on experiences related to the negative aspects of human social and historical condition, such as: exclusion, marginalization, stigmatization, privation, traumatization, and victimization. It is hard to overestimate the role of Holocaust studies, where the problem of intersubjective (non)expressibility of the border experiences is putting and discussing with extreme acuity. Most of these academic investigations is diversely related to the current social and political problems of our civilization. Within this panoramic view the “pure” scientific knowledge turns out to be only one among many equivalent elements, highly dependent on non-scientific aspects of its creation and transmission. This knowledge is also no more – at least in the actual phase of our cultural evolution – the highest, most privileged form of learning. Moreover, it is impossible to attribute such a role to anyone other form of knowledge, except by virtue of an arbitrary decision.

So, the notion of experience – a notion extraordinarily important in our time, even, so to say, neuralgic for the contemporary cultural and political common consciousness – is present today in philosophy, historiography, social sciences, literary studies, and anthropology – and everywhere it is embedded (categorially and analytically) in the metacategories which are emerging from writing practices, from the textual thinking founded for the Europeans by the ancient Greeks, with Plato and Aristotle at the forefront.

By formulating such a supposition (which was proved already in my previous book and here the proof is being continued), I am not intending to project some kind of escape or even withdrawal from this situation – a situation which would be labelled by more radical theorists as the prison of writing. We cannot get out from this prison for this would require us to exceed the borders of language understood as a tool for the human communication. The only thing we can do is to try to make our utterances – verbal and textual – as meaningful and affecting as it is possible for us, even when these utterances say nothing about the reality as such; like this book which, to be sure, is composed only from interpretations of other books and texts, but which nonetheless strives in its content to get out of the **brackets of text** enclosing that part of our world which is not a text and which appeared within these brackets only in part and by way of contingency.

One can guess that part is *pars maxima*. For those of us who are not the inhabitants of textual world such guessing is obvious, but just because writing is not their natural environment, they are seldom able to articulate this obviousness. So, usually they are content with its silent experience.

Chapter 1 The rhetors and the rhapsodes: notes on two modes of remembering

Before I get to describing the cultural phenomena connected mainly with the presence of the text in the Greek Hellenistic culture, I would pay some attention to the one of human mental abilities, which, although based on an organic, biological fundament, enters into a close relationships with the media transferring the cultural content and yields to their influences. This ability is what we call memory. And the question is: how the relations between memory and the plexus “oral/written” were formed in those phases of ancient Greek culture when writing and the text already dominated the circulation of symbolic signs.

In the Greek mythology, the mother of Muses was Mnemosyne – the personification of memory. She has this role e.g. in the lineage of gods described by Hesiod in *Theogony*.² There is no doubt that, before the broad proliferation of print, memory was one of the major human mental powers in terms of their importance for the cultural system. After all, it was the mental power responsible to the greatest extent for the transfer of cultural messages everywhere besides relatively narrow social groups dominated by the circulation of the manuscripts.

Memory performed a very important function in the ancient culture, both in oral and written transmissions. Its functioning in oral transmissions has been analyzed meticulously but not decisively by such theorists of oralism as Milman Parry, Albert B. Lord, Walter J. Ong, Eric A. Havelock, and their successors working on the borders between classical and cultural studies at the turn of the nineteenth and the twentieth centuries. In turn, the role of memory in the written forms of ancient and early medieval European culture has been precisely described for the first time in two initial chapters of

2 Cf. James A. Notopoulos, “Mnemosyne in Oral Literature,” *Transactions and Proceedings of the American Philological Association*, vol. LXIX, 1938, pp. 465–493. It is one of very first philological papers containing the results of Milman Parry’s researches.

Frances Yates' book, *The Art of Memory*, and later in a number of medieval studies with Mary Carruthers' works at the forefront. So, it might seem that there is nothing more to say about this topic. But this is not the case, since no one so far has analyzed mutual relations between these two modes of memory, which are very different. As we shall see, these are the two oldest modes of memorization in our culture and they furnish a constant point of reference for all later models up to our time.³

This is not an unfounded statement. One needs only to read major works written by the scholars interested in oralism and the "art of memory" to find out that each of these groups of scholars was not interested in the results obtained by the other; perhaps, they did not even know about each other. Thus, in the second chapter of her book about the art of memory Frances Yates writes:

One must believe, I think, that Simonides [a Greek archaic poet, traditionally recognized as the inventor of the art of memory – add. PM] really did take some notable step about mnemonics, teaching or publishing rules which, though they probably derived from an earlier oral tradition, had the appearance of a new presentation of the subject. We cannot concern ourselves here with the pre-Simonidean origins of the art of memory; some think it was Pythagorean; other have hinted at Egyptian influence. One can imagine that some form of the art might have been a very ancient technique use by bards and story-tellers. The inventions supposedly introduced by Simonides may have been symptoms of the emergence of a more highly organized society. Poets are now to have their definite economic place; a mnemonic practiced in the ages of oral memory, before writing, becomes codified into rules.⁴

Yates was a pioneer in modern research concerning the ancient art of memory. Before her book, only a few texts on that theme appeared.⁵ In

3 It must be noted here that I use the term "memory" basically in its cultural meaning, and not the physiological one. Of course, any exhaustive elaboration of this problem would require the knowledge of neuroscience. Nor do I include a great mass of recent articles written in the vein of memory studies, for an inquiry into the ancient contexts of numerous forms of collective memory described by theorists from this field would require a separate book.

4 Frances A. Yates, *The Art of Memory*, Routledge, London 1966, pp. 43–44.

5 See: Helga Hajdu, *Das mnemotechnische Schrifttum des Mittelalters*, Budapest 1936; the first part of this article (pp. 11–33) describes the ancient art of memory.

the greatest encyclopedia of the classical studies ever published (*Pauly's Realenzyklopädie der klassischen Altertumswissenschaft*), whose eighty volumes emerged as result of nearly hundred years of work of the best classical scholars (1894–1980), an entry about mnemonics fulfils only one column, and even not entirely. One can suppose that for the text-centered scholars from the turn of the nineteenth and the twentieth centuries “the theatres of memory” and other mnemotechnic tricks described by Quintilian or Cicero⁶ were embarrassing relics of an age when the written text had not yet the absolute power over human minds. In turn, the successors of Milman Parry on the field of oral studies were not interested in the art of memory for a quite opposite reason: it was a product of advanced literacy and the fact that there were relics of oral environment in it had no significance, at least for those of them, for whom the transit from “the oral” to “the written” was a revolution, not an evolution. Frances Yates herself spotted possible connections between the two distinct modes of memory: that of rhetors and that of rhapsodes. Still, she made only a general mention about these connections because her attention was focused on subsequent, mostly renaissance forms of the art of memory. Besides, it seems she did not know the achievements of Parry and Ong in detail, or she just ignored them.⁷ That is why memory of Homeric rhapsodes and

6 The bibliographical references about ancient sources of our knowledge of the art of memory are given by Yates, ch. 1 and 2. Here I only remind that the primary texts are: Quintilian, *Institutio oratoria*, XI 2, 1–51 (50–51 cf.: Pliny, *Historia naturalis*, VII 88–90); *Rhetorica ad Herennium* III 28–40; Cicero, *De inventione* I 9; Cicero, *De oratore*, II 350–360. There are to find descriptions of a mental mechanism known as “memory palace” or “method of loci,” although no one among ancient writers used such a name – it comes only from the times of Renaissance. The details of these descriptions leave no doubt that all this mechanism was based primarily on the writing (cf. e.g. *Rhetorica ad Herennium* III 30 about the role of the imaginations of letters). I will discuss these sources later.

7 Ong’s capital works on orality were published already after Yates’ *The Art of Memory*, but she knew very well his studies on Petrus Ramus. Significantly, during his intellectual career Walter Ong crossed the road from researches on life and work of the last great representative of the *artis memoriae* tradition, which was Petrus Ramus, to the analyze memory of rhapsodes – but he did it without, as it seems, noticing that there are any links between both modes of remembering. A reason for this was probably the fact that Ong – as distinct from

memory of sophists and rhetors became separated from each other in the contemporary humanities.

But were they separated only then? Let us have a look on a passus from Pliny's *Natural History*. Discussing the human mental abilities in the seventh book, Pliny mentions also memory (this fragment is almost identical with a passus in Quintilian's *Institutes of Oratory*, XI 2, 50–51, and this may be a proof for the stability of Roman imagination about the notion of memory).

As to memory, the boon most necessary for life, it is not easy to say who most excelled in it, so many men having gained renown for it. King Cyrus could give their names to all the soldiers in his army, Lucius Scipio knew the names of the whole Roman people, King Pyrrhus's envoy Cineas knew those of the senate and knighthood at Rome the day after his arrival. Mithridates who was king of twenty-two races gave judgements in as many languages, in an assembly addressing each race in turn without an interpreter. A person in Greece named Charmadas recited the contents of any volumes in libraries that anyone asked him to quote, just as if he were reading them. Finally, a *memoria technica* was constructed, which was invented by the lyric poet Simonides and perfected by Metrodorus of Scepsis, enabling anything heard to be repeated in the identical words. Also no other human faculty is equally fragile: injuries from, and even apprehensions of, diseases and accident may affect in some cases a single field of memory and in others the whole. A man has been known when struck by a stone to forget how to read and write but nothing else. One who fell from a very high roof forgot his mother and his relatives and friends, another when ill forgot his servants also; the orator Messala Corvinus forgot his own name. (VII 88–90)⁸

Here, Pliny understands memory as an ability to reproduce exactly the sets of names and relations occurring among them and among their designates. This is just such understanding of memory as it happens in written cultures – because writing becomes a matrix of memory, which should be mapped with absolute precision in subsequent mental acts of remembrance. One can see that this notion of memory is totally different from the dynamic memory of aoides as reconstructed by Ong and Havelock. It is significant that Pliny

Havelock – was not interested in the phase of mutual contact of oral and written cultures in ancient Greece.

8 Pliny, *Natural History with an English translation in ten volumes, Vol. II, libri III–VII*, trans. H. Rackham, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd (Loeb Classical Library 352) MCMLXI, pp. 563–565.

does not mention about the aoides at all: people who were able to memorize many thousands of epic verses (no matter how they did it) obviously would have caught the attention of the author who so willingly cited and narrated all exceptional achievements known to him – as is clearly visible even in the passage cited above. Instead of this, he recalls apocryphal tales about Cyrus the Great and Mithridates. So, it can be concluded that Pliny just did not know about the existence of aoides, and that he certainly did not know about their memorical achievements. And it is true also about Cicero and Quintilian, which means that probably no one of them found any information concerning the details of the activities of aoides in the Greek writings available to them, i.e. – in all Greek literature.

This statement is not surprising, because Plato and Aristotle, who lived few hundred years earlier, also mention the aoides and rhapsodes seldom and reluctantly.⁹ Moreover, all these authors undoubtedly knew the persons of Demodocus and Phemios from *Odyssey*, and yet they did not associate their songs – songs of true aoides – with the question of memory, which means probably that in their own personal memory and creative imagination Demodocus and Phemios were only fictitious persons, whose actions do not require any serious inquiry, other than actions of real men. They simply did not care, how aoides sung their songs; anyway, they probably thought that these older singers have already used a written text of their songs.¹⁰ But why memory of sophists and rhetors was so radically cut off from memory of their predecessors? To put it somehow paradoxically: why memory of the text forgot memory of speech?

Let us quote Frances Yates once again: “a mnemonic practiced in the ages of oral memory, before writing, becomes codified into rules.”¹¹ For

9 I tried to explain possible reasons of this reluctance in my previous book *Pismo, tekst, literatura* [Writing, text, literature], Warszawa 2013.

10 Already Demetrius of Phalerum (ca. 350 – ca. 280 BC) – who lived more than two centuries before Cicero, was a pupil of Theophrastus and, *ipso facto*, an “intellectual grandson” of Aristotle – claimed that the aoides, Phemios from Ithaca among them, wrote down their songs to perform them later with musical instruments (fr. 146 Stork-Ophuijsen-Dorandi, forwarded by Tzetzes in his introduction to the scholia to Lycophron). It is a very expressive example of forgetfulness about the oral performances.

11 Yates, p. 44.

Yates, oral memory of rhapsodes is just the primal, primitive, intuitive ability, which can be appreciated only insofar as it is framed within the strict rules of *artis rhetoricae*. In fact, her account did not differ from the views of all modern of rhetoric, and its ancient codifiers, too, at least those who noticed any kind of memory other than rhetoric one, which was rare. And Eric A. Havelock, in his studies on Greek mentality in the fifth century BC showed that the rising literacy produced a similar approach to oral culture among sophists and philosophers, although in their case this approach was naturally ambivalent, because they dealt with a new medium of communication, with which they had to come to terms. But Havelock, because of his main area of interest was the influence of writing on the Greek philosophy, did not include into his analyses the fact that transition from orality to literacy did not take away the importance of memory, but just changed this role, so radically that the memory of rhapsodes' memory vanished very quickly. What this change was about?

The proliferation of writing freed the Greek minds from the necessity of memorization of all the content of their symbolic culture – this theorem is one of the main assumptions of the whole theory of the ancient Greek orality. There is also an equally common assumption that this freedom was associated in Greek minds not only with benefits, as evidenced by the legend of Theuth and Thamus narrated in Plato's *Phaedrus*. For Plato, the transfer of memory from the inside of the human mind to its outside – that is to say, into the text – was related with a danger of “corruption of thought:” it was a purely ethical question, and it is for purely ethical reasons that Socrates in Platonic dialogues criticizes the mindless learning by heart of sophistic declamations. “Forgetfulness,” about which Thamus speaks, should be understood not verbatim, as an oblivion of any content of the mind, but as a component of the Platonic metaphysics: it is an oblivion of Truth in favor of “beliefs” (*doxai*), which occurs every time the living word of a real dialogue between a master and a seeking disciple degrades to the form of a mute, written, and petrified substitute, available to any random reader, who can read it in any random way. Nevertheless, if one considers this question out of its ethical context, it will turn out that the process of introduction of writing to Greece admittedly deprived the oral memory of its *raison d'être* but did not eliminate the need for memory as such.

The Greeks no longer needed the psychodynamics of orality as reconstructed by Ong – that is why they forgot it so soon. But they still needed a form of cultural memory, because the growing circulation of written texts did not eliminate from their mentality certain primal features of oral culture. I mean here the culture of “the living word,” rhetoric, the culture of speeches that in ancient Greece and Rome were delivered only from memory. No renowned sophist or rhetor read his speeches from written scrolls. And that is precisely the point where the art of memory begins. Its putative inventor was the poet Simonides of Ceos, but all its Greek masters known by their names – like Metrodorus of Scepsis, or Hippias of Elis¹² – were also the rhetors. They could construct their arguments using all the benefits of writing: the hypotactic syntax, the system of abstract ideas and notions, the inner critic of one’s own and someone else’s discourse. But they presented the final result of all these “written” treatments for the public just as their predecessors performing the Homeric songs. And the same way of presentation of very different structures of enunciation required also a very different method of memorization. This method was just the art of memory.

Therefore, I would argue that the art of memory – *ars memoriae*, whose history we can trace in the European culture from the fifth century BC onwards to the Age of Enlightenment – is a technique of transfer of the cultural content that, in the process of evolution of Western culture considered in terms of its media evolution, was a succession of oral psychodynamics subjected to the rigors of the written discourse. The beginnings and development of the art of memory resulted from the few centuries of mutual interpenetration of both these modes of cultural communication. In an older (“revolutionary”) version of the theory of Greek orality, the occurrence of the art of memory is incomprehensible: writing just frees its users from the necessity of memorization. And perhaps that is why the more radical theorists of orality showed no interest in this problem.

Let us set up a “discrepancy report” between the oral mode of memory and the written one.

12 Hippias was one of historical persons scoffed by ironical Socrates (who did it in Platonic dialogues titled with the name of Hippias) just because of his masterful memory. See: *Greater Hippias* 285 and *Lesser Hippias* 368.

	The psychodynamics of orality	The art of memory
Enunciation type	formular	rhetorical
Repetition type	approximate (contextual)	verbatim (textual)
Performers	rhapsodes and aoides	sophists and rhetors
Social form	aristocracy, oligarchy	democracy
Method	performance, improvisation	mind palace, algorithm
Medium	living word, voice	written text
Senses	whole sensorium	eyesight
Physiological context	body	mind

When I use the term “performance,” I mean not only the social conditions of the performance situation but also the image of rhapsody emerging from Lord and Parry’s research, which involves not only “pure memory,” i.e. the memory used by the written man, but also all of his carnality – the same aspect of the psychodynamics of orality is referred to in the table by the terms “whole sensorium” and “body” contrasted with “eyesight” and “mind” on the side of the art of memory. These somatic aspects of the psychodynamics of orality bring it closer to the phenomenological analyses of Merleau-Ponty and his successors.¹³

Let us now look at some excerpts from the source texts on the art of memory in ancient times. In the body of preserved works devoted to the theory of rhetoric, they constitute a small fraction, which indicates little interest of Roman theorists of pronunciation in this problem.¹⁴ Greek texts concerning this field have been too little preserved to allow us to formulate

13 In the modern humanities, there are at least two currents that can provide further inspiration or research tools for the issues discussed in this text. The first is the performance theory of Richard Schechner, the second is the somaesthetics of Richard Shusterman. Schechner examines the general conditions for performing all, and especially creative human activities, which take place within the framework of social ties using symbols (especially language symbols). Shusterman explores the relationship between mental and bodily practices in cultural contexts.

14 The marginal status of the problem of memory in the ancient theory of rhetoric finds its equivalent in its contemporary discussions. In Lausberg’s canonical synthesis (*Handbook of Literary Rhetoric*), only 9 of 1324 paragraphs (i.e. two pages of text from almost a thousand) are devoted to memory.

binding judgements, but it is worth noting that in both Aristotle's *Rhetorics* there is not even a single mention of memory, and his short dissertation *On Memory* (449 b-453 b) deals with this problem in complete detachment from the historical, social, and cultural context. In other words, the Stagirite adopts a naturalistic, not a cultural understanding of the phenomenon of memory. Many remarks that shed light on the transition from oral to rhetorical memory would certainly be found in the works of the sophists, from which only small fragments survived to our times. The Roman author of *Rhetoric for Herennius* says (III, 23, 38):

I know that most of the Greeks who have written on the memory have taken the course of listing images [*imagines*] that correspond to a great many words, so that persons who wished to learn these images by heart would have them ready without expending effort on a search for them.¹⁵

Then he criticizes this method as ineffective. This is one of our few specific information about the mnemonics of sophists. It can be assumed that the multiplicity of *imagines*, i.e. mental representations of objects that were connected with words and problems of prepared and uttered speech, postulated by sophists, maintains a strong connection with oral psychodynamics, with the richness of details characteristic for it and for the originally embedded home epics, serving to make the stream of speech better present in the minds of the recipients.

Memory (*memoria*) was the fourth of five phases of speech preparation in the most frequent, peripathetic division of rhetoric. However, the most important were the first three phases: *inventio*, *dispositio*, and *elocutio*. They determined the scope, content, and shape of the speech, the means of expression used in it and the methods of persuasion. Memory only served to consolidate the finished material, and the fifth part of the standard theory of rhetoric – *pronuntiatio* – was as neglected as the previous one, but also equally interesting from the point of view adopted here. For it was a theory of the very performance of speech, covering the same issues mentioned here in connection with “motorics,” “somaesthetics,” and “memory of the body” in the psychodynamics of orality – but also treating them

15 Pseudo-Cicero, *Ad C. Herennium De Ratione Dicendi (Rhetorica Ad Herennium)* with an English translation by Harry Caplan, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press (Loeb Classical Library 403) MCMLXIV, p. 221.

in a completely different way. However, let us return to the memory of rhetoric.¹⁶

One statement about memory can be found in Cicero's youthful work on the first of the most important parts of pronunciation theory, *De inventione* (I, 9). It is a concise definition:

memoria est firma animi rerum ac verborum perceptio [Memory is the firm mental grasp of matter and words].¹⁷

Let us note that, already in this very short term, one can see a certain connection with oralism, unintentional by the author, just like all the others I will be pointing out here. For Cicero speaks of a grasp [*perceptio*] of *words* and *matter*. The notions of *res* and *verbum*, which are standard in the theory of rhetoric, roughly correspond to our terms of *content* and *form*. *Res* is an image of a thought, which the speaker must pin on the words. This image does not necessarily consist of things, of representations of

16 At this point, it is worth noting that all the ancient rhetoric in general is a very promising field of research not only for oral/written theorists, but also for all authors dealing with cultural communication media. As far as I know, so far few scholars have entered the field. In Lausberg's case the *pronuntiatio* deserves even less attention than *memoria*. Although Lausberg notes in passing (paragraph 1091) that "rhetorical pronunciation has its literary equivalent in epic recitation (Aristoteles *Poetica* XXVI, 6: *rhapsodein*), lyrical poetry (Arist. *Po.* XXVI, 6: *diadein*) and in drama (Arist. *Po.* XXVI, 6: *he hypokritike*)," it is doubtful that it could have any similarity in verbal and performance contexts. Elements of the performative analysis of Cicero's statement can be found in Jerzy Axer's dispersed analyses, but the main emphasis there is on the acting aspect of the speaker's actions, and not on the issues of somatics and communicative contexts, which are specific parts of this aspect. Axer treats oratory as an artistic rather than cultural practice. See e.g.: Jerzy Axer, "Tribunal-Stage-Arena: Modelling of the Communication Situation in M. Tullius Cicero's Judicial Speeches," in: *Rhetorica. A Journal of the History of Rhetoric*, vol. VII, no. 4, 1989, pp. 299–311.

17 Cicero, *De inventione, De optimo genere oratorum, Topica*, with an English translation by H. M. Hubbell, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd (Loeb Classical Library 386), MCMXLIX, p. 21. Some of the manuscripts here give "verborum ad inventionem," which, in turn, some modern editors understand as "ad inventionem retinendam," but the possible adoption of this version does not significantly change the meaning of the whole sentence.

material objects – it may be an image of ideas or emotions – but, as is clear from the source texts, it is related to a mental state in which words do not yet appear. Therefore, it can be assumed that the rhetor’s *res* corresponds, to a certain extent, to the visual image evoked by the rhapsod’s recitation in the minds of the listeners. We can see, however, that what was the final result of the oral psychodynamics is a prefabricated element in rhetorical theory. The medium of writing and text already includes the leading in the process of producing and transmitting a performative statement. Still, if we were to consider that in the theoretical juxtaposition of *res-verbum* there is some remnant of oral culture, even with an inverted sign, we would at the same time adopt the hypothesis that the very opposition of “form” and “content,” whose role in the history of European reflection on literature and art does not need to be reminded, would be yet another residuum of the ancient element of speech and its gradual change in writing, which could be added to the long list of such “residua” that constitute the self-knowledge of Western culture.¹⁸

To be sure, it is impossible to make such a strong hypothesis based on a single sentence. So let us take a look at the next significant fragments of these deliberations. The oldest description of mnemonics at our disposal is the conclusion of the third book of *Rhetoric for Herennius* – a treaty once attributed to Cicero, written between 86 and 82 BC. We read there (III, 17, 30):

Those who know the letters of the alphabet can thereby write out what is dictated to them and read aloud what they have written. Likewise, those who have learned mnemonics can set in “backgrounds” [*locis*]¹⁹ what they have heard, and from these backgrounds deliver it by memory. For the backgrounds [*loci*] are very much like wax tablets or papyrus, the images [*imagines*] like the letters,

18 Noteworthy in this context is the famous saying of Cato the Elder in Roman culture: *Rem tene, verba sequentur*, which can be roughly rendered as “stick to the subject and the words will come alone.”

19 *Locus* and *imago* [place and image] are the two most important tools of the process of remembering in the art of memory, forming the basis of the mechanism of the “palace of memory.” In order to master the course of the planned speech well, the speaker must place the images he associates with particular parts or words of an argument in the appropriate *loci*. Yates gives a detailed analysis of this process.

the arrangement and disposition of the images like the script, and the delivery [*pronuntiatio*] is like the reading [*lectio*].²⁰

This extensive comparison is evidence for the mixing of elements of speech and writing culture in ancient rhetoric theory. The thought patterns specific to both these media of cultural communication are mixed here. Although the comparison of memory to the tablet on which records appear is a great literary topos, whose realizations we have seen over the course of more than twenty centuries, from Plato to Locke²¹, this does not mean that one cannot point out specific conditions of this topos in any of its historical moments, especially the early ones. By the way, today's Internet users, who sometimes treat the electrographic recording of the text in the interface of the web pages as if it were a typographic recording, that is to say, embedded stable on the surface of the print page, reason along the lines of the author of *Rhetoric for Herennius*.

In describing *imagines*, the author makes an important distinction (III, 20, 33):

Since, then, images [*imagines*] must resemble objects [*res*], we ought ourselves to choose from all objects likenesses for our use. Hence likenesses are bound to be of two kinds, one of subject-matter, the other of words. Likenesses of matter [*res*] are formed when we enlist images that present a general view of the matter with which we are dealing; likenesses of words [*verba*] are established when the record of each single noun or appellative is kept by an image [*imago*].²²

At this point another clash of oral and written model of memory is visible, which causes a certain inconsistency in the quoted sentence, in which first there is a general similarity of *imagines* to *res* and immediately afterwards – two kinds of similarities, to *res* and to *verba*. The first of these similarities has its roots in the psychodynamics of orality: mental representations correspond to the general image of the spoken thought, not to single words. However, matching *imagines* to specific words is already a correlate of

20 Pseudo-Cicero, p. 209.

21 A noteworthy cognitive approach to the problems of ancient memory and culture of the book is the work of Jocelyn Penny Small: *Wax Tablets of Mind. Cognitive Studies of Memory and Literacy in Classical Antiquity*, Routledge, New York-London 1997.

22 Pseudo-Cicero, p. 213–215.

writing. The mental image becomes here an instance of the process of remembering derived from the written image of a word. Only in such a situation can the utterance be mentally dismembered into its individual verbal parts.

The following sentences of *Rhetoric for Herennius* describe a concrete example of using *imagines*. Without going into its detailed analysis (otherwise made by Frances Yates), I merely point out that the nature of associations according to which *imagines* should be selected for both *res* and *verba* has much more to do with “written mnemonics” than with mimetic intuition based on the general framework of the narrative, as Ong and Havelock had it. In short, these associations hinge on a rational-abstract analysis of the content of the statement, for which writing is the proper medium, not the voice. In the next example (III, 21, 34), which concerns remembering a poetic text (and thus a kind of text closer to the art of rhapsodies than judicial and showpiece speeches), there are also sentences in addition to similar technical recommendations:

By this method all the words will be represented. But such an arrangement of images [*imagines*] succeeds only if we use our notation to stimulate the natural memory, so that we first go over a given verse twice or three times to ourselves and then represent the words [*verba*] by means of images [*imagines*]. In this way art will supplement nature.²³

After these sentences one can no longer doubt that writing is the primary medium for the rhetorical art of memory. Any remnants of living speech created spontaneously are subordinated to it to such an extent that nobody remembers their origin.

These are not all the important observations of the anonymous author of *Rhetoric for Herennius*. In the following, he deals with determining which *imagines* are best for enhancing memory, which ones work best on it. His conclusion is as follows (III, 22, 36): “Thus nature shows that she is not aroused by the common, ordinary event [such as sunrise and sunset – add. PM], but is moved by a new or striking occurrence [such as a solar eclipse – add. PM].”²⁴ Here, another influence of writing becomes apparent: the speaker’s memory no longer reacts to “everyday life” because it is not

²³ Pseudo-Cicero, p. 217.

²⁴ Pseudo-Cicero, pp. 219–221.

burdened with the obligation to contain the entire content of culture. There is no longer any need to remember long enumerations, lists, genealogies, or detailed behavioral scenarios. Thus, what is particularly easy to remember becomes “uncommon.” And so it is in Western culture to our days.

One of the last sentences in the part of *Rhetoric for Herennius* devoted to memory is: “So, since a ready memory is a useful thing, you see clearly with what great pains we must strive to acquire so useful a faculty.”²⁵ Whether the view of the ancient aoides and rhapsodes on their own art was similar to this bitter self-awareness of rhetoric, cannot be determined today. Perhaps, they did not pay so much conscious attention to their own technique as to be able to formulate such reflections.

Let us move on to another elaboration of rhetorical art. In the dialogue *On the Orator* (*De oratore*), Cicero adds to the image of memory we have already learned some interesting details related to legal practice. When calculating the benefits for a judicial speaker of mastering the art of memory, he says through one of the participants in this dialogue (II 355):

But what business is it of mine to specify the value to a speaker and the usefulness and effectiveness of memory? of retaining the information given you when you were briefed and the opinions you yourself have formed? of having all your ideas firmly planted in your mind and all your resources of vocabulary neatly arranged? of giving such close attention to the instructions of your client and to the speech of the opponent you have to answer that they may seem not just to pour what they say into your ears but to imprint it on your mind?²⁶

What manifests itself here is the complex communication situation in which the rhetor operates. The art of pronunciation was still quasi-oral at the time, not allowing the use of written records (or allowing such a use only for special moments, such as reading testimonies of witnesses or legal acts). At the same time, however, the degree of complication of judicial arguments and the structure of legal reasoning was already determined by the use of writing. Therefore, a good judicial speaker had to combine the “rhapsodic”

25 Pseudo-Cicero, p. 225.

26 Cicero in twenty-eight volumes, vol. III, *De Oratore in two volumes*, pt. I, *Books I, II*, with an English translation by E. W. Sutton, completed, with an Introduction, by H. Rackham, London, William Heinemann Ltd,

ability to deliver or even make extensive speeches from memory – with the critical ability to immediately assess his opponent’s complex reasoning, which he could only record by listening. *Ars memoriae* facilitated this difficult task, partly in keeping with both communication models. That is why in the following sentences Cicero praises people gifted with great memory by nature, because they can remember more of someone else’s arguments and more of someone else’s words in general. In oral culture, such an ability was not needed for there was no critical, internally differentiated discourse on such a large scale. In Cicero’s day, such a discourse had already become established, but the methods of its application still remained partly “illiterate.” But immediately afterwards (III 357), when the role of the senses in intellectual processes is mentioned, Cicero says that auditory experiences should be amplified by visual ones, because then they become more easily fixed in the mind. There is no mention of the text here, but the mere emphasis on the value of sight suggests its presence or is caused by that presence.

Quintilianus, who at the end of the first century AD summarized the knowledge of rhetoric in his *Institutio oratoria*, did not add anything significantly new to the information provided by his predecessors. However, the way he gave his lecture suggests the same residua of orality whose presence I have indicated in *Rhetoric for Herennius* and in *De oratore*. Still, in the fourth century AD Fortunatianus, the author of the last ancient *Ars rhetorica*, included in the form of questions and answers, repeats:

Do you always have to learn words? As long as time permits; if not, let’s stick to the *res* itself and match the words with it at the right time (III 14, trans. PM)

It turns out, therefore, that in the writings of Latin theorists of rhetoric from the first century BC and the first century AD one can find some traces of oral culture, which have been preserved in rhetoric for many centuries to come, regardless of the consciously developed shape of the whole discipline. But these traces are strongly obliterated and were hardly visible to the authors who left them in these texts.²⁷ Thus, the thesis put forward

Cambridge (Massachusetts), Harvard University Press (Loeb Classical Library 348) MCMLXVII, p. 467.

27 It should be remembered, moreover, that the proportion of orality and literacy in Rome during the Late Republic and Early Empire was very different from

here about a radical historical break between the rhetoric memory and the rhapsodic memory remains in force, and what is more – the power of this break is revealed even more clearly precisely in the lack of knowledge of Cicero or the author of *Rhetoric for Herennius* about possible links between rhetoric *memoriae* and psychodynamic memory and in the close connection of these residuals with notions or ideas already shaped solely on the basis of the medium of writing.

Are there today any remnants of the two memorization models discussed here? Undoubtedly – some of them were described by Paul Zumthor and Walter Ong, among others. The rhythmic enumerations, the refrains of the entertainment songs, and all the repetitive formulas present in our speech and in our verbal practices, which the mentioned authors indicate, can be regarded as residuals of orality. In my opinion, some features of most performing arts can also be added to them. An actor, dancer, or musician masters their skills in a similar way as performers of oral epics did. Their memory is not the “memory of the brain,” which would include only the textual record of the role or score, but the “memory of the body,” to use the title of an essay by Jan Kott on similar issues,²⁸ or “sensual-motoric memory.”²⁹ “Memory of the brain,” on the other hand, is memory of

the ideas and habits of our era. It is not a matter of the degree of the spread of writing (i.e. the index of society’s literacy), but of the fact that the Roman theory of rhetoric – as never before and never later in Europe – has achieved a functional alignment of literature and judicial pronunciation. Indeed, one and the same theory could have been equally successful in describing both these linguistic and cultural practices. Even for a medieval European, they were completely separated from each other. This theoretical equation testifies to the profound difference in the perception of the division between “artistic” and “non-artistic” linguistic practices between the ancient Romans and the people of Europe in later periods. This difference must be taken into consideration in our understanding of their perception of their mutual relationship in the performance of these practices. This is another possible research problem for performance scholars and somatoestheticians.

28 Jan Kott, “The Memory of the Body,” in his: *The Memory of the Body. Essays on Theatre and Death*, Evanston 1992.

29 Interesting descriptions of such a mnemonic method can be found in the texts of performance art theorists, especially those dealing with acting and music. Similar theses on the relationship between body, mind, and performance can be found in the texts by Konstantin Stanislavski and Edward Gordon Craig.

scientists, humanists and, to some extent, the creators of fiction – and this state of affairs is a result of an extremely profound literarization of their professions in a historical and cultural process.³⁰

As for *artis memoriae*, there is no doubt that all “mnemonists,” people gifted with a phenomenal memory, described by contemporary authors dealing with the phenomenon of memory (from Alexander Luria to Oliver Sacks and the editors of *The Guinness World Book of Records*), are involuntary successors to the former masters of this art. Their abilities are innate, not acquired, but – it is worth noting – a mnemonist described by Luria in his *Little Book About A Vast Memory*³¹ remembered everything in a way that almost coincided with the method of “memorial palace” described by Cicero and Quintilian. On the other hand, the cases of “great memory” cited by Pliny also had to be conditioned physiologically. In our times, however, such skills are only curiosities or objects of neurophysiological research. It is also obvious that memory of the creators of culture, burdened in the Oral Age with the weight of the whole content of culture, was probably burdened more or less strongly (though again – in a completely different way) with the weight of bibliographic data.

Continuing these remarks, we should also mention the distinction made by Roman theorists of rhetoric between natural memory (*memoria naturalis*), meaning an “ordinary” ability to remember, and artificial memory (*memoria artificiosa*), meaning the ability to remember much more data than in the case of ordinary memory. So, the author of *Rhetoric for Herennius* tells us (III 28–29):

There are, then, two kinds of memory: one natural, and the other the product of art. The natural memory is that memory which is imbedded in our minds,

Schechner and Shusterman’s theoretical works can also be useful in analyzing musical performance as a cultural phenomenon. Within the framework of memory studies, the memory of the body was first studied by Paul Connerton in his book *How Societies Remember* (Cambridge 1989).

30 Attempts to “exit beyond text” made in various literary eras and styles and, much less frequently, in schools and philosophical orientations deserve careful examination. They were particularly intensively undertaken by Romantics.

31 Alexander Luria, *The Mind of a Mnemonist. A Little Book About A Vast Memory*, Harvard 1968. Havelock quotes Luria’s analyses from this book in Chapter 5 of his book *The Muse Learns to Write* as an illustration of non-written

born simultaneously with thought. The artificial memory is that memory which is strengthened by a kind of training and system of discipline. But just as in everything else the merit of natural excellence often rivals acquired learning, and art, in its turn, reinforces and develops the natural advantages, so does it happen in this instance.³²

In this fragment, we again have to do with the popular topos (nature surpasses art, art refines nature) and again we can presume that it is precisely its use that is temporarily close to its historical origins. The distinction between natural and artificial memory, each of which contributes to the strengthening of the other, did not exist in the Oral Age, since writing is also necessary for its introduction. For an oral mnemonist, there is no difference between the resources of his own memory and the resources of the “external memory” of his culture. It does not exist because memory of such a man is in his own opinion or intuition – and in the opinion of his countrymen – identical to the whole memory of his culture. Hence, the categories of “naturalness” and “artificiality” do not make sense here. In order for them to exist, it is necessary to have a medium external to human memory to convey cultural contents – which, in the case discussed here, is writing. By radically expanding the content of culture and, at the same time, broadening the realm of experience, no individual memory is able to encompass this content, and if so, those who embrace it more than others must develop a special mechanism of remembering – secondary to the basic medium of communication. And so again we come to the art of memory.

In the written Greek culture of the fourth or third century BC there were certainly people who knew Homeric epics by heart, but knew them from **the text**. And this knowledge was no longer a necessary condition for their culture to last, but only an impressive mnemonic achievement or a reason for personal satisfaction, sometimes also an ideological symbol.³³ Here we

methods of categorizing data in the human mind – which, in the context of these observations, does not seem entirely accurate.

32 Pseudo-Cicero, p. 207.

33 In a developed culture of writing and printing, books were destroyed many times in order to destroy the cultural memory they contain, but perhaps never – neither in Hitler’s Germany, nor in China under Qin Shi Huang in the third century BC, nor during the religious wars of the Reformation period – has such a degree of destruction been achieved that the sustainability of the basic structures of culture contained in the records been seriously threatened. Such

can also see a change in the social functions of memory after culture had passed to the phase of the predominance of writing. After all, the art of memory was not only used to deliver carefully calibrated speeches. From the book by Frances Yates we learn about its numerous connections with various, mainly “underground,” currents of European culture from late antiquity to the Enlightenment. However, whatever were the social roles of the art of remembrance – they were certainly not the same as the social role of psychodynamics of orality, as this served the sustainability of culture as a whole.

Considering the relationship between oral and written memory, at least one more preliminary hypothesis can be made. Plato rejected the activities of the sophists, and thus also their mnemonic methods (the previously mentioned fragments of both *Hippiases* speak directly about it). If one considers Havelock’s interpretation in the *Preface to Plato* as the authoritative one, the philosopher also rejected the activity of rhapsodes with their oral psychodynamics. This means that he did not like either “natural” memory of the oralists or “artificial” memory of the sophists. Why did he not recognize any part of this alternative? Well, perhaps because none of them fit into his own concept of memory, which he put forward in the science of anamnesis.³⁴ The memory of the rhapsodes and the memory of the sophists, despite their great differences, had the same basic task – to record and repeat human words, regardless of their “essential” meaning, regardless of their attitude to the Truth. For similar reasons, many people today do not like the Internet, which serves as a storehouse, and since the spread of social networking sites, also as a centrifuge of all possible manifestations of human mental activity regardless of any value system. This, however, is the purpose of any medium for the transmission of cultural information: it is up

a situation can be found in Ray Bradbury’s fantastic novel *Fahrenheit 451*. Its protagonists oppose totalitarian power, learning by heart the texts contained in the books destroyed in mass. In Orwell’s *Nineteen Eighty-Four*, totalitarian power manipulates social memory through radical current transformations of the stock of texts archived in libraries (depending on the political situation, new “right” versions of old newspapers are printed and previous ones deleted).

34 The combination of rhetorical mnemonics with the Platonic anamnesis by some modern researchers testifies to a complete mixing of all ancient memory models in their text-centered interpretations.

to the user, sender, and recipient to determine the value and meaning of this information. But for a philosopher with such views as Plato, it was unacceptable. Hence his aversion to both these forms of flawed human memory which so easily dissuade one from the Truth and so reluctantly bend to it.

Chapter 2 Beginnings and development of technical writing: *Fachliteratur*

Memory, understood as a psychological ability, and not as an intellectual disposition mediated and strengthened by notation, was no longer one of the main tools for conveying symbolic content in the post-classical eras of Greek culture. These were epochs of an increasing influence of the text, which with time began to take on forms and enter into cycles exceeding even the achievements of Alexandria's scholars in the field of philology and text-centered literary forms. However, the power of the text over human cognitive processes became neither indivisible nor unambiguous.

Alexandrian creators and scholars, active in the third and the second centuries BC, developed textual practices to replace the *Lebenswelt* experience in the way we see for the first time in the works of Aristotle, whose demands they developed intensively, though not necessarily under his direct influence, in their textual "theory-practice."³⁵ But the first attempts at the textualization of experience came much earlier among the Greeks. These attempts, made by logographers and sophists, remained isolated in the fifth century. However, at the end of this century, and in the century to follow, new, more numerous texts with a textbook function appeared, providing theoretical knowledge on various social practices and forms of action. The section of ancient literature usually referred to as *Fachliteratur* in German ("specialized literature" or "professional literature") can be considered as one of the explicit implementations of the principles of textualization of experience. However, the question must be asked about the internal diversity of this literature, both in terms of the forms of written expression it uses and in terms of the type of social and target group circuits.³⁶

35 See: Roy Harris, *Rationality and Literate Mind*, Routledge 2009, Paweł Majewski, *Pismo, tekst, literatura* [Writing, text, literature], Warszawa 2013.

36 Contemporary specialist literature devoted to ancient specialist literature is very rich. In the following sections, I will cite representative examples on individual partial topics. On the general quality of Greek technical writing see. e.g. Philip J. van der Eijk, *Towards a Rhetoric of Ancient Scientific Discourse: Some Formal Characteristics of Greek Medical and Philosophical Texts*, in: Egbert

For, as in other genres of ancient text, it is possible to see here an evolution that has been influenced by the processes of dissemination of writing practices in ancient Greek culture and society. These processes, however, are taking a different course from that of the earliest philosophical or sophistical texts with which I dealt in my previous book. There, I tried to show that for people like Gorgias, Plato or Alcidas, writing, text, and related cultural activities were objects of intense reflection, a new problematic tool for cultural existence. In the case of textbooks, such as works of *Fachliterature*, the presence of writing and text can no longer be problematic, because the very existence of a textbook is due to the recognition of the obvious possibility of the textual transmission of experience. Aristotle had a great influence on the development of such an approach, and himself practiced it in his works, and in the *Organon* he not only practiced but also codified it. But even before his activity, there were texts that fell under the category of “textbook transfer of practical knowledge.” These texts are of particular interest to the researcher of the media aspects of the circulation of cultural content, because they occupy a liminal position in the dynamics of this circulation, namely – they still derive in part from a culture dominated by direct oral communication, by the environment of speech; but on the other hand, their task is to influence at a distance, to transfer the stock of practical experience connected with social and motoric activities – in the form of a symbolic text record. The question then arises: how did their authors find themselves in the face of this double nature of their own message?

We have less than scarce data about the earliest texts of this kind. We do not even know whether their titles and authorship, certified by much later authors, already acting under the influence of deeply textualized cultural mechanisms, are fully credible, or whether they represent a retrospective cultural projection. In his seminal study *Athenian Books in the Fifth and Fourth Centuries BC*, Eric G. Turner lists the following positions:

Through the Ionian Anaxagoras [as the author of the first known book as such – add. PM], as I suppose, this notion of a book is introduced into Athens; and this I take to be the style and intention of those technical manuals of the middle of the fifth century which are only names to us – Sophocles *On Greek Tragedy* (*peri*

chorou), Agatharchus *On Scene Painting*, Ictinus *On the Parthenon*, Polyclytus *On the Symmetry of the Human Body*, Meton *On the Calendar*, Hippodamus *On Townplanning*, to mention the better known.³⁷

These “book entities,” or rather their shadows, are probably fictions created in written prejudices, emerged in a cultural process a few centuries later, when the possibility of building the Parthenon, sculpting *Doryphoros*, determining any counting of time, designing an urban space or exhibiting *Antigone* was no longer imaginable without the guidance of a textbook. Modern researchers have willingly recognized this possibility of early textualization of cultural experience by the Greeks, as can be seen in the English equivalent of the title of the alleged treatise of Sophocles used by Turner. The phrase “peri chorou” (literally: “about the [tragic] chorus”) only with a great deal of freedom can be rendered as a title suggesting to the reader from the twentieth century a historical or theoretical work devoted to dramaturgy. The information that Sophocles put his creative activity within the framework of some discursive or even theoretical written expression is intriguing, especially if we consider that during its heyday Attic drama belonged to the performing arts, not to “literature” or “philosophy,” by which I mean that at that time there was no tendency to theorize it, especially in a text.³⁸ However, all our sources in this case are two mentions, one in *Suda Lexicon* (tenth century) and the other in Plutarch (first/second century). In the Byzantine lexicon, we read in the biography of Sophocles:

He wrote elegy and paens and an account in prose [*logon katalogaden*] of the chorus [*peri tou chorou*], in rivalry with Thespis and Choirilos. (*Liber Suda*, sigma 815 Adler)³⁹

In Plutarch’s text, *How a Man May Become Aware of his Progress in Virtue* (7, 79 b), we have a note that Sophocles was critical about Aeschylus’ style,

37 Eric G. Turner, *Athenian Books in the Fifth and Fourth Centuries BC*, London 1951, p. 18.

38 The question of whether it is possible to theorize practical experience in a non-textual way is left unanswered here. Perhaps, it can be regarded as equivalent to the “lessons of masters” given to students in the form of comments on practical activities.

39 Internet translation (“Suda Online”), <https://www.cs.uky.edu/~raphael/sol/sol-entries/sigma/815> [2020.05.28].

but this fragment, very damaged in manuscripts, does not contain any notions connected with the written word, and Plutarch could have meant an oral statement, an *ad hoc* one, transmitted in some relation – not a developed author’s stamped text. Suda’s testimony, widely discussed by specialists,⁴⁰ is suspicious inasmuch as it suggests that Sophocles has somehow been arguing with the fathers of the tragedy, Thespis and Choerilus, whose life and work were already unknown in the classical era. This sample allows us to see how fragile and illusory are the traces of these alleged earliest “theoretical” or “professional” treatises in our sources.⁴¹

40 Antique treatises on dramatic art were thoroughly examined in the monograph: Antonio Bagordo *Die antiken Traktate über das Drama* (Lepizig 1998). The researcher collected testimonies concerning eighty-eight authors living between the fifth century BC and the third century AD, but nearly all these testimonies consist only of allusions and loose references to the existence of one or another treatise. Thus, such a fascinating form of the textualization of experience, which was the ancient theoretical approach to performative practices related to drama, will remain unknown to us. As far as Sophocles is concerned, Bagordo quotes the opinions of such experts on the subject as K. J. Dover, O. Crusius, T. B. L. Webster and A. W. Pickard-Cambridge – all of them deny the value of the mention about *Peri chorou*.

41 Several dozen Greek treatises on building and decorative art are enumerated by Vitruvius (*On architecture*, book VII, preface, 11 ff.), but also in this case we do not learn any more details. Besides, a large part of this enumeration concerns the authors of the Hellenistic era, sometimes well-known from elsewhere.

Chapter 3 Xenophon, Ischomachus, Kikkuli: the transparency of the message

The costly charm of the ancient tragedy, and indeed of all the old literature, is, that the persons speak simply, speak as persons who have great good sense without knowing it, before yet the reflective habit has become the predominant habit of the mind.

Ralph Waldo Emerson, essay *History*⁴²

Today's examples of the first-ever "professional literature" are the works of Xenophon on practical issues, especially *Oeconomicus* and *On Horsemanship* (*Hippika*), and to some extent also *Hunting with Dogs* (*Kynegetikos*).

Xenophon (ca. 430–354 BC), aside from being one of the most often and most eagerly read authors of the classical period ever since the Renaissance, is also among those writers produced by the Greek culture who are of particular interest for a historically inclined media theory. The Polish author of his biography called him "a warrior and an author,"⁴³ and while these labels are anachronistic, they do render well the sort of work he produced which, to modern eyes, seems to be polymorphous and defies the text-centered categorizations. He seems to have been a man devoid of excessive inclination for abstract, theoretical thought, seeing writing as a "transparent" practice facilitating all sorts of social and political activities.⁴⁴ He and Plato

42 *Essays by Ralph Waldo Emerson, First Series*, Boston and New York 1904, p. 25.

43 Krzysztof Głombowski, *Ksenofont. Żołnierz i pisarz*, Wrocław 1993.

44 It is worth noting that the oral component in Greek culture of the classical period was clear not only to oralists but also to some "strict" philologists. This topic deserves a separate analysis, and here is a supporting quote from the canonical synthesis of the history of classical philology: "The very existence of scholarship depends on the book and books seem to have come into common use in the course of the fifth century, particularly as the medium for Sophistic writings. Early Greek literature had to rely on oral tradition, it had to be recited

were both Socrates' disciples, but already the ancients noticed that none of them ever mentioned the other one's name,⁴⁵ which we can confirm today, as their entire (or almost entire) corpuses have luckily survived to our times. This silence is most certainly caused by a strong, mutual aversion they had for each other on both intellectual and psychological grounds; if one may judge their characters based on their style and the problematic they touched upon in their works, it is indeed difficult to imagine two more divergent personalities. It has also been long known, at least since the early Renaissance humanists, that the image of Socrates rendered in the writings of Plato and Xenophon is rather an image of two very different "Socrateses," and the decision which one of them better resembles the real Socrates has been troubling all classically oriented humanists ever since – assuming, of course, that they accept the existence of an independent extra-textual reality at all.

Xenophon was not particularly interested in the Greek discussion about the cultural and social functions of practices of literacy, even though it reached its peak of intensity during his lifetime. Most probably, writing as a phenomenon and as an activity was never an object of reflection for him, but only served him as a tool facilitating the social life and broadening its scope – there are hardly any references to writing in his works. At the same time, he must have had a natural ease in writing (or, in other words, his literate diction resonated well with the readers), since his contemporaries and the future generations appreciated his writing style as adroit, sophisticated, and elegant, and many centuries later, during subsequent periods of revived popularity of the classical Attic dialect, he was presented as the model author using that form of Greek. Diogenes Laertius claims that it is Xenophon who brought about the "publication" of *History of the Peloponnesian War* by Thucydides, by which he presumably means that he ordered multiple handwritten copies of this extensive and difficult text

and to be heard; even in the fifth and fourth centuries there was a strong reaction against the inevitable transition from the spoken to the written word; only the civilization of the third century can be called – and not without exaggeration – a 'bookish' one." (Richard Pfeiffer, *History of the Classical Scholarship. From the Beginning to the End of the Hellenistic Age*, Oxford 1968, p. 17, footnotes omitted).

45 Strictly speaking, in Xenophon's writings Plato's name appears once (*Memorabilia* III 6), but only because his brothers are mentioned there.

and contributed to its spread among the Athenian cultural and political elites of the early fourth century. These were practical, social efforts, and not merely a theoretical deliberation on the role of writing, which was the sort of activity Plato preferred to undertake in isolation from his peers. Xenophon clearly preferred to act with texts rather than on texts or in texts; he treated the practices of literacy and their results as tools of collective life, not as means of abstract reflection.

This pragmatic, utilitarian approach is visible in his own writings, and more specifically in the works already mentioned here: in *Oeconomicus*, famous as an alleged polemic with Plato or even a parody of his style, and in a short text on horse breeding known as *On Horsemanship*, which ought not to be confused with a much longer treaty *Hipparchicus*.

Chronologically speaking, *Oeconomicus* is the first known text in the European culture which is wholly devoted to the issues that we might call “management” today – just as another Xenophon’s work, *Cyropaedia*, is seen as the founding text of pedagogy. It takes the form of a Socratic dialogue resembling the Platonic dialogues, which it might have been intended to emulate or mock, as it is dated as belonging to Xenophon’s late period, after 362. The title *Oeconomicus* literally means “the one, who knows the affairs of the house very well,” and the main topic of the work is managing just such issues, which, in Xenophon’s world, would have implied the distribution and redistribution of goods and “human resource management,” as well as agricultural technologies. Cicero translated *Oeconomicus* to Latin (which was more of an ideological or intellectual gesture than a practical one, as the structure of land ownership and management in the late republican Rome bore little resemblance to those in late classical Athens), but in later periods this text did not raise much interest outside the circles of humanists and philologists until the second half of the twentieth century, when it was taken up by political philosophers (such as Leo Strauss⁴⁶) and by the scholars intrigued by Xenophon’s intuitions on psychology of management, women issues, and the dynamics of power in interpersonal relations (Foucault devoted an entire chapter of the second volume of his *History of Sexuality* to *Oeconomicus*). As is often the case, modern scholars

46 Leo Strauss, *Xenophon’s Socratic Discourse*, Cornell Univ. Press 1970.

have presented a large variety of mutually exclusive interpretations: some of them, for instance, have asserted that Xenophon is the forerunner of the emancipation of women, while others – that he is a misogynist. Most of such approaches do not account for the historical and cultural contexts of Xenophon's works.

Here the focus is not on Xenophon's view on economic matters, but the way he used writing to fulfil the aims of a very specific type of cultural communication that is textual transmission of specialized knowledge about how a certain type of social practices is carried out. Havelock and his disciples suggested that Homeric singers transmitted such knowledge through narrative descriptions weaved into the plots of the epics they performed. Such message had larger impact on the senses and emotions of the audience than on their reflexive realm; it did not separate the "practical" from the "theoretical," even though – or perhaps exactly because – the performers and the audience of the rhapsodic form did not necessarily do any of the described things in their own lives, e.g. fighting in a battle, sailing or performing sacrifice. Xenophon, living in an already literate society, prefers a different method.

In the dialogue Socrates talks with Critoboulus, the son of Crito, immortalized by Plato in his account of Socrates' imprisonment. Critoboulus is a man perfectly managing a model household and farm. Socrates asks him questions about how he ensures such success. The roles switch quickly though, just like in Plato's work, and it is Socrates who takes the role of the "expert." However, the quasi-Platonian analysis of notions takes a different turn here. Instead of dissociating the notions from any concreteness and elevating them to the level of abstraction, in order to obtain an "idea," Socrates and Critoboulus strive to elucidate the meanings of the notions by invoking real examples illustrating their content. It has little to do with text-centered distinctions between deduction and induction or such, but a lot more with the degree of textualization of communication in which people share their experience in practices of importance for their coexistence. The Platonic message was all about rejecting the accidental quantum of experience and replacing it with a conceptual template rooted in a visual, logo-alphabetic image of notions. According to Plato, applied knowledge should be drawn in particular cases from such a theoretical matrix of experience. Aristotle went further still, separating algorithms of

reasoning from all real experience and creating a total theoretical approach, only occasionally supported with examples (the “empiricism” of his philosophy is wholly dependent on textuality, as I will prove in next chapter). Xenophon, in turn, clearly does not intend to distance his text from “real experience” and therefore he combines the Platonic style of dialogue with strictly practical premises, which the text only records, gives an account of them, a mimetic reflection, but is not an independent, abstracted entity.

Searching for an answer on how to be a good man of the house and manager, Socrates and Critoboulus give examples taken from Xenophon’s personal biographical experience. This includes references to Persian culture and seasonal agricultural works, which take up most of *Oeconomicus*. The textual argument remains closely bound with praxis; it gives a functional account of praxis rather than replacing it with a theory. The general notions pertaining to the function of a good steward do not become decontextualized ideas, nor do they form a poetic enunciation, as is the case in Hesiod’s *Works and Days*. However, in chapter 7 Xenophon introduces the character of Ischomachus, whom Socrates invokes during the discussion of good household management. Ischomachus, a figure otherwise unknown (even though there have been speculations about him resembling several real-life citizens), is described as *kalos kai agathos*, “beautiful and good,” a person who fulfils the ideal of humanity. The rest of the dialogue is an account of a conversation between Socrates and Ischomachus, which is clearly an allusion to a similar device employed by Plato in *Symposium*, where in the crucial moments Socrates invokes the authority of Diotima. The similarity is made still stronger by the main theme taken up by Ischomachus: the cooperation between husband and wife in household management. There is not a word on the metaphysics of love here though; it is merely about the practical cooperation in everyday life.

Let us look more closely at a few sentences from chapter 8. Ischomachus tells Socrates about the importance of orderliness and cleanliness in how the farm utilities are located for the proper functioning of the house:

I must tell you, Socrates, what strikes me as the finest and most accurate arrangement [*taksin*] of goods and furniture it was ever my fortune to set eyes on; when I went as a sightseer on board the great Phoenician merchantman, and beheld an endless quantity of goods and gear of all sorts, all separately packed and stowed away within the smallest compass [...]. Well, all these different things that I have

named lay packed there in a space but little larger than a fair-sized dining-room. The several sorts, moreover, as I noticed, lay so well arranged, there could be no entanglement of one with other, nor were searchers needed; and if all were snugly stowed, all were alike gettable, much to the avoidance of delay if anything were wanted on the instant. Then the pilot's mate — “the look-out man at the prow,” to give him his proper title — was, I found, so well acquainted with the place for everything that, even off the ship, he could tell you where each set of things was laid and how many there were of each, just as well as anyone who knows his alphabet [*ho grammata epistamenos*] could tell you how many letters there are in Socrates and the order in which they stand.⁴⁷

The fragment quoted above, which within the dialogue sets the scene for a discussion of the arrangement of house utilities, is interesting not only as an example of Xenophon's “practicality” but also as it brings several cultural motifs to the fore. First, it is not hard to see that the postulate to keep order within a household and the assertion of the advantage that comes from such orderliness for the functioning of a household are not drawn from the Platonic, literate model of understanding and experiencing the reality, but come from a particular observation made by one of the participants of the dialogue. This observation is then posed as a directive for a certain class of social actions, and not because of some textual rule either, but because of the speakers' broad practical experience. There is no literate or textual mediation of experience here: text serves as a “pure medium” and does not affect either the structure of knowledge or the message (not in the diegetic time of the story but also not on the level of authorial production of a written message). The presence of text does not affect the shape of the transmitted knowledge, it does not transform it with distant recipients in mind, it does not try to adjust the message to the needs of “every possible reader” in “any possible time or space;” it does not categorize the reality and the actions performed in/on⁴⁸ it according to the rigors of literate and

47 Xenophon, *Oeconomicus* [*The Economist*]. *A Treatise on the Science of the Household in the form of a Dialogue*, in: *The Works of Xenophon*, vol. III, pt. 1, trans. H. G. Dakyns, Macmillan and Co., London and New York 1897, pp. 236–237.

48 The two prepositions reflect the basic European, philosophical and cultural alternative pertaining to human's position in the world and deeply rooted in the cognitive processes studied here. I choose to juxtapose them here using a very text-centered device – the slash.

abstract thought. Moreover, it is worth noticing that the text does not use any sophisticated or rhetorical persuasive devices that provoked anger in Plato and Aristotle. Xenophon does not refer to any mental or personal qualities of his readers; he does not try to influence their judgment with purely verbal devices. This is where the “transparency” of his style lies. It is a “literate, rational” style, but it is also “non-literate and concrete.”

It does not mean that Xenophon does not use any elements of the existing world or that we cannot find traces of reality in the devices he uses. The very reference to the arrangement of letters is a sign of his awareness of the technology of writing – however, Xenophon does not treat this technology in any special way, but as equal with other methods of bringing order into existence. The practical order praised and recommended by Ischomachus on the example of the perfectly kept Phoenician ship can be associated with at least three other cultural phenomena, two of which are strongly linked with practices of literacy.

First, the focus on the arrangement of objects in a particular social space and proxemics necessarily brings to mind the temple inventories in ancient cultures, from Sumer, through Egypt to Crete. Today we can study these material arrangements mainly through the literate order of the inventories (sometimes through excavation works too). The relationship between the existence of such inventories and the early forms of literacy has been thoroughly analyzed by Goody.⁴⁹ However, despite the superficial similarity there is no functional resemblance between the two phenomena. Apart from the simple fact that we do not know to what extent the order in the records that we can observe today reflects the actual arrangement of temple and palace goods (the very illusion that the books signify or impose the physical arrangement of objects that they describe is in itself characteristic of the “typographic” minds of the modern Europeans), the main issue is that the arrangement of goods had no practical significance, and more specifically bore no significance to any social or political activities, as these resources were by definition meant not to enable the everyday functioning of the system, but to ensure its permanence through honoring the gods and

49 Jack Goody, *The Logic of Writing and the Organization of Society*, Cambridge-New York 1986.

rulers with these goods. In other words, the actual physical arrangement of these resources could have been important to narrow groups of clergy or courtiers, but certainly neither everyday fulfilment of the processes of management nor proper functioning of the elements of social system which are determined largely by short-term factors depended on it. Unlike a merchant ship or a household and a farm which indeed depended on a proper arrangement of particular objects.

The other possible association is military discipline, which Xenophon probably knew well from his own biographical experience. The practical analogy is much clearer here, as the success of any military exercise and the operational efficacy of a soldier in such culture is largely dependent on the degree of perfection in routine fulfilment of prescribed actions. It is worth noticing that in this case the practices of literacy are of little significance. Even though they facilitate any type of collective actions, which require high standardization (bureaucracy, rules, regulations, etc.) in case of the military realm they do not have any foundational role.

The third possible association is the art of memory, *ars memoriae*. Precise arrangement of numerous objects in order to easily access them when needed is a method similar to the technique of “places of memory” discussed in ancient theories of rhetoric (and this association is strengthened when Ischomachus mentions the mental reproduction of the arrangement of objects when it is not directly seen, as in “a palace of memory”). The comparison to remembering the placement of letters in the written name that comes immediately afterwards invokes the advanced practices of literacy which strongly affect the cognitive functions. However, in this case, too, the practical function of the image is different. The rhetorical apparatus of the palace of memory is a highly abstract intellectual product, the aim of which is to perfect the technique of giving speeches, whereas the proper arrangement of the load onboard a ship is simply meant to make it easier to use equipment while sailing. The example shows how writing deludes us when to our eyes and minds it equates phenomena belonging to very different orders of reality. The illusion is the price we pay for the advantages of the alphabet.

Thus, three associations have been incorporated in the interpretation – and all three dismissed. What is the conclusion? It confirms that Xenophon most probably meant pure practice only and the textual communication was

merely a transparent medium. Presumably, he hoped to act on a small scale, not *sub specie aeternitatis*, as was the case for Plato. Therefore, Xenophon did not bother to produce any absolute textual message, or to adjust it to social practices in a way that would make it applicable to as many of them as possible, notwithstanding the time and space of their fulfilment.

In chapter 13 of *Oeconomicus*, Socrates and Ischomachus discuss the figure of a “bailiff” [*epitropos*], thereby introducing another “human factor,” apart from a spouse, into the problematic of household management:

Soc. But suppose him to have learnt the whole routine of business, will he need aught else, or have we found at last your bailiff absolute?

Isch. He must learn at any rate, I think, to rule his fellow-workmen.

What! (I exclaimed): you mean to say you educate your bailiffs to that extent? Actually you make them capable of rule?

At any rate I try to do so (he replied).

And how, in Heaven’s name (I asked), do you contrive to educate another in the skill to govern human beings?

Isch. I have a very simple [*phaulos pany*] system, Socrates; so simple, I daresay, you will simply laugh at me.

Soc. The matter, I protest, is hardly one for laughter. The man who can make another capable of rule, clearly can teach him how to play the master; and if he can make him play the master, he can make him what is grander still, a kingly being.⁵⁰

It is one of the most important moments of the conversation because it brings together vital psychological and political themes. It needs to be said first that Ischomachus’ fears in the dialogue are caused by the “vulgarity” of his methods as compared to the Platonic ones: it is not said explicitly here but it would have been rather obvious for a contemporary reader. In *The Republic*, Plato devotes extensive passages to describing the method of perfect education for guardians, who are the equivalent of a bailiff in *Oeconomicus* in terms of their social role. However, while Plato’s methods are mostly about developing vaguely defined personal qualities of the guardians which are supposed to guarantee their impeccable praxeological attitude, Ischomachus in the later part of the dialogue tells Socrates that he simply rewards his disciples when they fulfil their tasks properly, and punishes them when they fail. Motivating is basically positive or negative

50 Xenophon, *Oeconomicus*, pp. 258–259.

stimulation of their major needs and desires – and this is also what he recommends to them as means of dealing with their subordinates. This is the simplest possible motivating method and, again, it is not derived from any abstract rules formulated in a detached literate discourse, but from practical experience and years of observation of how real-life participants of social games behave. Ischomachus' disclaimers (about the method being “laughable” and “simple”)⁵¹ signal that Xenophon realized that even in his time such recommendation could sound naïve, because of the growing role of the “methods of literacy” in the social processes. In turn, the sequence “rule – play the master – be a king” suggests that Xenophon knows how fluid the transition from “practical everyday reality” to the macro-level of political power can be and how in the latter area practical methods based on concrete everyday experience can fail.

The character of Ischomachus has an interesting trait here, because it is clear that unlike unworldly Diotima in Plato's *Symposium*, he has been created by Xenophon as “a real person.” What, then, is the status of knowledge, if it is not absolute knowledge, revealed or acquired in the metaphysical anamnesis which emerges in the minds of philosophers who have internalized writing, but neither is it purely local knowledge since it can be turned into a textual directive, which entails it being applicable “elsewhere”?

The above remarks on the specificity of Xenophon's writings in the context of the transmission of experiential knowledge (not to be confused with modern experimental knowledge, whose rules and structures are derived from the textual model of cognition) suggest that Ischomachus is a character located on the borderline between the two cultural systems that coexisted in his world. He has qualities of a figure of “authority” based on oral transmission, in which a singer, a sage, or a chief preaches to his audience through a mythical narrative which combines “tradition” with “here and now” of the storytelling. However, the content of Ischomachus' message has nothing in common with the mythical stories of the rhapsodists because it comes from a rational observation of actual social practices performed

51 The word used – “phaulos” – can mean “simplicity,” “vulgarity,” “inferiority” or “sloppiness,” and it generally has a negative connotation.

in particular time and space. In that sense, he resembles an “expert,” a figure born in the literate world, which through practices of literacy is also an increasingly rationalized world. And yet, what Ischomachus says is not absolute in character in a way that comes from advanced mental and reflective activities deeply rooted in the media of writing and text. As was already said here, Xenophon who draws on the advantages offered by writing, sees no need for formulating abstract algorithms of rules of practical doing. And it is just such algorithmic approach that is one of the most important consequences of alphabetization in the Western culture: it was in the times of the author of *Oeconomicus*, and in the times of Plato, too, when the foundations for it were laid. Ischomachus the expert is not an expert known for giving advice with no relation to the processual reality and drawn only from automatically employing abstract rules suggested in manuals. He is an “experienced expert,” and this only seemingly pleonastic term can be applied to Xenophon as the author of Ischomachus’ words as well.

This sort of practical experience, which is the subject of *Oeconomicus*, is also visible in chapter 16 when Socrates and Ischomachus begin a long discussion about agricultural activities. In the introduction to the conversation, Socrates says:

The first thing I should like to learn, Ischomachus, I think, if only as a point befitting a philosopher, is this: how to proceed and how to work the soil, did I desire to extract the largest crops of wheat and barley.⁵²

The context of use of the word “philosopher” is striking here. It is hard not to see it as ironical toward Plato: the Platonic philosopher lives in the world of ideas, and its spatial elevation is frequently and eagerly emphasized in all the metaphors of flight outside and over the material world. Meanwhile, Xenophon the philosopher is literally bound to land, he cultivates it, remaining in a physical contact with it, and he performs particular physical actions working in the matter of soil. But perhaps this is simply a trace of a self-contained concept of the philosopher’s task. Perhaps, according to Xenophon this task is not to abstract notions derived through literacy from experience, which Plato began to do on a large scale, and Aristotle continued followed by nearly all the other Western philosophers – but quite

52 Xenophon, *Oeconomicus*, p. 267.

the opposite, the task is to construct as precise links between the practical motoric experiences and their verbal and textual expression. Therefore, the philosopher's task is not to elevate himself spiritually above the world, but to work on developing the motoric potentials of a human in the world. While Plato deprives the philosopher of the body, Xenophon strives to teach him to use the body; and both employ text as means of influencing the readers to achieve their objectives. It is not difficult to say which of these versions triumphed in Europe. But why this one?

Among the last words of *Oeconomicus*, we find the term *sophrosyne*, crucial for the Greek thought of the late fifth and the early fourth centuries but extremely difficult to translate. It is usually rendered as "prudence," and Ischomachus applies it to people who have mastered the art of governing others in such a way that they allow themselves to be managed, without becoming objects of manipulation. Earlier it is said that the main advantage of effective managers is not knowledge or experience itself, nor even luck but "carefulness and application" (*epimeleia*),⁵³ a quality related to reflexive ability to grasp the content of experience and use it in future practices. The final conclusions given by Socrates and Ischomachus are then focused on the highest form of practical skills, which is any human activity whose aim is to oppose the entropy in the real world. Alphabetic writing happens to be one of the most effective tools we have to achieve this goal. However, Xenophon, unlike Plato and Aristotle, tried to employ it, not in order to create universal models of thinking and doing, but to produce the most precise descriptions of concrete activities, real-life practices, which he synthesized only to the level of local classes of activities ("agriculture in Attica," "keeping a neat household by a wealthy citizen of Athens"), never reaching the absolute, ideal level. Comparing the use of writing and text by the people discussed here, we see the seeds of the two major types of textualization of experience in the Western culture: **the text of theory** and **the text of practice**.

Let us now discuss the other one of Xenophon's texts mentioned earlier. *On Horsemanship* (literally: "matters pertaining to equitation") is a very

53 I would like to remind here that Michel Foucault, in the title of the third volume of *The History of Sexuality*, referred to this Greek term because "le souci de soi" is, in Foucault's work, the translation of "epimeleia heautou."

brief text which in its structure and style already resembles a modern, typographic manual. It has all the textual qualities I have listed with reference to *Oeconomicus*, and, moreover, it is not a dialogue that we are dealing with here but a monologue of an expert who reveals his subjectivity in the text but only to bring out the authority of knowledge and not to sketch a contextual communication. The scholars of antiquity do not agree on the target audience of the work. Some claim Xenophon wrote it for the use of his own sons, which is suggested by the mention of “the benefit of our younger friends,” *neoteriois ton philon delosai*; others think it was meant for wealthy Athenians. The final sentences of the text are:

These notes, instructions and exercises [*hypomnemata kai mathemata kai meletemata*] which we have here set down are intended only for the private person [*idiote*]. What it belongs to a cavalry leader [*hipparcho*] to know [*eidenai te kai prattein*] and to do has been set forth in another book [*logo*]⁵⁴.

We encounter here a few semantically laden terms, together with a clear announcement of a forthcoming sequel to this work, that is, *Hipparchikos*: it is a sign that that Xenophon consciously distributed the material of his writing. It is particularly worth paying attention to the notion of “hypomnema,” which can be rendered as “sub-memory” and which, in ancient writings, mostly in the post-Hellenic epochs, signified a literary genre more or less resembling our essay, and which by the end of antiquity also meant “diaries” and “memoirs.” In the most general sense, the Greeks used the term to describe any kind of written record which is basically meant to be a reminder about some useful and needed mental contents.

Of all Greek notions pertaining to the cultural roles of writing and text the word “hypomnema” most clearly renders their role as extensions of human organism, or more precisely of its capacity called memory. In the oldest recorded uses of this word, it actually meant the very content of memory, but the very fact that this content of memory was perceived as such means that the process of internal self-reflection was already under way. In the works of Thucydides (II 44), Isocrates, Demosthenes, Plato (*Phaedrus* 249c), and in numerous inscriptions, expressions such as

54 Xenophon, *Scripta Minora*, with an English translation by E. C. Marchant, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press (Loeb Classical Library 183) MCMXLVI, p. 363.

“echein hypomnema tinos” (“to have *hypomnema* of someone”) mean “to remember about something.” Liddell and Scott’s dictionary gives Latin “monumentum” as a synonym of this meaning. In both these words, there is the core related to human internal cognitive powers (*mnema*, *mens*); and in English it is related, of course, to “monument.”⁵⁵

55 An extremely interesting contribution to the history of both the word “hypomnema” and the reading practices of the Greeks is the gnome attributed to Oenopides, an author living in the mid-fifth century (frgm. 4 Bodnar): “ta biblia ton men memathekoton hypomnemata eisi, ton de amathon mnemata” [books are *hypomnemata* for educated people, but for uneducated they are *mnemata*]. The word *memathekotos* means a person who has been educated through schooling or has specialist knowledge, so it is not synonymous with the word *pepaideumenos* denoting a person brought up according to the principles of the earlier *paideia*. This quotation comes from *Florilegium Monacense*, a medieval collection of ancient sayings whose original authorship was obliterated by the process of transmission; another collection of this kind, *Gnomologium Vaticanum*, attributes this sentence to a much later author, Diocles of Karystos. In the same *Gnomologium* there is also another sentence written down which is said to come from Oenopides (frgm. 4 Diels-Kranz): “Oinopides horon meirakion polla biblia ktomenon ephe: ‘me te kiboto, alla to stethei’” [Oenopides saw a young man buying a lot of books, and he said: “don’t put them in a box, but in your heart.”]. Even if it is certainly not possible to link these sentences to the Oenopides era (some researchers point out that, in Oenopides’ times, Greek culture may not have been “booked” enough for such statements), the expressions they contain are important for understanding the concepts used in them in the context of early Greek reading practices. “Hypomnema” is here an external memory support, while “mnema” is memory as such and its external full substitutes in text form are considered unnatural. Testimonies on Oenopides collected and discussed by Istvan M. Bodnar (Max Planck Institut, Berlin 2007) provide interesting material on yet another person functioning at the threshold of advanced Greek writing culture. Oenopides was an astronomer and was to be the first to write about this field, according to the doxographic testimonies, and he made some important findings about the numerical relations between celestial bodies – this information provokes questions about how he recorded the results of his observations: did he already use any notation or diagrams and charts, or did he just stop at illustrative verbal descriptions? As for the word “hypomnema,” it is also worth mentioning his small renaissance by Michel Foucault in his late lectures collected in *The Hermeneutics of the Subject* (Palgrave 2005).

A juxtaposition of three terms – “hypomnema,” “mathema” (subject of mental learning, learning process) and “meletema” (subject of practical learning, exercise process; also “care”) – is a proof of developed Xenophon’s awareness of the relationship between the text and experience. The first of these words defines *Hippika*’s message in its textual layer – as a text in fact, as a message extended in time and space beyond the moment and place of its formulation, for the use of people in other places. “Mathema” here means the didactic component of the message, that it is to serve the recipient as a basis for acquiring new knowledge. The most problematic is the third term – “meletema” – which can be understood as a sign of the entanglement of the *Hippika*’s text itself with its extra-textual reference, because it is a text describing a set of practical activities performed using the human body in close connection with the material environment of that body (a relationship rendered in the *Lebenswelt* concept), and as such, in a sense, it deletes itself. *Hippika* is therefore a text whose author knows, or at least intuitively guesses, that he is trying to include in it a description of something that is not and cannot be either text or even speech – for it is a motoric activity in which the human body participates, and not only the mind subjecting the exterior and its data to mental processing. The description – both oral and written – can only symbolically relate this activity, but it is impossible to convey through it the motoric content that lies in the performer’s body and its surroundings subjected to this activity. This is an extremely expressive example of the inner contradiction that lies in every **text of practice**, which necessarily describes in a reflective and mediated way the realm of action, the occurrence of which is direct toward the subjects involved. Let us take a look at a representative fragment of *Hippika*:

We will now show how one may rub down a horse with least danger to oneself and most advantage to the horse. If in cleaning him the man faces in the same direction as the horse, he runs the risk of getting a blow in the face from his knee and his hoof. But if he faces in the opposite direction to the horse and sits by the shoulder out of reach of his leg when he cleans him, and rubs him down so, then he will come to no harm, and can also attend to the horse’s frog by lifting up the hoof. Let him do exactly the same in cleaning the hind-legs. (VI, 1)⁵⁶

56 Xenophon, *Scripta Minora*, p. 321.

Such instructions are obvious to anyone with practical experience in the subject (including Xenophon himself, which he states in the first sentences of *On Horsemanship*), but problematic to those who do not have it – the “idiotes,” “the private person” mentioned in the previous quotation.⁵⁷ A question arises: what is the purpose of a text which explains practical activities, if it cannot replace those activities in the cognitive and motoric realm of reference of the reader? A swimming manual will not suffice to learn to swim, even if it is studied most diligently – and the same applies to any “manual” pertaining to the motoric realm. The question applies to any epoch and culture, in which there are texts serving as handbooks, but in the case of Xenophon it is all the more important, as he was one of the first men in the Western culture who wrote such texts.⁵⁸

It is not impossible that what had motivated him was the very presence of writing and text. The availability and the increasing popularity of this means of communication might have provoked Greeks to use it

57 “Private person” in this case means also “not participating in the civic life” – the Greek word’s root *idios* means generally someone, who interested only in themselves and their personal affairs. Lack of interest in the intersubjective social and political realm in a person who was born to a family of an elevated social status was seen by the classic Greeks as a severe existential handicap. Therefore, later the word “idiotes” came to mean a “dullard, a dunce” – hence our modern “idiot.”

58 His predecessor in the field of horsemanship in Greece was a certain Simon (ca. 470–400), about whom Xenophon writes in the introduction to *On Horsemanship* that “there is already a treatise on horsemanship by Simon, who also dedicated the bronze horse in the Eleusinium at Athens and recorded his own feats in relief on the pedestal.” Xenophon then states that he intends to develop Simon’s instructions. We know nothing more about him – he belongs to the mysterious group of authors of the already mentioned “earliest theoretical treatises.” Perhaps, he is the same person as the cavalry leader mentioned by Aristophanes (*The Knights*, 242). The initial chapter of his text, preserved in one of the hippic manuscripts, was published by F. Ruehl in the second volume of the lesser texts by Xenophon (*Xenophontis scripta minora*, Teubner 1912). It has the shape of a regular textual discourse – the author gives a detailed description of model physical features of a horse, and then proceeds to the breeding rules. Pollux, a lexicographer who lived in the second century, quotes Simon’s six times, which must mean his work was highly influential. He was also quoted by Byzantine authors writing on horsemanship.

in any possible way, including to recording all sorts of enunciations and developing all kinds of reflections, as well as giving accounts of motoric practices – activities belonging to *Lebenswelt*. If such a presupposition can be accepted, this would mean that ever since writing and text became independent means of communicating symbolic and experiential content in ancient Greece, in cultural practices in which they were involved they were endowed with an excessive expressive and functional potential which was put to use, among other areas, in the self-contradictory enterprise of transferring motoric existential experience over time and space. The activity in a text can never be identical with an activity of a body which contains the mind producing the text. Plato and Aristotle understood that only too well and therefore they constructed the model of the **text of theory** for the Europeans. It does not require the presence of a body, as it refers to abstract notions applicable to any possible “here and now.” The **text of practice**, constructed by, among others, Xenophon turned out to be much more problematic as it strived to produce an impossible synthesis of sensory experience, motoric activities, and their verbal account which would have a textual reach across time and space. The aporia of this model of transmission of knowledge through writing is probably the main reason why it was Plato’s and Aristotle’s model that was preferred within the Western culture, even though it was itself problematic, too. These problems, however, were not as striking in the smaller scale of the civilizing process, and moreover they contributed largely to creating the Platonic-Cartesian subject, which, in turn, impacted greatly the formation of the modern expansive civilization of the West, the emergence of which would have been much less likely, had the Europeans commonly accepted the kind of textualization of experience that we can find in Xenophon’s *Scripta Minora*.

Xenophon who was probably aware of at least some of the referential problems discussed here, attempted to sensitize his readers to the specificity of the chosen medium with regard to the topic:

If anyone thinks that we are repeating ourselves [*dilogein*], because we are referring to matters already dealt with [i.e. checking the physical qualities of a horse – add. PM], this is not repetition [*ou dilogia estin*]. For we recommended the purchaser to try whether the horse could do these things at the time of

buying; but now we say that a man should teach his own horse; and we will show how to teach him (VIII, 2)⁵⁹

This methodological comment is an evidence of Xenophon's full literacy. Just as the sophist he realizes that the reality of a literate culture is governed by different rules of cultural transmission than those that are characteristic of an oral environment. There were horses in both these worlds, though, and the bonds between horses and people were equally strong.

Texts about horse breeding and dealing with horses are known from cultures much older than the Greek one. It is hardly surprising given the role these animals played even in the earliest stages of human civilization⁶⁰. The oldest known text on horsemanship was discovered in 1906 in the palace archives in the capital of the Hittites, Hattuša (today's Boğazköy in Turkey) on four steles dated from 1340 BC. Its author – who was not, however, the author of this particular copy – was Kikkuli who probably lived between the fifteenth and the fourteenth centuries BC. He introduces himself at the beginning of the text as “master horse trainer of the land Mitanni.” Kikkuli's text includes day-by-day instructions for 214 days on how to care for a horse intended for a battle or race chariot (which one of the two exactly is a matter of discussion between experts). The structure of the text resembles bookkeeping and enumerations known from the Mesopotamian records. As I am not an Orientalist, I lack competence to analyze it more thoroughly,⁶¹ but it is certainly interesting how early this text relating and designing the experience of motoric practices is. Moreover, the text was considered important enough to be placed on the steles of the royal palace archives. The question about the text's practical use in the Hittite world must remain unanswered, as it is hard to imagine the Hittite cavalrymen

59 Xenophon, *Scripta Minora*, p. 335.

60 The beginnings of domestication of horses are now being estimated at 4500 years BC. The inhabitants of what is now known as Ukraine were probably the first ones to attempt it. Cf. David W. Anthony, *The Horse, the Wheel and Language. How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World*, Princeton University Press 2007.

61 Cf. An overview (with a rich bibliography) given by Peter Raulwing, “The Kikkuli Text. Hittite Training Instructions for Chariot Horses in the Second Half of the 2nd Millenium BC and Their Interdisciplinary Context,” 2009 [online publication].

studying the steles for Kikkuli's instructions right before attempting to tame their horses. It is equally difficult on the other hand to imagine that his work was particularly interesting to "intellectuals" or priests of his time. Thirty-five centuries later, in 1991, an Australian scholar, Ann Nyland carried out an experiment: she followed Kikkuli's instructions meticulously – as meticulously, as limited understanding of the Hittite text with numerous Mitannian additions allowed anyway (the text poses linguistic problems to professional scholars of Hittite) – while training Arabian horses.⁶² The very possibility of carrying out such an experiment shows how little has changed in the class of cultural practices pertaining to horse breeding and training in dozens of centuries. It is a peculiar class as it includes activities performed on biological systems endowed with a developed psychism, which, however, does not undergo cultural evolution, nor does it become part of the human symbolic communication. Twentieth- and twenty-first-century scholars and thinkers, who have studied human-animal relations, from Jakob von Uexküll to Peter Singer, have their earliest predecessors in the ancient authors of hippic treatises.

The history of writing on horsemanship is further marked by texts such as Latin *Ars veterinaria* by Pelagonius (fourth century BC) and the Byzantine medico-hippic manuals (*Hippiatrica*), the authors of which did not really have much to do with live horses themselves, as can be seen from the divergences between their texts and the biological reality. Such divergences are at least partly a sign of the textual absolutism in which texts are the only sources of other texts, while the link with immediate experience weakens.⁶³ In the Middle Ages in Europe, no one wrote treatises on horsemanship, which was probably caused by the knight's ethos within which practices such as writing and reading were not particularly popular, while the "text-producing" circles of that time had little to do with practices of breeding and riding horses. Hippic manuals re-emerge in Europe in the

62 Ann Nyland, *The Kikkuli Method of Horse Training*, Armidale, Kikkuli Research Publications 1993, rev. ed. Sydney 2009.

63 The shift of focus from breeding and training horses to curing them is significant too – the issues of interaction between man and animals are replaced by issues of one-directional interventions of human professional knowledge into the animal's body.

sixteenth century though, and they have been written ever since. Perhaps – if we may repeat the remark – “things horses-related” are so important in the history of humanity, so closely related to the extra-cultural relationship between man and animal, that the set of textual renditions of the very experience of horsemanship and the related practices is both broad in terms of historical frequency and largely unchanged in what is being taught on the subject (as Ann Nyland’s example shows). The persistence of the model of textual transmission established for this particular experience and class of practices is an extreme example as it is closely related both to the cultural realm with its institutions and media, and to the emotive and biological realms – the immediate contact with the animal. Horsemen of all countries and epochs unite over the political, structural and stylistic variety of textual renderings of the abstracted experience. Moreover, the presence of text does not affect their practice; it is neutral to them and may at best serve as support to the actual process of practice.

A “bond with nature” can occasionally be found in Xenophon’s text – as in the works of all his followers who attempted to combine an intense sensory experience of reality with a highly developed skill of rendering traces of such experience in text, be it a literary, essayist, neutrally recounting or – most rarely – philosophical text. Such a bond can for example be found in an early text on hunting (*Cynegeticus*). Eminent Polish scholar Tadeusz Sinko wrote about it with piercing insight:

Xenophon hunted only hares in Attica. His description of a hare’s body structure, which enhances its running skills (*Cynegeticus*, V, 30) is a model of scientific description, with not a single spare word. The only other equally classic [i.e. concise and accurate, add. PM] descriptions can be found in *Corpus Hippocrateum*. The conclusion of the description (par. 33): “So charming is the sight that to see a hare tracked, found, pursued and caught is enough to make any man forget his heart’s desire”⁶⁴ shows that young Xenophon, as all true hunters, was sensitive to the beauty of game’s moves and behaviors. What he wrote about hunting bears and lions, he drew from some book [Sinko refers here to a lack of “reality of description” in these parts of *Cynegeticus*].⁶⁵

64 Xenophon, *Scripta Minora*, with an English translation by E. C. Marchant, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press (Loeb Classical Library 183) MCMXLVI, p. 401.

65 Tadeusz Sinko, *Zarys historii literatury greckiej* [*An Outline of History of Greek Literature*], Warszawa 1959, vol. 1, p. 799.

The philologist points to the particular quality of Xenophon's text, which is of fundamental importance to the interpretation developed here. The experience and the feelings of a hunter, which unite him in a sort of mystical participation with the hunted game, which are comparable to the pantheist and shamanist attitudes of Native American or Siberian hunters described by anthropologists, can be found in parts of the text which are right next to those resembling analytical descriptions given by positivist scientists. Never before and never after have such divergent attitudes come together in our culture within a work of one author and on equal terms – not as a pastiche or a styling device. Such contrasts of register in Xenophon's writings are the evidence for the beginnings of the process of transferring the experiential world – more or less equivalent to the phenomenological *Lebenswelt* – to the textual world. Here again we observe a shift from **the experience of transmission to transmission of experience**, that I wrote about elsewhere in context of the emergence of the Greek historiography⁶⁶ – except that in the technical writings such as these the shift, as is visible here, takes a different trajectory. It is caused by the difference in proportions of individual experience in macrohistorical narratives, that is those that dominated the Western historiography since its beginnings up until the second half of the last century, when microhistory was born, with its return to personal, experiential accounts.

Cynegeticus contains one more surprise – its last part is a critique of the sophists, who are compared by Xenophon to hunters who go after young and naïve people, who are easily taken in by perfidious argument. This critique itself, so very Socratic in spirit, and not unlike many other similar critiques, includes one sentence, which is an ideal – if unintended – commentary on the method of writing about the reality employed by the author in this text (XIII, 6):

Many others besides myself blame the sophists of our generation—philosophers I will not call them —because the wisdom they profess [*sophizontai*] consists of words [*en tois onomasi*] and not of thoughts [*en tois noemasin*].⁶⁷

66 Paweł Majewski, *Pismo, tekst, literatura*, Warszawa 2013, chapter 2.

67 Xenophon, *Scripta Minora*, p. 451.

Young Xenophon, a strong believer in Socratic ideas, and still without the intellectual balance which he would acquire in his mature works, takes up the same problem here as the one that defined Plato's entire life, but he sees it differently. The emptiness of the words used by the sophists is shocking to him not because what they mean by these words may be accidental in their intellectual and ethical content, but because there is no significant content related to actual experience recorded in mental images and in the memory of the body belonging to a subject who speaks or writes.⁶⁸

I have tried to show that Xenophon's text is an enunciation that was consciously constructed as a text, but which also retains clear traces of "local" communication and does not claim to be universal, which soon after became Aristotle's objective; but it is also a kind of text which retains a close and paradoxical bond with numerous qualities of human experience, which are not only extra-textual but also extra-linguistic. "The expert's experience" carried by "implicit knowledge" is communicated here with non-rhetorical, non-persuasive devices (they are the "philosophical input" in *Oeconomicus*, the "concrete knowledge" in *On Horsemanship* and "the knowledge based on observation and practice" in *Cynegeticus*); it contains no "absolutizing" components, which the author would intend as ensuring the eternal applicability of the message. If, as in the case of *On Horsemanship*, such applicability does nevertheless occur, this is not due to any quality of the text, but to the quality of the experience it accounts for.

Sinko emphasizes that Xenophon employed "technical," "non-literary" vocabulary in his works and this "professional" quality of his style was a little confusing for those among his ancient and modern readers who saw him as a "writer," a "man of letters."⁶⁹ In fact, it is exactly the clarity of

68 Another interesting quality of this text is the abrupt shift from the enumeration of mythical hero-hunters in chapter 1 to a detailed, technological description of hunting tools (including giving precise numbers of meshes and the types of knots in hunting nets for minor animals) in chapter 2. It shows the broad scope of Xenophon's thinking between two domains of his culture: the traditional-mythical one and the rational-textual one. He locates his own sensory biographical experience in-between these two and mediates them with words – the medium which is itself located in-between speech and writing. All these borders and "in-between" realms are interconnected and interdependent.

69 Sinko, *Zarys historii literatury greckiej*, p. 810.

his texts that made Xenophon as an author not particularly interesting to the Alexandrian philologists, who had little space for commenting and exegesis in his works, as his style and vocabulary, even despite all the expert terminology, was not very far removed from the reality of the Alexandrian era – unlike the Homeric epics or the archaic poetry. Moreover, there was no trouble with the philological constitution of his text, and therefore there was little need to bring his writings to life with textual exegesis and the work of interpretation. There are few scholia to Xenophon and they are limited in content. Apparently, Xenophon's writings did not raise in his ancient readers any sense of cognitive distance that would call for elaborate textual responses of the kind other authors provoked. The same applies to commentaries written closer to our time, when Xenophon was being read by members of higher classes in Britain who found a mirror image of a model of a gentleman in his works: dividing his time between military and public service, managing the estate and breeding horses, and hunting in his spare time or indulging in amateur writing. For us, his works are a striking example of a textual practice which becomes an alternative to the models elaborated by Plato and Aristotle. It remains to be answered why the Western culture so radically preferred their textural models and practices. The suggestion entailed by this analysis is but a preliminary voice in the discussion. In what follows, I will address – also contributively – several other early manifestations of the textualization of various forms of the Greek experience.

* * *

It is widely believed that the Greek religion, unlike the trinity of the great monotheistic religions and Hinduism and Buddhism, did not produce a corpus of “holy texts,” and therefore writing and writing practices did not play a significant role in the religious life of the Greeks, at least in periods prior to the Hellenistic era. Most of Greek narrative texts as we know them today, which are entirely related to religious issues, are either mythographs that form the basis of all popular Greek mythologies written in modern times, or late, mainly neo-Platonic comments on old doctrines and beliefs. Both of these types of texts were created and developed in a world deeply dominated by the medium of writing.

However, there is a significant exception to this rule, which is at the same time an extremely mysterious and difficult phenomenon to analyze. It concerns the Orphics and their beliefs and cult practices.

The archaic verbal expression of Orphic concepts (hexametric poems and hymns; figures of poetic speech sometimes reminiscent of Homeric diction or epic in general; pictorial plastic descriptions of processes taking place in the world⁷⁰) was somehow connected with their radical textualization, and it must have happened very early. Moreover, according to our current knowledge, Orphism is the only form of the Greek religion that was clearly based on the circulation of “sacred texts” (*hieroi logoi*). The edition of Orphic excerpts and testimonials, prepared by Alberto Bernabé as part of the *Poetae Epici Graeci* collection⁷¹, shows how complicated, esoteric and long-lasting the textual transmission of the Orphic traditions is⁷², and most of the texts, headed by the papyrus of Derveni, date back to the late and post-Classical times. However, two allusions by previous authors testify to the fact that already in the fifth century the Orphics used texts in their religious practices. So here is Theseus, accusing Hippolytus of belonging to Orphic cults in Euripides’ drama (*Hippolytus* 954), saying: “bakcheue pollon grammaton timon kapnous,” which means “engage in mystic rites, holding the vaporings of many books in honor!”⁷³ A little later, Plato

70 In my previous book, I assumed that this stylistic conservatism is a sign of the distance of Greek religious cults from the medium of writing and its influence. However, at least for the Orphics, this assumption is false.

71 *Poetae Epici Graeci. Testimonia et fragmenta*, pars II, fasc. 1–3, *Orphicorum et Orphicis similis testimonia et fragmenta*, edited by Alberto Bernabé Pajeros, Monachii et Lipsiae in aedibus K. G. Saur (Bibl. Teubneriana) 2004–2007.

72 In the evolution of the history of antiquity, there have been some great discussions about the reality of the existence of Orphism in antiquity as a separate, self-contained and consciously experienced domain of spiritual life. The creation of orphism in modern European science and culture is itself a broadly separate topic with a rich literature. See: Lech Trzcionkowski, *Bios-thanatos-bios. Olbia Semiophors and the Culture of Polis* (Warszawa 2013) – this extensive monograph presents a whole range of issues related to both ancient Orphism and its modern scientific visions.

73 Euripides, *Children of Heracles, Hippolytus, Andromache, Hecuba*, edited and translated by David Kovacs, Harvard University Press, Cambridge (Massachusetts), London 1995 (Loeb Classical Library 484), p. 217.

mocked them in the *Republic* (364 e): “And they produce a bushel of books [*homadon biblon*], of Musaeus and Orpheus [...]. And these books they use in their ritual...”⁷⁴

Based on these testimonies, it is appropriate to recognize that, at the end of the fifth century, in the collective consciousness of the inhabitants of Attica, who were the audience of Euripides’ drama, the religious practices of the Orphics had to be associated with the existence of records which served as “sacred texts” and, what is more, were a determinant of the identity of this religious group. Was their role similar to that of a text in monotheistic religions? And did the text function for the Orphics as an independent “reading entity” supposed to “preserve” revelation or some primordial act of founding the faith? Today, we also know that in Orphic cults, apart from the narrative texts, which probably had the form of scrolls running among the followers, there were also lamellae, “golden Orphic plates” used in funeral rituals. These are small plates on which fragments of formulas and Orphic texts were engraved. These records cannot be regarded as magical-spiritual formulas not having the necessary connections with “high” forms of writing, because the degree of semantic and structural complexity of these records is too advanced – as if they were copied from text records. Moreover, the author of the poem written on the Derveni papyrus clearly quotes Heraclitus, mentioning him by name as the author of the quotation (in column IV), which is also a manifestation of highly developed textual practices. Therefore, it is not out of the question that the archaic diction of Orphic works was a deliberate stylization into “antiquity,” a procedure consciously used by the followers. If they had indeed done so, such a practice would be well in line with the custom of the Orphics to attribute most of their narrative texts to the two mythical creators of the whole trend – Orpheus and Musaios. This custom made it extremely difficult in modern times to think about the phenomenon of Orphism and to date individual texts in an approximate way. It was not until the beginning of the nineteenth century that it was shown that Orpheus and Musaios are certainly not concrete historical figures (even in the sense in which Homer is such a

74 Plato, *The Republic*, with an English translation by Paul Shorey, in two volumes, vol. I, Books I-V, Cambridge (Massachusetts), Harvard University

figure, that is, it is impossible to indicate or even hypothetically acknowledge a separate real entity to which the authorship of this or that text could be linked), and concrete results in the study of Orphic chronology were obtained only in the twentieth century.

So perhaps for the fifth-century Orphics, writing and text were tools as handy as they were for Xenophon, but they used them for very different – if not opposite – purposes. The world experienced in everyday experience, the realm of *Lebenswelt*, did not interest them at all, which is why they did not feel the need to transform it into a record of the types of experience that occupied Xenophon. What they transformed was strictly mental, spiritual, and religious experience. This is also why their texts, in spite of considerable media advancement, convey content that has so little in common with the rationalism freshly discovered in writing by their contemporaries: sophists, Plato, and Aristotle.

* * *

Another “textual case” difficult to interpret mediologically is the *Corpus Hippocraticum*, a collection of sixty medical treatises attributed in ancient times to the “father of medicine,” Hippocrates of Kos (ca. 460-ca. 370).

Of course, it is not my intention, nor is it in my power, to analyze in detail a corpus that takes several thousand pages of print; it was undertaken in hundreds of specialist dissertations and commentaries. I limit myself to a few general comments. The Hippocratic corpus undoubtedly consists of “professional texts” as understood here, and this is about a class of practices that is fundamental to human existence. However, there is also a problem with authorship and chronology. These texts are characterized by the uniformity of diction, the same as that which I have indicated as a special feature of professional hippological texts. This makes it difficult to date them, but it is assumed that much of them were written in the 450–350 period and that the circle of their authors is roughly the same as that of the medical school existing on the island of Kos (this is indicated by the Ionic dialect of the texts). It is likely that Hippocrates himself was collecting old records of disease cases prepared by the priests of Asclepius. At the earliest stage, the record was perhaps a reminder or commemoration of a case of the disease, which evolved from the votive gifts for Asclepius, and Hippocrates began to use the old records on a larger scale as both a comparative and a research material, and to make new ones, with the intention of using them and passing on to

his successors. Such a change could have contributed to the often-discussed rationalization of the attitude of Hippocrates himself and his successors. The treatise *On the Sacred Disease*, which argued that epilepsy comes from brain damage, and not from the will of the gods, is a case in point. This text clearly shows the author's desire to depreciate his predecessors, whom he considers charlatans or ignorant, but modern researchers are perhaps too eager to suggest this radical position. In the case of the medical art, textual practices have probably contributed to the intensification of observational methods, thanks to which more and more organic factors playing a role in the aetiology of diseases and their treatment were discovered. At the same time, however, many of the texts in the Hippocratic collection, with *The Oath* in the forefront, exhibit "local" characteristics, closely and only linked to the cultural situation in which they were created.⁷⁵ Still, it is difficult to go beyond the area of speculation in their mediological analysis, just as when thinking about the beginnings of Greek "philosophy" and "literature" or rather the activities whose results were called so many centuries later.

The ten volumes of Littré's edition,⁷⁶ which date back to a century and a half ago (1839–1861, not yet fully replaced), almost certainly contain texts by Hippocrates himself, but it is impossible to identify them precisely and

Press, London, William Heinemann Ltd, MCMXXXVII (Loeb Classical Library 237), p. 135.

- 75 Let us take the second paragraph of *The Oath*: "[I swear] To hold my teacher in this art equal to my own parents; to make him partner in my livelihood; when he is in need of money to share mine with him; to consider his family as my own brothers, and to teach them this art, if they want to learn it, without fee or indenture; to impart precept, oral instruction, and all other instruction to my own sons, the sons of my teacher, and to indentured pupils who have taken the physician's oath, but to nobody else." (Hippocrates with an English translation by W. H. S. Jones, vol. I, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press, MCMLVII (Loeb Classical Library 147), p. 299). This recommendation refers to the situation in which the medical art is mostly transmitted orally within the familial-guild system limited to a quantitatively slim group whose members have close personal relations: this is probably what the medical school on Kos Island looked like in the fifth century BC. In our times, strict adherence to it would be considered nepotism.
- 76 Émile Littré (1801–1881), the most eminent student of Comte, was mainly famous for developing a dictionary of the French language, which is now known by his name. Apart from it, and in addition to translating and compiling ten

separate them from later ones because of the uniformity of structure and style mentioned above. Perhaps, this means that the textualization of medical art is very early, and at an early stage, regardless of the normativizing sophistic-philosophical undertakings, it has acquired its own principles. Littré supposed that scholars from the Alexandrian Library received the Hippocratic writings already in the form of a compact body taken from the collections gathered in Kos and did not interfere with their content. From a textological point of view, this corpus is very diverse, as it contains both theoretical and even philosophical texts, but also strictly practical textbooks, referring to various fields of the medical art, and in individual treatises one can see both traces of oral tradition and signs of a far-reaching process of the use of textualized expert knowledge.

What is extremely interesting is the fact that, exactly the same as in the case of the Orphic texts, the entire resource of texts included in the *Corpus Hippocraticum* was attributed to the “first author,” which made both resources structurally and stylistically homogenized; in the process, the traces of their historical and medial evolution were blurred. The practical dimension of both groups is a significant difference. While religious beliefs generally do not require a precise determination of the motoric practices associated with them or a careful observation of sensory reality,⁷⁷ medical art relies largely on these types of behavior. Since the treatment of diseases even in ancient times, when they were combined with the will of deities or the systems of heavenly bodies, required from those treating them a resource of practical and observational skills, it can be assumed that the introduction of writing into this particular area of human life did not cause any fundamental changes – but, as I have already mentioned, it made it possible to collect testimonies and history of diseases differently than just through oral transmission, which, in turn, resulted in an extension of the material and the possibility of comparative analysis not available with oral-memory

volumes of *Corpus Hippocraticum*, he also worked on many other ancient authors. His figure deserves to be explored more closely, as he is an exceptionally expressive representative of both the ethos and lifestyle of the positivist philologists who have devoted themselves to the Text.

77 Ritual activities and certain group behaviors should be excluded from the scope of this statement, but it does make sense in relation to individual religiousness

transmission. However, the training of functional skills still had to be carried out through direct contact between teachers and adepts; here, too, records could only support this process, as in all other epochs of medical history and other social practices where tacit knowledge is indispensable.

* * *

Both previous cases were puzzling and ambiguous in terms of the role of writing and text. So let us now quote a more expressive case. One of the concrete early examples of the dominance of the textual approach in Greek culture can be found in the fragment of Alexis' comedy *Linus* quoted by Athenaeus (ca. 375 – ca. 275):

The gist of it is that Heracles was being educated in Linus' house and was ordered to pick up one of the many books lying beside him and read it; and he picked up a cookbook and was holding it in his hands with great enthusiasm. Linus says the following: "yes, go over and pick any papyrus roll you like out of there and then read it. [...] This way you'll show me what subject you're naturally inclined to. (Heracles) I'm picking this one! (Linus) First show me what it is. (Heracles) It's a cookbook according to the label." (164 b)⁷⁸

This comedy already ridicules the specialization of the text and the existence of textbooks of knowledge and practical skills, which is a sign – typical in the situations presented by Greek comedians – that a given phenomenon is at least approximately known to a larger part of the audience, because if it were to be an allusion understandable only to the chosen ones, it would be difficult to achieve a comic effect. Heracles as a glutton chooses a cookbook (which, of course, has the form of a scroll that he holds in both hands and which bears a label similar to today's clothing label with a title and perhaps the author's name) instead of the canonical literary works that Linus discreetly suggested to him. How can we understand this outside the original humorous context?

Heracles was a somewhat grotesque figure in the mythology and collective cultural consciousness of the Greeks of that time: he was known as a mythical hero of superhuman strength and physical and sexual fitness,⁷⁹

78 Athenaeus, *The Learned Banqueters*, Books III.106e-V, edited and translated by S. Douglas Olson, Harvard University Press, Cambridge (Massachusetts), London 2006 (Loeb Classical Library 208), pp. 287–289.

79 Chamfort's biography quotes a letter from a lady sent to her friend about young Chamfort, who led a lively social and erotic life until he fell for syphilis: "You

but at the same time he was also considered, especially since the “golden age” of the Attic culture, a thoughtless blunt strongman who made the representatives of the intellectual elite of the time ironical smiling in the same way as the action movie stars did at the end of the twentieth century, making up for the deficiencies in the art of acting with their outstandingly developed muscles. According to the myth, Linus was the son of Apollo and one of the nymphs or muses, and taught Heracles to play the lyre, but with little success, because the hero, rebuked for performance errors, beat him to death with his own instrument – in the intellectual circles of the written Greece, this theme could also seem comical. Moreover, Linus was regarded as one of the mythical inventors of letters, although he was not as famous in this role as Cadmus or Palamedes. The comedy frame of Alexis, one of the most important creators of Middle Comedy, probably played out all these motifs.

Heracles’ behavior is supposed to prove his rudeness, but at the same time, in the distorted mirror of the comedy, we can see a progressive textualization of not only the spiritual and intellectual experiences or social practices practiced by the privileged social layers – for we are talking here about a cookbook from which the simpleton Heracles expects to **read the taste** of the dishes. What is more, Heracles does not distinguish here between the action performed on words and the action performed on things⁸⁰, a bit like the users of modern media who treat, for example, the world presented in a television broadcast as if it were the real world. His dullness, his inability to critically perceive the content of experience mediated by the medium, clashed with the presence of a textbook, not only has

think he’s only an Adonis, yet he’s Hercules.” This sentence – a model example of the application of the semiotic code based on the symbols of classical tradition commonly used in French court culture of the seventeenth and the eighteenth centuries – is, contrary to appearances, also a very specific information about Chamfort’s qualities. Adonis symbolized in this code delicate boyish beauty, while Hercules (Heracles) was known, among other things, for the fact that during one night he fertilized the fifty daughters of King Tespius, who then gave him fifty sons. See: Claude Arnaud, *Chamfort. A Biography*, trans. D. Dusinberre, Chicago-London 1992, p. 32.

80 We can also use the phrase “the action of the text” if we assume that Heracles’ reaction is caused by the active character of the autonomous presence of the

a comic effect, but also – at least in our eyes – confirms the inner contradiction inherent in the very essence of such a text and in the reactions of its recipients. Moreover, it should be stressed that the content of the book in question concerns one of the most common and everyday practices of every culture and every society – the preparation of meals. The text in the form of a textbook already enters the human world through the kitchen door. Following it, we are far away from both sophists and Plato.

* * *

This review of the forms of textualization of different types of intersubjective experience (and only such, because until the end of antiquity the Greeks did not produce a textual frame for individual subjectivity in the form of an autobiography or a diary in the contemporary understanding of these terms) can be continued for a long time, but such an enumeration would quickly become tedious. So let us try to summarize the remarks made so far and make the first attempt to generalize the whole class of these cultural phenomena.

In modern science, texts belonging to the ancient *Fachliteratur* are usually examined as if they were transparent protocols of knowledge or technology specific to ancient people⁸¹. Usually, the McLuhanian specificity of the message is not taken into account. Meanwhile, it is worth asking what has to happen in epistemological processes, in the experience of reality by people living in the world of culture, so that such texts could not only exist but also enter into a constant circulation? How are they used? Who

text in the realm of *Lebenswelt* – this presence would induce the recipients of the text to specific behaviors affecting other areas of reality as well.

81 Among the vast literature on the subject one can mention for example: Th. Fögen (ed.), *Antike Fachtexte – Ancient Technical Texts*, de Gruyter 2005; M. Horster, Ch. Reitz (eds.), *Antike Fachschriftsteller. Literarischer Diskurs und sozialer Kontext*, Stuttgart 2003; A. Imhausen, T. Pommerening (eds.), *Writings of Early Scholars in the Ancient Near East, Egypt, Rome, and Greece. Translating Ancient Scientific Texts*, de Gruyter 2010; B. Meissner, *Die technologische Fachliteratur der Antike*, Berlin 1999; C. W. Müller et al. (eds.), *Ärzte und Ihre Interpreten. Medizinische Fachtexte der Antike als Forschungsgegenstand der klassischen Philologie*, Saur 2006; L. Totelin, *Hippocratic Recipes. Oral and Written Transmission of Pharmacological Knowledge in Fifth- and Fourth-Century Greece*, Brill 2009. This is a sample of the most recent studies; however, the history of the subject goes much further, since as early as 1924 Hermann

need them and what for? I would like to stress that I am not interested in the problem of the influence of writing and text on cognitive processes in such fields as mathematics, whose representatives deal with phenomena independent of the individual and intersubjective realms of experience and sensation, or at least they consciously strive to keep their subjects of interest in such independence.⁸² The problem is to transform into a text form those very areas of existence in which the mentioned realms determine the original form of experience.

In the earliest Greek literature that can be included in the area of *Fachliteratur*, one can observe a more or less intentional desire of authors of texts to use writing as a means of conveying that part of the functional or motoric experience that can be conveyed through writing – that is to say, a protocol, formal and phenomenal description of certain classes of activities

Diels published *Die Antike Technik*, in which he aimed to capture an issue that goes beyond pure positivist factography.

- 82 The relationship between writing practices and the emergence and development of such areas of human intellectual life as mathematics is a separate topic which I do not address here. It is widely acknowledged that in the world of classical Greece there has been a qualitative change in making mathematical procedures an independent intellectual undertaking alongside strictly practical applications known from earlier civilizations, which was connected with a gradual detachment of mathematical concepts from their relationship with the material world experienced sensually and being a space of social practices. The presence of Greek writing has probably contributed to this, but rather not to a decisive extent, because graphic representations of mathematical concepts do not have the necessary connections with alphabetical writing. On the other hand, for such thinkers as the Pythagoreans, mathematical concepts maintained strong links with the material world, but on a different ontological level from that of the Egyptians or Babylonians – numbers and proportions were no longer tools to facilitate practical activities (calculations and measurements), but principles defining the abstract order of building reality. The basic elaboration of the history of Greek mathematics remains a two-volume work by Sir Thomas Little Heath: *A History of Greek Mathematics*, vol. I, *From Thales to Euclid*; vol. II, *From Aristarchus to Diophantus*, Oxford 1921. The history of mathematical notation was presented by Georges Ifrah, *The Universal History of Numbers*, trans. D. Bello (Wiley 2000), but this work concerns mainly the notation of digits and numbers, while all other mathematical notations and symbols also play an important role in thinking about epistemological problems related to “mathematical notation.” At this point, I can only suggest that writing practices

and practices, which is to serve as an instruction to the recipients to carry out such practices. As I have tried to demonstrate in the case of Xenophon, in the practice of producing such texts⁸³ it is a matter of exploiting the opportunity offered by writing with its communicative potential, which is imposed on users the more deeply and reflectively they become aware of the variety of its possible roles, functions and possibilities of its application. There appear, therefore, groups of senders and recipients of such messages – messages in which, however, it is not possible to include the sensory and functional realm because it is generally impossible to convey, even in the living word or in any other symbolic message, since it is produced and played out in the necessary connection with the human body, whose mental experience, immersed in the very irreducible and non-transferable corporeality that is the legacy of distant epochs of biological evolution, is not at all subject to the cultural message between human subjects⁸⁴.

and forms of notation and text specific to European mathematics are linked to cognitive processes of a different nature from those of alphabetical writing.

- 83 Let us note that the practice of writing or rewriting a text is also itself a functional and motoric practice – but with properties very different from those of the practices referred to in the textbook, although a textbook of good writing (in both creative and reproducible terms – both calligraphy and creative writing) is as illusory in its effectiveness as textbooks of efficient swimming or dancing. Writing could be regarded as a kind of cultural metapractice marking the identity and evolution of writing cultures to a great extent, but I am not sure if such a conceptual approach would be cognitively fruitful. I will return to the issue of writing activities in this book in the appendix on medieval scribes. It is impossible to make judgements or even assumptions about the psychophysiology of writing in antiquity due to an almost complete lack of source testimonies. The phenomenology of writing with a stylus on a wax plate, with a pen on a papyrus sheet and with a graver on a marble plate – these are certainly three very different fields of experience: sensual, intellectual, and cognitive. However, we cannot go beyond this most general statement.
- 84 Toward the end of the nineteenth century, similar intuitions were manifested by empiriocritical philosophers in their attempts to overcome the contradictions led by the post-Kantian philosophy of the subject clashing with the achievements of the nineteenth century exact sciences. In his essay *Positivist philosophy*, Leszek Kołakowski sums up Avenarius by saying that, according to this philosopher, the existence of the external world depends, in its final instance, on the existence of the nervous system of the subject that perceives this world. Here I only suggest that the impossibility of transferring between people the sensual experiences as

People writing and reading textbooks therefore had to give up trying to convey what could not be conveyed anyway. There would be no problem here if the text did not push the body and its activities out of the area of conceptualisation of practices – this push has had a huge impact on the cultural message in Europe.

Inevitably, the question arises whether this specific type of writing and reading practices, which is “professional literature,” has caused some changes in human cognitive processes at the physiological and neuronal level. I believe that the answer to such a question is not possible, if only because we do not have means to trace possible changes in the structure of the brain and nervous system of people from antiquity as compared to their structure in inhabitants of earlier eras. Hypotheses about the influence of cultural phenomena on the biological form of *Homo sapiens* have been formulated many times already, and scientists dealing with physical anthropology generally agree today that during the ten millennia that have passed since the dawn of civilization, human organisms as biological species have undergone changes caused by culture. However, the details of these processes and the details of these changes remain the subject of lively discussion.⁸⁵ It would be risky – even with regard to the norms of these

such (and not only their symbolic, mainly written representations) results from our biological heritage, which has made each of us have a nervous system that has no external connections “on the way out” (effectors), but only receptors, which means that we can absorb the sensations, but we cannot emit them from ourselves so that our fellows perceive them with their own receptors, and that’s why we can only communicate our sensual experience symbolically. Some of the theses expressed in the Aristotle’s *Metaphysics*, which I will analyze in the following pages of this book, are based on these very properties of the human cognitive-receptive apparatus.

85 The area of these discussions is sometimes referred to as “biocultural anthropology,” and its intellectual and institutional autonomy remains problematic so far because it is not clear whether it is to be a new sub-discipline of cultural studies or whether it is to become a synthesis of cultural and physical anthropology freed from the ballast of old discredited racial theories. Research tools of neuroscience and cognitive science also come into play here. Researchers interested in this issue highlight, for example, the possible influence of cultural factors (including the development of writing and visual images as carriers of symbolic meanings circulating in cultural communication) on changes in the structure of certain areas of the human cortex responsible for the recognition and processing of visual stimuli – this

speculative inquiries – to determine the impact of writing practices on the realm of human perception, which includes not only anatomical and physiological aspects but also psychological and behavioral ones.

So let us confine ourselves to the safe statement that the “handbook” is the result of the classical Greeks’ realization that there are some redundant potentials of writing, text and also of writing and reading practices: they discovered the possibility of transmitting an experience that is not necessarily linked to the situational experience of transmission, as it happened in oral culture. In this way, one of the most important misunderstandings in the history of our culture has occurred.

The misunderstanding was that text users quickly recognized that a text message could replace experience itself, i.e. they started to ignore the absence of activity and sensation content in this message. This is what “body displacement by text” is all about. The “handbook,” treated as an independent object of reading and not only as a support for active learning, gained full autonomy as a record and as a means of cultural communication. The process of achieving this autonomy from actual experience by professional texts had to start in Greece as early as in the fifth century, although it is impossible to say anything more specific about it due to the lack of testimonies of reception of these texts in the cultural system of the time. Plato and Aristotle greatly strengthened this conviction, the first in the path of idealistic philosophy, the second in the path of empirical philosophy: the written-text subsoil of both these philosophies was analyzed by Eric Havelock and Roy Harris. As was the case in other areas of the mental life written by the classical Greeks, the first attempts, somewhat coincidental and made in order to recognize the possibilities of writing as such, at some point (obviously elusive on the timeline even at the Hegelian twilight) have moved into a systematic approach aimed at embracing the

is one of the potential examples of changes caused by the presence of cultural phenomena in our anatomical structure. However, finding such changes does not give us an answer to the question whether and how our cognitive processes change under the influence of these phenomena. On the subject of biocultural anthropology, see e.g. Alan H. Goodman, Thomas L. Leatherman (eds.), *Building A New Biocultural Synthesis* (University of Michigan Press 1998); Daniel A. Segal, Sylvia J. Yanagisako (eds.), *Unwrapping the Sacred Bundle: Reflections on the Disciplining of Anthropology* (Duke University Press 2005).

whole reality and designing its own and human behavior in it. And here it turned out that **we are stuck in the text** – because the mentioned suppression can be understood as such. After all, the bodies of users of culture practicing the practices belonging to it have never been annihilated, their presence is felt even in the descriptions of extreme spiritual or mystical experiences – sometimes this presence is even a kind of manifestation á rebours. Thus, “displacement” can be understood as the identification of the body’s activity with the instruction of the text, that is, the subordination of the functional *aisthesis* to the realms of the reflective *episteme*. Experience has been recorded.

The reason why Europeans were so eager to submit their bodies to the dictates of the record and the text – and those who did not want or could not do so were pushed into marginal areas and deprived of privileges and recognition in our culture’s system – has already been mentioned here. The text and the cognitive processes associated with it enable people to prevent the entropy of the real world by codifying and consolidating the liquid, processional reality in a stable record. The presence of the text is tantamount to an extensification of individual and collective memory on a scale inaccessible to any oral culture. The production and use of texts provides their authors and recipients with a cultural, social, and political hegemony through the accumulation of messages and the knowledge they contain, accessible only to written experts, who thus gain a symbolic and practical advantage over the rest of the population. All this is a benefit for which it is worthwhile to sacrifice a silent, reflective sensory experience. This is how it emerges as a separate field of what, for many centuries to come, the masters of all performing arts passed on to their students in action, in rehearsal, and in demonstration, without textbooks and without documents – a practice which the learned scribes always had in contempt (and today we may suspect them of resentment), and which in the twentieth century was called tacit knowledge.

But how, therefore, should one understand the conviction common in the history of philosophy that Aristotle, by opposing Plato, created a philosophical system based precisely on experience?

Chapter 4 The putative empiricism of Aristotle

You have come out of the trees so recently, and your kinship with the monkeys and lemurs is still so strong, that you tend toward abstraction without being able to part with the palpable—firsthand experience. Therefore a lecture unsupported by strong sensuality, full of formulas telling more about stone than a stone glimpsed, licked, and fingered will tell you – such a lecture will either bore you and frighten you away, or at the very least leave a certain unsatisfied need familiar even to lofty theoreticians, your highest class of abstractors, as attested by countless examples lifted from scientists’ intimate confessions, since the vast majority of them admit that, in the course of constructing abstract proofs, they feel an immense need for the support of things tangible.

Stanisław Lem, “Golem’s Inaugural Lecture,” in his: *Imaginary Magnitude*, trans. M. Heine (New York 1984), p. 127.

The principles formulated by Aristotle with regard to the textual representation of reality were analyzed by Roy Harris focusing on the principles of logic defined in the *Organon*. Here, I would like to develop his analysis by referring to those fragments of *Metaphysics* that concern cognitive processes.⁸⁶

86 The most important modern studies on the history and composition of the text of *Metaphysics* and interpretation of its meanings are the following: Werner Jaeger, *Studien zur Entstehungsgeschichte der Metaphysik des Aristoteles* (Berlin 1912), *Aristotle’s Metaphysics. A Revised Text with Introduction and Commentary* by W. D. Ross, vols 1–2 (Oxford 1924 and many reprints). From the latest general studies are recommended for example: Jonathan Barnes (ed.), *The Cambridge Companion to Aristotle*, Cambridge 1995 (with vast comprehensive bibliography), and the first larger collection of texts on ancient commentaries to Aristotle: Richard Sorabji (ed.), *Aristotle Transformed. The*

It should be remembered that the text of *Metaphysics*, which we received in our legacy from old times, is not a text preserved in its original layout. In other words, it is not a work (nor a book) designed by the Stagirite himself. Even a cursory reading of individual books makes it possible to see that they do not constitute a coherent elaborate argument – even though, for many centuries, European philosophers believed otherwise. It is now almost universally accepted that the arrangement of *Metaphysics* and the order of its contents are the result of editorial work undertaken in the first century BC by Andronicus of Rhodos, the eleventh scholarch of Peripate, who put in order the whole of Aristotle’s surviving texts, which were brought to light after a long time of oblivion, as reported by Strabo (who was probably a pupil of Andronicus; *Geography* XIII 1, 54) and Plutarch (*Life of Sulla* 26). It is believed that the title *Metaphysics* was given by Andronicus to several short texts written by the Aristotle himself, but mostly in the form of working sketches or outlines, and to a certain number of notes made by his students during lectures. Since Andronicus could not assign them to any particular field of knowledge, he finally placed them after the *Physics* treatise – and this is the origin of one of the most important terms in Western philosophy. “Ta meta ta physica” literally means “what is after physics,” and this term should be understood rather in its simplest sense, that which refers to the disposition of the contents of the book, although some researchers have found metaphysical meanings in it.

The fact that the order of the individual books of this work does not come from the author does not strongly influence the meaning of its entirety, especially from the point of view of the interpretation developed here. Nevertheless, it is worth realizing that, in general, the majority of the preserved writings of the Stagirite – that is, the texts that played a huge role in the development of European culture – were most probably not intended by the author for wider circulation (his exoteric writings are practically entirely lost), which can be considered a particular irony of history, and the fact that

Ancient Commentators and Their Influence, Cornell Univ. Press 1990, which is supplemented by a newer bibliographic contribution: John Sellars, *The Aristotelian Commentators: A Bibliographical Guide*, in: Peter Adamson, Han Baltussen, Martin William Francis Stone (eds.), *Philosophy, science and exegesis in Greek, Arabic and Latin commentaries*, vol. 1, pp. 239–268 (London 2004).

the texts which were created as high-context expert messages for a narrow circle of specialists or as preliminary, barely outlined diagnoses, have finally become, in result of blind historical processes, texts understood as a universal interpretation of the most general truths about the nature of reality must lead us to think deeply both about the sense of cultural evolution, or rather the lack of it, and about the discrepancy between the cultural media understood per se and their meanings and uses that make their sender and recipient, especially at the great scale of the historical process.

In *Metaphysics*, Aristotle sometimes explains or at least tries to explain the concepts he uses, but much more often he introduces them without prior preparation in the course of his own reasoning, which, in turn, remains for the readers in statu nascendi. We observe here usually not a ready-made philosophical system, as many former commentators thought, but the process of its creation, a process which is very rarely conducted consistently. However, that the author's goal, repeatedly and emphatically expressed in the course of this loud thinking in the text, was precisely the creation of a stable conceptual system that would present reality more precisely and fully than all of its predecessors had succeeded, so *Metaphysics* as a philosophical text is a phenomenon that is at least inconsistent, and its textual form – necessarily stable as far as the arrangement of words is concerned, if one omits the problems of composition and philological constitution of the text – has for many centuries given the illusion of stability to the thoughts expressed in it, even though in this case we are rather dealing with a thought captured by the record as it emerges from the author's mind. Moreover, these remarks can be applied to a large part of the preserved legacy of the Stagirite, and in this way at least partly explain why the edition of *Commentaria in Aristotelem Graeca*, one of the major ventures of the late nineteenth century philology, has fifty-one large volumes, covering nearly fifteen thousand pages of dense printing, and contains only those commentaries that have survived to modern times.

The first⁸⁷ and probably most famous phrases of *Metaphysics* are as follows:

87 While maintaining due respect for the English translations of this work, I decided to translate by myself most of the quotations from *Metaphysics* analyzed here, so that they adhere as closely as possible to both the meaning of the

πάντες ἄνθρωποι τοῦ εἰδέναι ὀρέγονται φύσει. σημεῖον δ' ἡ τῶν αἰσθήσεων ἀγάπησις; καὶ γὰρ χωρὶς τῆς χρείας ἀγαπῶνται δι' αὐτάς, καὶ μάλιστα τῶν ἄλλων ἡ διὰ τῶν ὀμμάτων. οὐ γὰρ μόνον ἵνα πράττωμεν ἀλλὰ καὶ μηθὲν μέλλοντες πράττειν τὸ ὄραν αἰρούμεθα ἀντὶ πάντων ὡς εἰπεῖν τῶν ἄλλων. αἴτιον δ' ὅτι μάλιστα ποιεῖ γνωρίζειν ἡμᾶς αὕτη τῶν αἰσθήσεων καὶ πολλὰς δηλοῖ διαφορὰς. (980 a 21–27)

All people by nature want to know/learn. A sign of this is the pleasure of experiencing [of sensory experiences]; for apart from the benefit [that comes from them], they are enjoyed by themselves, and most of all those that come through the eyes. For not only to act but also without intending to act, we put seeing above, so to speak, everything else. The reason for this [is] that it is the one of the senses that gives us the most to know and reveals many differences.

Such an opening of the topic marks, it would seem, a naturalistic, empirical and common-sense starting point for the arguments about “first philosophy.” The source of knowledge, says the philosopher, is the resource of data coming to the human mind through the senses, and out of the senses it is sight that provides the most data. That is why people like to look at the world – thanks to this (let us recall that “looking,” or “watching,” is “theoria” in Greek), they gain knowledge and, moreover, they enjoy themselves. If we were to stop at this statement, Aristotle would in fact be a pioneer of philosophical empiricism in the traditional, textbook sense, and the question of the written or textual organization of knowledge would be irrelevant to his thought. But in the following sentences this simple outline of “knowledge from the looking” begins to complicate.

τὰ μὲν οὖν ἄλλα ταῖς φαντασίαις ζῆ καὶ ταῖς μνήμαις, ἐμπειρίας δὲ μετέχει μικρόν: τὸ δὲ τῶν ἀνθρώπων γένος καὶ τέχνη καὶ λογισμοῖς. (980 b 25–27)

Other [animals] live on phantasies and images of memory, and they have a small share in experience [*empeiria*]; whereas mankind [lives] both with skill [*techne*] and with reasoning.

Sir William David Ross (1877–1971), the Scottish moral philosopher who produced one of the most important twentieth-century editions of *Metaphysics*, tried with Anglo-Saxon chill to sort out in it what one of his successors, who had already been rid of reversion to the Old Masters at

original and the assumed meaning of these considerations. These are makeshift translations, do not aspire to stylistic elegance, and even avoid it in order to render the diction of the original more faithfully. In square brackets there are additions not present in the Greek text, added to clarify the meaning of the text.

the end of the twentieth century, called “a hotch-potch, a farrago.”⁸⁸ In his commentary on verse 980 b 26, Ross states calmly: “It is not easy to see what Aristotle wants to say about *empeiria*, the connecting link between memory and art or science.” Here, too, this doubt will not be resolved, even though “experience” is one of the key words in this book.

The concept of “experience” (*empeiria*) in this passage is a tool for Aristotle to differentiate people and animals in terms of how they experience reality. Animals participate in the experience only to a small extent because they have neither *techne* nor *logismos* – hence the conclusion that both these concepts, whatever they mean, concern such qualities of the human cognitive and intellectual process that have at least a significant connection with the results of “experience” and at the same time represent a degree of organization of consciousness higher than memory images and pure representational content. The word “logismos” can be quite safely translated as “reasoning” – but it should be remembered that this is a reasoning that emerges from the *logos*, which in this case means not so much the mysterious beginning of all things or their quasi-religious principle, but rather, according to Aristotle’s rationalistic approach, a concept from the order of the written text. A much bigger problem is posed by the term *techne*, often and wrongly translated as “art” (through the Latin *ars*), which brings to mind associations with the artistic creative process, which the Greeks in the classical era did not problematize at all (at least not in the modern sense of the term). *Techne* can be roughly defined as any practice or class of practices that are performed by people at their best (in the sense: the most effective, the most efficient, in terms of achieving the desired results) of possible ways, thanks to their excellent mastery of the execution method, whether it be carving marble statues, carving woodwork, athletics, making speeches, writing philosophical works, doing politics, managing assets or sewing shoes – the Greeks did not differentiate this concept because of the social prestige of the activities to which they applied it. Therefore, the most accurate English equivalent of this word is, I believe, the word “skill.”

88 Jonathan Barnes, *Metaphysics*, in: *The Cambridge Companion to Aristotle*, Cambridge 1995, p. 68. Barnes describes very suggestively the compositional disintegrity of *Metaphysics* and the resulting interpretation problems.

Greek *technē* contains conceptual components which, in the twentieth century, entered into the categories of tacit knowledge – intuitive knowledge, embedded in the bodily-active realm of the performing subject, uncluttered and elusive in the verbal message and possible to transfer only in actu, within the activities and practices of the master observed and, as far as possible, imitated by the student. If Aristotle points to this very characteristic of human behavior as a distinctive feature – besides written reasoning – it means that he considers both the conceptual and the functional aspect of “experience.” And if so, then the problem of the textual capture and transmission of experience appears in the horizon of Stagirite’s thought with all its sharpness, even if he himself omits it with silence. In the next part of the argument, it will be shown how he manipulates the concept of *technē* in order to bring its meaning to the desired form.

Here is the next passus from the *Book Alpha* (980 b 27 – 981 a 5):

γίνεται δ' ἐκ τῆς μνήμης ἐμπειρία τοῖς ἀνθρώποις: αἱ γὰρ πολλὰ μνήμαι τοῦ αὐτοῦ πράγματος μιᾶς ἐμπειρίας δύναμιν ἀποτελοῦσιν. καὶ δοκεῖ σχεδὸν ἐπιστήμη καὶ τέχνη ὅμοιον εἶναι καὶ ἐμπειρία, ἀποβαίνει δ' ἐπιστήμη καὶ τέχνη διὰ τῆς ἐμπειρίας τοῖς ἀνθρώποις; ἢ μὲν γὰρ ἐμπειρία τέχνην ἐποίησεν, ὡς φησὶ Πῶλος, ἢ δ' ἀπειρία τύχην.

And in people, experience arises from memory; for many memories of the same thing can eventually turn into the power of one experience. And it almost seems that knowledge and skill are something similar to experience, but in people, knowledge and skill are achieved through experience; because, as Polos says, experience has created skill, and lack of experience [has created] chance.

After reading these sentences, one can hardly doubt that the text of *Metaphysics* is a record of an emerging thought, not an emerged one. Striving to give his students, and probably mainly himself, an answer to the question what is human experience understood as a universal cognitive process, Aristotle states that it is created through the accumulation of memory traces, and that it is itself the basis of knowledge (*epistēmē*) and skills (*technē*). He adds to this a Gorgian sentence by the sophist Polos based on the antithetical arrangement of two pairs of notions. At this stage of reasoning, “experience” is a cognitive power mediating between organic images of memory and advanced intellectual and practical activities. We are still in the circle of common sense naturalistic psychologism, where there is no room for the problem of cultural media. However, it is not clear (as long as anything is clear in the arguments referred to here) how the accumulation

of memory content is to be transformed into an experience, especially one that, in turn, lies at the basis of *techne* and *episteme*. In addition, as Polos' opinion suggests, the opposite of skills is coincidence, which means that experience – just like the written practices analyzed in this book – prevents entropy, introduces order into the chaotic stream of reality perceived by the human mind. Thus, in Aristotle's reasoning there is a qualitative leap from biological reactions to categories and cultural phenomena. What is the causative factor of this transition?

The extraction of the program of textualization of experience hidden in the first books of *Metaphysics* will require patiently going through a large number of intricate phrases. The following sentences are therefore (981 a 5–7, 12–16):

γίγνεται δὲ τέχνη ὅταν ἐκ πολλῶν τῆς ἐμπειρίας ἐννοημάτων μία καθόλου γένηται περὶ τῶν ὁμοίων ὑπόληψις. [...] πρὸς μὲν οὖν τὸ πράττειν ἐμπειρία τέχνης οὐδὲν δοκεῖ διαφέρειν, ἀλλὰ καὶ μᾶλλον ἐπιτυχάνουσιν οἱ ἐμπειροὶ τῶν ἀνευ τῆς ἐμπειρίας λόγον ἔχόντων. αἴτιον δ' ὅτι ἡ μὲν ἐμπειρία τῶν καθ' ἕκαστόν ἐστι γνῶσις ἡ δὲ τέχνη τῶν καθόλου.

A skill arises when many mental images of experience produce a single overall picture of similar [phenomena]. [...] As for action [*prattein*], experience seems to be no different from skill, but the experienced manage to do better than those who have understanding [*logon*] without experience. The reason for this is that experience is knowing what is individual and skill [is knowing what is] general.

The relationship between experience and skill is somewhat complicated here, but it is important that the philosopher places a strong emphasis on the functional aspect of experience and its connection to specific individual practices opposed to purely intellectual knowledge. Skill seem to be a higher level of experience, as it somehow combines a set of individual experiences and generalizes them. All this reasoning is permeated by a constant negative reference to the Platonic theory of ideas, but there is no clear explanation as to what – if not knowledge of ideas – the process of generalizing individual experiences into skills is supposed to consist of. All we learn is that the highest degree of practical human knowledge is achieved by moving from knowledge of individual actions to knowledge of general principles. But the next quote will explain much more:

ὁμως τὸ γε εἰδέναι καὶ τὸ ἐπαεῖν τῇ τέχνῃ τῆς ἐμπειρίας ὑπάρχειν οἰόμεθα μᾶλλον, καὶ σοφωτέρους τοὺς τεχνίτας τῶν ἐμπείρων ὑπολαμβάνομεν [...]. τοῦτο δ' ὅτι οἱ μὲν τὴν αἰτίαν ἴσασι οἱ δ' οὐ. οἱ μὲν γὰρ ἐμπειροὶ τὸ ὅτι μὲν ἴσασι, διότι δ' οὐκ

ἴσασιν: οἱ δὲ τὸ διότι καὶ τὴν αἰτίαν γνωρίζουσιν. διὸ καὶ τοὺς ἀρχιτέκτονας περὶ ἕκαστον τιμωτέρους καὶ μᾶλλον εἰδέναι νομιζόμεν τῶν χειροτεχνῶν καὶ σοφωτέρους, ὅτι τὰς αἰτίας τῶν ποιουμένων ἴσασιν τοὺς δ', ὥσπερ καὶ τῶν ἀψύχων ἕνια ποιεῖ μὲν, οὐκ εἰδότες δὲ ποιεῖ ἢ ποιεῖ, οἷον καίει τὸ πῦρ. (981 a – 24 b 3)

However, we believe that cognition and understanding are more a skill than an experience. And we think that the skilled [*technitai*] are smarter than the experienced [*empeiroi*] [...]. And this is because they know the cause and those do not know. Because the experienced know how [*hoti*], but they don't know why [*dioti*]; and those others will know why and for what reason. Therefore we think that architects are always more respectable and know more than craftsmen, and they are smarter than them, because they know the reason for what they do. And they are like some inanimate objects [*apsycha*] that do something without knowing that they are doing what they are doing, like fire burns.

At this point, Aristotle, so to say, gives up preliminary courtesies and goes to the point. Experience-*empeiria* is rapidly degraded in favor of skill-*technē*, which becomes fully autonomous in these sentences, as if a few sentences earlier Aristotle had not said that skill is grounded just and only in experience. However, experience in itself has no value because it results only in mechanical repetition, a mindless habit, a routine that does not require a critical intellectual attitude at all. “How” [*hoti*] and “why” [*dioti*] are almost synonymous with twentieth-century “know how” and “know that,” but Aristotle’s valuation of these concepts is much more polarized. It is clear to him that knowledge that is purely practical, functional, resulting from motorized mastery of practice (that is, knowledge that he does not think can be passed on in word, especially written word) – is an inferior and purely utilitarian knowledge, and those who have acquired it in experiential-*empeiria* perform their activities without understanding their cause, sense, or purpose.

Now we’re touching the point. The categories of causality, purposefulness and agency are among the main instruments for building an Aristotelian vision of the world, as every graduate of philosophy knows. Many books have been devoted to the explication of these concepts, and the beliefs about the existence of causes, aims and effects in our world, which have been rooted for centuries in the common knowledge of Europeans and the inhabitants of other parts of the Earth who are subject to their influence – also have much in common with them. There is no doubt that Aristotle saw the world as a dynamic structure evolving in an order of purpose built into it. However, what is most interesting here is the sudden appearance of the

notion of cause in an argument devoted *prima facie* to epistemological, not ontological problems.

Using this trick, Aristotle emerges from the impasse he was led to by rejection of Platonic ideas. Unable to base the thesis of the superiority of *techne* over *empeiria* on the argument “of knowledge of the ideas,” he proves it through the argument “of knowledge of the causes,” introduced into this reasoning completely arbitrarily. Thanks to this, he also answers the question about the qualitative difference between knowledge from experience and knowledge from skills – the former being limited to individual cases, isolated from each other and immersed in random situational contexts depending on factual reality, whose course seems chaotic if it is captured only in small scales. This is why *empeiroi* can only mechanically carry out their learned actions, reacting to the conditions they encounter in the short term – even if, what the philosopher discreetly omits, they do so masterfully. On the other hand, the knowledge incorporated into *techne* is knowledge not only about the practices as such, but above all about their place in the causal-objective structure of large-scale reality perceived only by the skilful. In this way, Stagirite reduces the whole field of practical and functional knowledge to the functions performed by an ant worker, termite or human worker standing at the production line in a Ford factory. The possibility of achieving mastery, executive perfection understood as an intrinsic cultural value, does not matter to him. What matters is only the higher level of knowledge, which frees the skilled from the practices *ad hoc*, and at the same time guides them inevitably toward theory. Reading these and similar sentences, we can see under a magnifying glass the reason why in Europe until the Renaissance (and in some cases much later) people working in the performing arts and crafts were disregarded and usually given low positions in the social hierarchy.

The answer to one question entails another – where do *technitai* get their knowledge of the causes if it is not provided by *empeiria*?

ὄλως τε σημείον τοῦ εἰδότος καὶ μὴ εἰδότος τὸ δύνασθαι διδάσκειν ἐστίν, καὶ διὰ τοῦτο τὴν τέχνην τῆς ἐμπειρίας ἡγούμεθα μᾶλλον ἐπιστήμην εἶναι: δύνανται γάρ, οἱ δὲ οὐ δύνανται διδάσκειν. ἔτι δὲ τῶν αἰσθήσεων οὐδεμίαν ἡγούμεθα εἶναι σοφίαν: καίτοι κυριώτατα γ' εἰσὶν αὐταὶ τῶν καθ' ἕκαστα γνώσεις: ἀλλ' οὐ λέγουσι τὸ διὰ τί περὶ οὐδενός, οἷον διὰ τί θερμὸν τὸ πῦρ, ἀλλὰ μόνον ὅτι θερμόν. (981 b 7–13)

In general, the difference between the knowing and the ignorant one is the ability to teach, and therefore we believe that skill is knowledge more than

experience; for they can teach, and those who are experienced cannot [teach]. And we do not consider any of the sensory experiences to be wisdom; although they are the main source of knowledge about individual subjects; but they do not say anything about “why”, for example, why fire is warm, but only that it is warm.

The statement that the experienced cannot teach, and only the skilled can do so, is surprising, to say the least. Indeed, it requires a specific definition of the teaching process, which, however, the philosopher does not give, and the commentator must provide it. Aristotle clearly does not recognize the possibility of conveying knowledge other than verbal, in particular based on an established categorical and meaningful structure. At the same time, however, experience in its most elementary manifestation – the perception of sensory stimuli – is not transferable because the knowledge obtained through it, although the richest possible, is not discursive and communicative: it cannot be contained in a system of linguistic signs, neither oral nor written.

Since Aristotle defines the conditions for the transfer of knowledge in such a way, it is difficult to avoid the conclusion that “teaching,” i.e. the transfer of knowledge obtained through experience, is possible only when this knowledge takes the form of a systematic and independent conceptual structure, namely – wisdom (*sophia*), the highest and best form of knowledge, whose source is no longer the sensual experience itself, but mental, reflective cognition, which has little in common with that one, although even the Stagirite cannot push the realm of sensation out of his project, because then all knowledge in this project would be suspended in a cognitive vacuum. A little further (981 b 30) finally the philosopher points this whole argument with an open statement that mental cognition is superior to sensual cognition, which is tantamount to recognizing sensual knowledge only as the first step, in fact, of little importance, on the road to true cognition. In the end, Aristotle asserts:

...αἱ δὲ θεωρητικαὶ τῶν ποιητικῶν μᾶλλον. ὅτι μὲν οὖν ἡ σοφία περὶ τινὰς ἀρχὰς καὶ αἰτίας ἐστὶν ἐπιστήμη, δῆλον. (982 a 1–3)

...and the theoretical/visual are better than the performative/practical. It has been shown that wisdom is knowledge of some principles and causes.

The whole realm of functional, motoric, and performative practices was thereby maneuvered beyond the bounds of philosophical reflection, and thus

Stagirite both got rid himself and freed his successors from the problems of the textual transmission of this realm – problems which I analyzed on the example of Xenophon.

Here, however, we return to the main thread – for the world of principles and reasons, the knowledge of which, according to Aristotle, provides wisdom in such a monopolistic way, is a world created and existing in the text. This is because what remains for the thinker after the separation of his own thinking from the phenomenal realm is nothing more or less than the realm of the text (which Aristotle completely ignores) – only this realm can mediate the internal mental processes of the thinking subject under such specific conditions of thinking and at least seemingly connect them with the external world in both the objective and communicative sense. Also the teaching, which was said to be practiced only by *technitai* and not *empeiroi*, takes place in the realm of the text, since only the textual message guarantees that the conceptual structures built within the framework of *technē* do not dissolve into a fluid *empeiria* or distort in the “Chinese whispers” of everyday oral communication.⁸⁹ This is why the experienced cannot teach: they do not have a tool to convey their knowledge, or at least they do not have such a tool that would satisfy a philosopher who persists

89 Analyzing the *Rhetoric* in my previous book, I pointed out that, for Aristotle, the textual message of knowledge is no longer significantly different from the oral message in terms of its cognitive potential and contextual circumstances – the intertwining of the “lecture” and “writing” style visible even in the sentences from the first book of *Metaphysics* quoted here confirms this thesis. In other words, for Aristotle, written abstract philosophical concepts can also be conveyed orally, because for him the “oral message” is probably the same as a lecture for student listeners, and not as an epic recitation or a discussion on the agora, which means that his transient-received situational entanglement is irrelevant to his content. Perhaps Aristotle spoke just as he wrote and expected his listeners to behave as if they were readers – and if the parts of his works that are students’ notes faithfully reflect the course of his speech in the lectures, this supposition borders with certainty. For this reason, too, *Metaphysics*, like most of his preserved works, makes no mention of speech and writing as carriers of meaning and means of communication, and particularly there are no mention of his own messages there. Aristotle was probably not interested in the specificity of communication media – unlike most of his contemporary Greek authors. They were completely transparent to him and did not differ functionally from each other.

in the absolute codification of both knowledge itself as the content of the cognitive mind and its form transmitted between the subjects who possess it. The actions and practices in their individual one-off appearances are not suitable to be textualized, even if they are mechanical and routine, because not only do they themselves escape text description, but, what is worse, they do not create any superior cognitive-conceptual structure through which a universal textbook of causes and objectives could be constructed – precisely the causes and objectives, not the practices that must be subordinated to them. For Aristotle, Xenophon’s arguments about maintaining horses or catching hares were probably naive and clumsy attempts to describe accidental activities.⁹⁰

Later in the *Book Alpha*, Aristotle reviews the opinions of his predecessors about the first principles and *archai*, making it clear that these opinions do not deserve to be acknowledged, and at the same time providing us with one of the most important sources of modern knowledge about Presocratic philosophy, although its use is subject to considerable risk, because the philosopher relates the views of his predecessors only through his own, as Hegel has already clearly emphasized in his lectures on the history of philosophy. But before that, he makes a few remarks about the highest form of knowledge and ways of acquiring it.

ὑπολαμβάνομεν δὴ πρῶτον μὲν ἐπίστασθαι πάντα τὸν σοφὸν ὡς ἐνδέχεται, μὴ καθ’ ἕκαστον ἔχοντα ἐπιστήμην αὐτῶν: εἶτα τὸν τὰ χαλεπὰ γνῶναι δυνάμενον καὶ μὴ ῥάδια ἀνθρώπων γινώσκειν, τοῦτον σοφόν τὸ γὰρ αἰσθάνεσθαι πάντων κοινόν, διὸ ῥάδιον καὶ οὐδὲν σοφόν. (982 a 8–12)

90 Xenophon’s name does not appear even once in the entire *Corpus Aristotelicum*, which may be a meaningful lack and may indicate that Aristotle completely disregard this author, but it may be also a pure coincidence, especially since we do not know whether Xenophon did appear somewhere in the lost writings of the Stagirite. It is known that one of his missing dialogues about rhetoric was named after Xenophon’s son, Gryllus, who fell in the Battle of Mantinea (362 BC), as Diogenes Laertius informs us (II 55): “Aristotle mentions that there were innumerable authors of epitaphs and eulogies upon Gryllus, who wrote, in part at least, to gratify his father.” Diogenes Laertius, *Lives of Eminent Philosophers*, with an English translation by R. D. Hicks, in two volumes, vol. I, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd, MCMLIX (Loeb Classical Library 184), p. 185.

So, first, we assume that the wise one learns everything that can be grasped, but his knowledge does not concern individual objects; then, [we assume that] he is able to learn [things] that are difficult, not easy for man to learn – such [we call] the wise one; because sensory experience is common to all, because [it is] easy and not wise.

At this point, it is hard to resist the impression that the Stagirite's arguments – apart from being intended to form the basis of universal philosophical thinking – are characterized by an entirely non-universal aspiration to define philosophy as an occupation, or even a profession, of high social status in the world of late classical Greece. Such superiority tones resound in him often and more openly than in his master, who – in his ironic Socratic word games – was able to hide the pride of the thinker much better than his pupil devoid of a sense of irony. For both of them, however, it was rather indisputable that philosophical thinking, such as they practiced at the Academy and Lyceum themselves, is the most noble form of life, not only spiritual, but also earthly, social life.

But reducing their philosophy to its social contexts and status games is not the purpose of these considerations, although it would be easy to show that the *paideia* represented in the late phase by this very philosophy is the first installment of the life of the Veblen's leisure class. What is more important at this point is to emphasize two features of wise man's knowledge, and this in connection with each other – that knowledge does not concern individual objects (i.e. it is a general knowledge, built on abstract concepts), and its obtaining is difficult, more difficult than the obtaining of empirical knowledge that anyone who sees and hears can have. So this knowledge is reserved for those people who have the tools to acquire and understand it, and these are tools other than the common-sense apparatus of all people together with basic (read: "rude") categories of mental processing of consciousness data. A little further we find:

σχεδὸν δὲ καὶ χαλεπώτατα ταῦτα γνωρίζειν τοῖς ἀνθρώποις, τὰ μάλιστα καθόλου πορρωτάτω γὰρ τῶν αἰσθήσεων ἐστίν. (982 a 23–25)

And probably these [issues, problems etc.] are the most difficult for people to know, which are the most general because they are furthest from the sensory experience.

It becomes understood that the objects of the highest knowledge are neither material objects, because they cannot be experienced sensually, nor

platonian ideas, which Aristotle rejects, nor, finally, mental objects, because then we would be dealing with solipsism. Aristotle never states explicitly where and how these objects exist (although he devotes a lot of space to this issue in various books of *Metaphysics*) – and we can only assume that the environment of their existence is **the text**. Of course, this is not about some specific text written on papyrus by a particular person, such as the note from the lecture of the Stagirite made by Theophrastus. Rather, the point is that the system of notions and intellectual categories developed by Aristotle to cover effectively the whole of reality – regardless of its accidental appearances and sensations in human minds and regardless of short-term functional reactions to these appearances – must be based on an independent external medium, a carrier of meanings and structures of meaning, which will be able to bear the burden of abstract knowledge about causes, goals, and principles that are not inherent in the material of consciousness data. Such a medium is a record, a text that preserves Aristotle's course of thought in its successive items, copies, apographs, and editions so effectively that for centuries its readers will try to understand what the philosopher had in mind – because his thought is very important, which results from the text and its traditionally sacred authority. In this way, the hermeneutic circle is closed by written practices. Such a text not only explains but also, and above all, affirms itself in some distance from it, which the philosopher intended as a self-cancelling distance and, at the same time, self-confirming: self-cancelling because the text is declared to be adjacent to experience (after all, we are dealing with empirical philosophy), and self-confirming because it clearly states that the concepts written in it and the relations between them are independent of experience and do not emerge from it.

Platonism and Aristotelianism are two very different projects of philosophical construction of the image of the world. However, there is an important community between these projects: both of them are based on the process of the textualization of experience. More precisely, both Plato and Aristotle were convinced that the condition for the construction of a global, universal, and at least relatively coherent philosophical image of the world is to transfer the resource of human phenomenal experience to the field of abstract notions recorded in the written text. By making the pioneering work of this transfer, they tried to solve or neutralize the numerous

problems and contradictions that the radical use of consciousness data and concrete notions in alphabetical writing leads to. In what follows, I shall continue the discussion of the first chapters of the first book of *Metaphysics*, the content of which is one of the most expressive realizations of this process.

In the further part of the *Book Alpha*, summarizing the Ionian philosophers of nature, Aristotle states:

ἐκ μὲν οὖν τούτων μόνην τις αἰτίαν νομίσειεν ἂν τὴν ἐν ὕλης εἶδει λεγομένην: προϊόντων δ' οὕτως, αὐτὸ τὸ πρᾶγμα ὡδοποίησεν αὐτοῖς καὶ συνηνάγκασε ζητεῖν: εἰ γὰρ ὅτι μάλιστα πᾶσα γένεσις καὶ φθορὰ ἐκ τινος ἐνός ἢ καὶ πλειόνων ἐστίν, διὰ τί τοῦτο συμβαίνει καὶ τί τὸ αἴτιον; οὐ γὰρ δὴ τὸ γε ὑποκείμενον αὐτὸ ποιεῖ μεταβάλλειν ἑαυτό: λέγω δ' οἶον οὔτε τὸ ξύλον οὔτε ὁ χαλκὸς αἴτιος τοῦ μεταβάλλειν ἐκάτερον αὐτῶν, οὐδὲ ποιεῖ τὸ μὲν ξύλον κλίνην ὁ δὲ χαλκὸς ἀνδριάντα, ἀλλ' ἕτερόν τι τῆς μεταβολῆς αἴτιον. (984 a 16–25)

So, according to what they said, one might think that there is only one cause – in the matter; but if they turned their way, the thing itself [*auto to pragma*] showed them the way and forced them to ask; for if, to the greatest extent, all creation and corruption is from [i.e., through] someone or many, then why is this happening and for what reason? For surely the base/substrate [i.e. the matter of objects] [*hypokeimenon*] does not change by itself. So neither wood nor bronze are the causes of the change by itself, wood does not become a bed or bronze [doesn't become] statue, but something else [*heteron ti*] is the cause of the change.

It follows that the Ionians' *archai* – water, air, *apeiron* or fire, early abstracted hypostases of physically perceived natural phenomena, treated by these philosophers as half-poetic verbal incarnations of the supreme forces of nature – should, according to the Stagirite, explain the transformation of a block of wood into a bed and a block of bronze into a statue. Even if this is not a conscious intellectual abuse – a radical overinterpretation – Aristotle demands from philosophical notions an explanation power greater than they could have given until they were completely detached from sensual experience and functional reality. He wants the principles contained in the philosophical vocabulary to explain reality at all levels of its processual being: from the cosmic elements to the carpenter's planning in one of Athens' workshops, from the scenario of mankind's history to the laying of the horses bred by Xenophon in his possessions in Attica. No description, no textual account of practices or actual tangible processes will cover such a wide range. In order to do so, concepts completely isolated from any particular experience must be used – only then can they

be manipulated with sufficient freedom. Plato's ideas were the first level of this radical abstraction, but in order to achieve his goal, Plato had to resign from the description of experience and consider it an illusion, and his objects as shadows of real – i.e. ideal – objects that exist outside the material and sensual world. Aristotle had greater ambitions: he wanted the written discourse of detached notions to cover the material world and contain it within itself – despite the obvious circumstance that the written word is not the thing it describes, because only the spoken word can be the thing, and only in special situations. This is why *Metaphysics* begins with an illusory argument about experiencing sensual impressions. But, as we have seen, this subject is rapidly changing in a very radical way. The center of the Stagirite's thinking is the experience that is fully textualized, because only then he can fully develop the conceptual apparatus that, in his opinion, will cover everything that is to be grasped by a sage, including experience, but already properly crafted in the text – so that it is not limited to objects perceived by a particular person “here and now,” but encompasses all possible perceptual acts in one record.

Let us look at how Aristotle presents the beginnings of his own master's philosophizing (987 a 32 – b 8, here, and in some other cases, I omit the original and quote the translation of Tredennick with my distinctions in bold and additions in brackets):

In his youth Plato first became acquainted with Cratylus and the Heraclitean doctrines – that the whole sensible world in a state of flux, and that there is no scientific knowledge of it – and in after years he still held these opinions. And when Socrates, disregarding the physical universe and confining his study to moral questions, sought in this sphere for the universal and was the first to concentrate upon definition, Plato followed him and assumed that the problem of definition is concerned not to any sensible thing but with entities of another kind; for the reason that there can be no general definition of sensible things which are always changing. These entities he called “Ideas”...⁹¹

The main problem faced by a philosopher who starts to construct a universal image of the world (and the very possibility of such an image, its

91 Aristotle, *The Metaphysics, Books I–IX*, with an English translation by Hugh Tredennick, London, William Heinemann Ltd, New York, G. P. Putnam's Sons MCMXXXIII (Loeb Classical Library 271), p. 43.

very conception is a result of the strong presence of writing and text in the mind of this philosopher, because only in the presence of a text detached from the conditions of its creation can it be considered that it is possible to describe the world-in-general, and not only local “production in performance” of the world-here-and-now, which we know from oral epic), the main problem is the problem of the fluidity of this world in the experience of the people inhabiting it and in the culturally conditioned expressions of this experience, problem of this fluidity, whose worst quality for those hungry for order I called entropy here, borrowing this term from a field far from humanities, because it very aptly reflects a feature of the world not only of nature but also of people. This fluidity can be ascertained and then perceived contemplatively, like Heraclitus has done; or, taking it as a starting point, one can build on it a philosophical counter-text,⁹² like the ancient sceptics with Sextus Empiricus at the forefront; or one can proceed to the titanic task of translating it into an apparatus of concepts that are both textual and fluent, as Hegel did in fifteen hundred pages of his *Logic*. Aristotle chooses a different method: suggesting that Plato did not fully deal with this obstacle,⁹³ he also makes it clear that he has overcome it by placing a grid of his categories on the liquid *Lebenswelt*, stiff enough to tame it, and flexible enough not to lose it completely in description.⁹⁴

92 I borrow the concept of counter-text from Olga Kaczmarek, who applied it in her dissertation on the anthropological aspects of Emmanuel Lévinas’ philosophy (*Inaczej niż pisać. Lévinas i antropologia postmodernistyczna* [Otherwise than Writing. Lévinas and the postmodern Anthropology], Warszawa 2016). Generally speaking, it is a type of text which, according to the author’s intention, goes beyond the rules adopted in the culture and era of this author for the textual creation of the message and communication of cultural content.

93 “οἱ μὲν γὰρ Πυθαγόρειοι μιμήσει τὰ ὄντα φασὶν εἶναι τῶν ἀριθμῶν, Πλάτων δὲ μεθέξει, τοῦνομα μεταβαλὼν. τὴν μὲντοι γε μέθεξιν ἢ τὴν μίμησιν ἥτις ἂν εἴη τῶν εἰδῶν ἀφεῖσαν ἐν κοινῷ ζητεῖν.” (987 b 11–14): “for whereas the Pythagoreans say that things exist by imitation of numbers, Plato says that they exist by participation [in numbers] – merely a change of term. As to what this ‘participation’ or ‘imitation’ may be, they left this an open question.” (*Metaphysics*, p. 45).

94 As far as Aristotle’s criticism of Platonic philosophy is concerned, Cherniss’ work still remains the basic elaboration of the problem, despite its complicated and difficult form: Harold F. Cherniss, *Aristotle’s Criticism of Plato and the Academy* (Baltimore 1944).

Let us now see how Aristotle adapts the reality experienced in perception to the principles of the philosophical text, that is, how he practices his theory on concrete examples.

When we wish to refer substances [*ousias*] to their principles [*archas*] we derive lines from “Long and Short”, a kind of “Great and Small”, and the plane from “Wide and Narrow” and the solid body from “Deep and Shallow” are different genera. But in this case how can the plane contain a line, or the solid a line and a plane? For “Wide and Narrow” and “Deep and Shallow” are different genera. Nor is Number contained in these objects (because “Many and Few” is yet another class); and in the same way it is clear that none of the other higher genera will be contained in the lower. Nor, again, is the Broad the genus of which the Deep is a species, for then body would be a kind of plane. Further, how it will be possible for figures to contain points? (992 a 10–20)⁹⁵

This reasoning would not satisfy modern mathematicians, but its validity in the light of current knowledge is not important at this point. Let us note that Aristotle leads this reasoning on concepts that are already highly abstract at the moment of their introduction into the course of his thoughts: “line,” “plane,” and “solid” are words that are not suitable to describe the content of any particular experience, since their own content is the result of the extraction of certain detached characteristics of objects perceived in acts of perception and subjected to a developed intellectual analysis, like things painted by old Cézanne. For the philosopher, however, these concepts are objects of manipulation aimed at placing them on an even higher level of intellectual abstraction; looking for relations between them (with reference to the material and experiential world, admittedly, but regardless of its perceived qualities), he uses concepts of “short,” “long,” “small,” “great,” “wide,” “narrow,” which are no longer names of objects at all, but terms of quality isolated from the relations with any objects that might fall under them in acts of perception. In this way, the text containing all these words becomes for the Stagirite a kind of pattern volume, on which it can conveniently juxtapose words, concepts, and names, which in the notation have gained full existential autonomy and have broken away from the material objects they once served to describe. If he uses them in the course of a lecture addressed to his students, this situation is no longer significantly different

95 Aristotle, *Metaphysics*, pp. 73–75.

for him from writing and textual practice – much more so than Plato is Aristotle, a man of text with a literate mind (which, let us note, just in case, does not necessarily mean that he could write and read faster than Plato).

A little further on, the Stagirite discusses the process of building knowledge on thus defined concepts:

But all learning proceeds, wholly or in part, from what is already known; whether it is through demonstration [i.e. from any experience] or through definition [i.e. from pure ideas] – since the parts of the definition must be already known and familiar. The same is true of induction. On the other hand, assuming that this knowledge should turn out to be innate, it is astonishing that we should possess unawares the most important of the sciences. Further, how is one to know of what elements things consist? how is it to be established? Even this presents a difficulty, because the facts might be disputed, as happens in the case of certain syllables – for some say that ZA is composed of S, D and A, while others say that it is a distinct sound and not any one of those which are familiar to us. Further, how can one gain knowledge of the objects of a particular sense-perception without possessing that sense? Yet it should be possible, that if the elements of which all things consist, as composite sounds consist of their peculiar elements, are the same. (992 b 30 – 993 a 10)⁹⁶

Returning to the question of experience after he established the textual principles of the description of knowledge, Aristotle clearly feels the difficulty of combining one with the other. The autonomous text is separated from the content of experience by a barrier, which is tighter, more stable, and more defined are the concepts that are the components of this text. The philosopher sees only one way out, namely – to **quantize experience**, to subject its content to such intellectual processing that will lead to its breaking down into the tiniest, most elementary components; one must overcome the element of experience, one must split its all-encompassing current into chunks that can be efficiently grasped into a web of textual notions and arranged anew, this time in a precisely defined shape, ready to be shown to the eyes and minds of the philosopher's disciples. Extreme generalizations can only be built on extremely fragmented reality, and both its fragmentation and generalization take place in an environment of the text that is internalized as a mental representation and at the same time enables its intersubjective message.

96 Aristotle, *Metaphysics*, pp. 79–81.

In this passage, there is a rare comparison in the writings of the Stagirite, which proves that he had a well-developed “media consciousness,” even if he ignored the influence of the media on his own thinking. For he compares the process of quantification of reality in a text-based experience to the analysis of speech sounds based on their alphabetical notation. Is the syllable “za” (dzeta-alpha) one sound, or can you break it into three (s, d, a)? The letter “dzeta” was created as a cluster of two originally separate phonemes, so that the mentioned syllable can also be broken down into elements “s, d, a”, which Aristotle could not possibly have been unaware of. These kinds of questions tormented thinkers right up to the times close to us, but rarely did any of them realize that the very fact of asking them was due to the use of alphabetical writing, which put a kind of screen between human minds and the reality they were experiencing, and at the same time forcing them to reproduce the hidden shapes on special rules. The “world-mind-language-writing” relationship, dictated in its many dimensions by the presence of the alphabet, has determined many characteristics of the culture and thinking of Europeans, especially those who, for centuries, defined their culture in its elite self-awareness. What Aristotle is doing in *Metaphysics* in an attempt to describe the reality that escapes him is one of the preliminary chapters of this story.

That concludes the *Book Alpha* analysis. Out of the remaining thirteen books of *Metaphysics*, I will quote only a dozen or so excerpts, thanks to which it will be possible to see more clearly some of the features of the process of textualizing the experience by Aristotle.

In the initial parts of *Book Three (Beta)*, Aristotle admits that there is a difference between sensory data and the corresponding concepts:

Nor, again, can astronomy be concerned with sensible magnitudes or with this heaven of ours; for as sensible lines are not like those of which the geometrician speaks (since there is nothing sensible which is straight or curved in that sense [...]), so the paths and orbits of our heaven are not like those which astronomy discusses, nor have the symbols of the astronomer the same nature as the stars. (997 b 34–998 a 6)⁹⁷

But even if the sensory data cannot be simply translated into categories and abstract-written concepts, the worse for the sensory data:

97 Aristotle, *Metaphysics*, p. 115.

Some, however, say that these so-called Intermediates [*ta metaksy*] between Forms [*eidon*] and sensibles [*aistheton*] do exist: not indeed separately from the sensibles, but in them. It would take too long to consider in detail all the impossible consequences of this theory... (998 a 7–10)⁹⁸

It is clear that, in order to be consistent, Aristotle cannot take any intermediate level between the experiential and conceptual realms, or, in other words, between the epistemology and ontology of his world. The problem of effective translation of the content of experience into the notions of philosophy remains open – and neither the Stagirite himself nor any of his successors will ultimately be able to resolve it, because the essence of this problem is not the imperfection of its postulated solutions, but the primary gap between the realm of experience and that of the alphabetical text. This gap was attempted to be eliminated until the end of the nineteenth century, and in the following century, when it was increasingly widely accepted that this was not possible, there was less and less talk of reality as such within philosophical thought and humanities in general. Nowadays, the formulation of such judgments is considered at best an expression of naivety. The textualized thinking about reality deals mostly with itself, however, because for twenty-five centuries of its development it has produced a practically incalculable number of phenomena, so in a broad cultural view – especially after the enormous enlargement of that view that has taken place in European culture over the last two centuries – one can safely identify cultural and especially linguistic and textual images of reality with reality itself. Moreover, as influential representatives of psychology and psychoanalysis teach, reality stripped of its cultural and symbolic representations is unbearable for man,⁹⁹ and especially – we should add – for a person fully immersed in the culture of writing and text.

In the next passage of *Metaphysics*, we read:

Thus it is very difficult to say, not only what view we should adopt in the foregoing questions [i.e. translating the content of experience into the ideas] in order to arrive at the truth, but also in the case of the first principles [*peri ton archon*] whether we should assume that the genera, or the simplest constituents [*stoicheia*]

⁹⁸ Aristotle, *Metaphysics*, p. 115.

⁹⁹ See e.g.: Bruce Fink, *The Lacanian Subject. Between Language and Jouissance*, Princeton Univ. Press 1997.

of each particular thing, are more truly the elements and first principles of existing things. E.g., it is generally agreed that the elements and first principles of speech are those things [*phones*] of which, in their simplest form, all speech [*hai phonai*] is composed; and not the common term “speech” [*phone*]... (998 a 20–25)¹⁰⁰

In his search for a problem that torments him, Aristotle intuitively refers to the borderline between speech and writing, and again reflects on the criteria for dividing and defining the hierarchy of speech elements based on the medium of the alphabet, which, however, as we already know, is a very dubious help in this case. It is symptomatic that, also in this passage, he does not even try to solve the problem and does not show the confidence with which he usually proves his theses. The inaccuracy of the rules of reproducing the sounds of speech in alphabetical writing to the fluidity of living speech in its sensual appearance in the minds of listeners must have disturbed this thinker, but we cannot rule out that he did not admit to these anxieties even before himself.

In a further part of the *Book Beta*, the issue of the constitution of knowledge about objects under predefined cognitive conditions continues:

In this connection there is a difficulty which is the hardest [*pason chalepotate*] and yet the most necessary of all to investigate, and with which our inquiry is now concerned. If nothing exists apart from individual things, and these are infinite in number, how is it possible to obtain knowledge [*episteme*] of the numerically infinite? [...] If nothing exists apart from individual things, nothing will be intelligible [*noeton*]; everything will be sensible [*aistheta*], and there will be no knowledge [*episteme*] of anything – unless it be maintained that sense-perception is knowledge. (999 a 24 – 28, 999 b 1–4)¹⁰¹

Once again, we find out that sensual cognition – the foundation of experience – does not give the human mind knowledge worthy of its name. Since at this stage of deliberations we would very much like to find out what, in this case, is the basis of our reliable and not accidental knowledge of the outside world, the sources of which are supposed to lie outside our minds and means of communication. In the following sentences, Aristotle uses one of his favorite thought motives – a teleological argument – and concludes

100 Aristotle, *Metaphysics*, p. 117.

101 Aristotle, *Metaphysics*, p. 123.

his inquiry by introducing two important concepts, which should solve this burning problem:

Further, if matter exists apart in virtue of being ungenerated, it is still more probable that the substance, i.e. that which the matter is at any given time becoming, should exist. And if neither one nor the other exists, nothing will exist at all. But if this is impossible, there must be something, the shape [*morphe*] or form [*eidos*], apart from the concrete whole [*para to synolon*]. (999 b 12–16)¹⁰²

At this point, we are getting to one of the sources of hylemorphism. The philosopher conceptually splits the objects that appear to the mind in experience and leads to a cognitive situation in which the sensual data of consciousness are not identical to reality as such, but constitute one of its aspects, phenomenal and individual, the same that could not be pushed neatly into the textualized categories of true knowledge. Now, between these categories and reality experienced by the senses, there is a bridge – *morphe*, a form of things whose sensual qualities are ad-hoc manifestations. The success of the Stagirite is to place this abstract instance of cognition not outside the world, as Plato did with ideas, but within it, in reality itself. Indeed, empiricism opposes idealism. But from a textual perspective, the two ontological-epistemological models are similar, because Aristotle's *morphe* is a concept of the same provenance as Plato's *idea*, it is the result of intellectual operations mediated by the text's alphabetical record, aimed at the analytical dissection of experience and the reassembly of its content into a structure protected against chaotic flows of uncategorized existence (in the case of Aristotle) or accidental reactions of psychologically and emotionally unstable subjects (in the case of Plato). The ideas lie somewhere outside this world, and *morphai* – somewhere in the things of this world, where the word “somewhere” is very important; its precise definition has been a concern for generations of thinkers. For me, its synonym is “in the text.”¹⁰³ But

102 Aristotle, *Metaphysics*, p. 125.

103 Note that if you put the phrase “in the text” instead of “somewhere” in the phrases used here, you get a grammatically incorrect phrase – “The ideas are in the text outside this world, and *morphai* – in the text in the things of this world.” If we consider that the distortion of grammar can tell us something about the issues under consideration, then this anacolute would testify to an uncontrolled invasion of the text into the realm of existence experienced by the man who internalizes alphabetical writing.

Aristotle, again leaving the issue of the media in silence, concludes the third book of *Metaphysics* with the words “katholou gar he episteme panton” (1003 a 14–15) – “the knowledge of everything is general,” which William of Moerbeke, translating this work for his pupil, Thomas of Aquinas, will translate into “universales enim sunt omnium scientiae” – “universals are knowledge of everything”.

The fourth book (*Gamma*), the most famous alongside the first, opens with words that were supposed to ignite human intellects in many cultures and epochs:

ἔστιν ἐπιστήμη τις ἢ θεωρεῖ τὸ ὄν ἢ ὄν καὶ τὰ τοῦτω ὑπάρχοντα καθ’ αὐτό. αὕτη δ’ ἐστὶν οὐδεμιᾶ τῶν ἐν μέρει λεγομένων ἢ αὐτῆ. (1003 a 21–23)

There is some knowledge that considers being as being [literally – “that which is, as that which is” or “what is as what is”] and [considers] that which falls under it [or “that which belongs to it”] in itself. But [this knowledge] itself is not one of those [fields of knowledge] which are called partial [detailed].

The *Book Gamma* is entirely devoted to defining the principles of this knowledge of being as such, and it would be difficult to find a declaration in the history of Western philosophy that would have a stronger impact on the ambition of people interested in the philosophical form of reflection on the world than its first sentences. All kinds of “metaphysics,” “ontologies,” “first philosophies,” “eternal philosophies” and other bold undertakings, from which the histories of philosophy are swarming, were inspired – directly or indirectly, through other texts – by this very statement, which is itself the result of such design of reality and its experience by the human mind as I have tried to present above.

“Being as being” cannot become an object of simple sensual experience, because it has been deprived of all the definitions resulting from the sensual perception of the elements, phenomena, and processes taking place in the world through radical conceptual abstraction. It is an intellectual construct made possible by the prior appearance of a textualized image of a quantized reality being an object of intellectual experience. Thus, “being as being” – the starting point of the ontology – is by no means a primary concept or object in an epistemological sense, but rather the final result of a number of mental processes and written practices, which tear the human mind away from the realm of sensual and functional experience of reality and lead it toward a sensual and disembodied

reflection concerning the invariability of the basis – as postulated in literate conceptual categories – on which the whole of the multiform, fluid, and cognitively elusive appearance of the world in human minds is to be based, at least according to this vision. The natural environment of “being as being” is the notation and the text – not the external world and not the human mind, but the text as an element of both the world and the mind, an element which differentiates between them and at the same time connects them in a cognitive distance. It is in this peculiar ontological gap that the text allows abstract concepts to become independent, to reach from this borderline position both into the happening world and into the mind that perceives it.

In the fifth book of *Metaphysics* (*Book Delta*), Aristotle tentatively defines thirty concepts, most of which will play a key role in the whole European philosophy. These are: “principle” (*arche*), “cause” (*aition*), “element” (*stoicheion*), “nature” (*physis*), “necessity” (*anankaion*), “one” (*hen*), “being” (*on*), “substance” (*ousia*), “identity” (*tauta*), “opposite” (*antikeimene*), “the first and the next” (*proton kai hysteron*), “ability” (*dynamis*), “quantity” (*poson*), “quality” (*poion*), “relationship” (*to pros ti*, literally: “it toward something”), “perfection” (*teleion*), “end” (*peras*), “what by” (*to kath’*), “order” (*diathesis*), “state” (*hexis*), “experience” (*pathos*), “lack” (*steresis*), “possession” (*to echein*), “being from something” (*to ek tinos einai*), “part” (*meros*), “whole” (*holon*), “cut off” (*kolobon*), “kind” (*genos*), “false” (*pseudos*) and “contingency” (*symbebekos*). Well, all these terms (put together by any other means in a sketch that does not have a rather important connection with other books) are defined and described according to the principles founded on such cognitive and mediological meta-principles as I have analyzed above. Having dealt with the claims of those of his predecessors and contemporaries who demanded recognition of the content of sensual experience with all its “here and now,” Aristotle begins to construct a new vocabulary of thinking. It is a textual vocabulary, and its text is, by definition, absolute: it is supposed to describe everything that happens everywhere. It was difficult to resist its overwhelming ruthlessness, especially when, despite countless internal contradictions in its structure, it promised shelter from the unrestrained chaos of true reality. Most of the Stagirite’s reflections on the nature and essence of reality that we find in the fourteen books of *Metaphysics* are

manipulations carried out precisely on these completely and only textual concepts, whose relationship to real experience is, at most, merely marked, because only then can they be considered universal.

However, Aristotle's philosophical vocabulary, in spite of this radical abstraction, still retains the traces of a descriptive character associated with the reporting of experience, which was the primary task of the language that the Stagirite had to use out of necessity. In translations into modern languages, which have a much greater potential for the conceptualization of concepts purifying them of their relationship with the phenomenal realm, these traces disappear.¹⁰⁴ Let us consider one of the terms from the vocabulary of the fifth book, very eloquent in this respect. "Substance" (*ousia*) is finally defined as:

104 Even such a conservative exegete as Mieczysław Krąpiec OP notes in the introduction to the Polish translation of *Metaphysics*: "It is exactly in this [vocabulary referring to cognition of real objects and not detached concepts] that the specificity of the realism of the language of metaphysics manifests itself. However, this specificity has been lost in the majority of translations [...] in favor of the logicalization and modernization of the language of metaphysics. Thus, expressions such as 'concept of being' instead of 'understanding of being,' 'essence' instead of 'what something was and is,' 'quantity' instead of 'how much,' 'quality' instead of 'what,' etc., have permanently entered the translations. The object ('meaningful') language of metaphysics has become an abstract language, which instead of leading to 'seeing' (understanding) things, started to exist with his own life. This entailed not only the deformation of the specificity of metaphysical cognition, but also of the very language of metaphysics in which the verbalization of the cognition of reality is to take place. No wonder, then, that instead of cognition of concretely existing things, an analysis of concepts was introduced and the whole metaphysics started to be treated as a system of definitions and statements from which further statements can be derived, following the example of deductive systems. Consequently, Aristotle's realistic metaphysics was reduced to one of the most abstract (i.e. detached from reality) philosophical disciplines. (*Editor's Preface*, in: Aristotle, *Ta meta ta physika – Metaphysica – Metafizyka*, vol. 1, the Polish text was prepared by M. A. Krąpiec and A. Maryniarczyk on the basis of Tadeusz Żeleźnik's translation, Lublin 1996, p. II [Greek-Latin-Polish trilingual edition]). Krąpiec does not notice, however, that the "linguistic situation" of metaphysics described by him in such a critical way is an inevitable consequence of the method of textualization of experience adopted by Aristotle himself.

συμβαίνει δὴ κατὰ δύο τρόπους τὴν οὐσίαν λέγεσθαι, τό θ' ὑποκείμενον ἔσχατον, ὃ μηκέτι κατ' ἄλλου λέγεται, καὶ ὃ ἂν τότε τι ὄν καὶ χωριστὸν ᾗ: τοιοῦτον δὲ ἐκάστου ἢ μορφῆ καὶ τὸ εἶδος. (1017 b 23–26)

It follows that a substance can be called in two ways – [it is] the ultimate ground, which is no longer defined by anything [other], or [it is] **this-something-what-is-being-here** [*tode ti on*], which can be defined separately – and that is each [object's] form and essence. [my bolding, PM]

In his philosophical vocabulary, Aristotle often adapts expressions taken from ordinary lexical usage, and rarely introduces neologisms. But these “ordinary words” change their function. The phrase “*tode ti*” (“this something here”) in the everyday usage of the Greek of that time must have belonged to common expressions referring to concrete material objects in the eyesight of the people who spoke them and the addressees of their statements (“take this from the table,” “give me that,” “see what lies there,” etc.). Thus, it was an expression, one could say, extremely local and ad hoc, highly contextual and each time deeply entangled in extraverbal circumstances of the statement. Meanwhile, in the Stagirite’s conceptual structures, as recorded in the text of *Metaphysics* and his other works, this expression not only undergoes complete decontextualisation and abstraction but also becomes a descriptor of one of the basic concepts describing all possible materiality of the object. In this and many other similar cases, the philosopher performs a staggeringly radical operation on the tissue of language and speech – transplanting this tissue onto a completely new substrate, giving words of his language a meaning and function that they have never had before. None of his predecessors – not even among the boldly experimenting sophists – has ever performed this kind of linguistic surgery on such a large scale. These semantic-functional shifts are one of the most important processes of the textualization of experience analyzed here. One can suppose that most of Aristotle’s contemporaries who do not deal with writing and text on such a large scale as he and his students would ask “*Tode ti?* But what *tode ti?* Where is it?” This would be even more incomprehensible for an audience listening to oral performances of the old epics, in which the undefined pronouns appeared very rarely precisely because the essence of the epic was a concrete verbal and sensual performance. However, when reading *Metaphysics*, it is worth remembering that its author often states, for example, that there are some things that are not those things, but some others.

As mentioned, in the course of the development of textual metaphysics (probably the only one possible for our civilization), the process of detaching concepts from their counterparts in the realm of experience progressed rapidly. Already the Neo-Platonics used pronouns that were not defined in a radically textual and abstracted way to such an extent that their phrases about “the All” and “the One” do not allow any associations with the realm of everyday experience. At the same time, however, medieval people lost not only the contact between the words of their philosophy and the things of their world but also – mostly – the very knowledge of the possibility of establishing it. And when Heidegger, in his conversion to the vocabulary of the Greeks, will introduce such terms as “Dasein” or “Seiende,” emulating expressions from *Metaphysics*, or to emphasize the specificity of his thought, he will extract from the deep layers of the German language expressions from Luther’s time, it will only be a sophisticated philosophical stylization for the pre-source, practiced by a thinker escaping from Husserl’s accumulated metaphysical verbalisms, whose cognitive barrenness was also recognized on the Polish ground by Leon Chwistek in his brilliant essay “The Tragedy of Verbal Metaphysics.”¹⁰⁵ The stylization will replace another stylization, but the text will remain a text.

Continuing our discussion of the traces of extratextual determinants of the text of *Metaphysics*, we should point to yet another of its features, one which proves both its provisional character as a record of a ready system and the circumstances of its creation. It contains no less than a dozen or so phrases addressed to recipients. Thus, in the seventh book (*Dzeta*), 1040 a 12–13, we find – “E.g., if a man were to define you, he would say that you are an animal which is lean or white or has some other attribute, which will apply to something else as well,” and in 1029 b 14–15: “‘To be you’ is not ‘to be cultured,’ [to *mousiko*] because you are not of your own nature cultured [*mousikos*],”¹⁰⁶ while in some other passages the philosopher says that something is as obvious as “that you are sitting.” Almost certainly, in these points we are dealing with the statements captured

105 *Kwartalnik Filozoficzny*, no. 10 (1/1932), pp. 46–76; reprint: Leon Chwistek, *Wybór pism estetycznych* [Selected Aesthetical Writings], Kraków 2004.

106 Aristotle, *Metaphysics*, pp. 387, 389, 321.

in an ad hoc record not of the writer, but of the lecturer who turned to his students (where the “mousikos” is concerned, we can perhaps see a speak to Aristoxenus of Tarentum, later author of *Elements of Harmony*). These books, or at least the parts of the books in which traces of the lecture performance were kept, are edited notes of the Lyceum’s students: we may hope that, in these notes, they faithfully reflected the thought uttered by their master, that they noted quickly and diligently or consulted with him about what they produced. In this respect, fragment 1032 b 19–22 is especially interesting:

τί οὖν ἐστὶ τὸ ὀμαλυνθῆναι; τοδί, τοῦτο δ’ ἔσται εἰ θερμανθήσεται. τοῦτο δὲ τί ἐστὶ; τοδί. ὑπάρχει δὲ τοδί δυνάμει...

And what is it like to balance? Just this. And that will be if it gets warm. And what is that again? Just this. And all you have to do is do it...

It is hard to resist the impression that, with these words, Aristotle had to demonstrate something to his audience, or at least make some pictorial gestures, because taken as an element of an independent text, this arrangement of words does not make any sense at all, but it is strongly associated with a recording from the hearing of someone’s statement strongly set in a situational context. Such moments in the text of *Metaphysics* make us aware once again of the enormity of the Stagirite’s undertaking in constructing a radically textualized project of thinking about the world in a world that still remained – as a social system – barely literate, and its inhabitants communicated mainly through speech and the accompanying non-verbal means of communication.

In the seventh book (*Dzeta*), we also find an expression of the famous principle *individuum est ineffabile*, which can be considered as a summary of the whole issue discussed here:

For this reason also there is no definition or demonstration of particular sensible substances, because they contain matter whose nature is such that it can both exist and not exist. Hence all the individual instances of them are perishable. If, then, the demonstration and definition of necessary truths requires scientific knowledge, [...], so too demonstration and definition cannot vary (it is opinion [*doxa*] that is concerned with that which can be otherwise than it is) [...]. For things which perish are obscure to those who have knowledge of them when they are removed from the sphere of their perception, and even though their formulae are preserved in the soul, there will no longer be either definition or demonstration of them. Therefore in cases relating to definition, when we are trying to

define any individual, we must not fail to realize that our definition may always be upset; because it is impossible to define these things. (1039 b 27 –1040 a 7)¹⁰⁷

An individual being is elusive to the literate mind, because this mind is not satisfied with its perception and experience of its presence and with this mind's own relationship to this object in its appearance (pushing these mental activities into the realm of *doxai*, the contemptible thinking and perceptions of the simpletons). The literate mind strives for an absolute categorization of perceived objects, and not only for their flexible, arbitrary, and relative description – while categorization, at least as designed by Aristotle, requires the generalization of the object, its inclusion in a certain class of objects, whose elements appear to the mind in different circumstances, conditions, moments of time, and places of space; but they have a cognitive value only as elements of this class, not as spontaneous appearances. In order to grasp the object with written concepts and introduce it into the world of the text, it is necessary to first isolate it from the context of its original appearance, to tear it out of the stream of experienced reality,¹⁰⁸ to de-sensualize its experience and make it an intellectual-text venture. But then the object will no longer be an *individuum*, and it will no longer need the human senses to grasp it and will rely solely on the mind, functionally separated from the senses and elevated to the rank of the only source of cognition. In this way, the writing practices based on alphabetical writing have broken down the sensual and intellectual realms of the human body, and perhaps even created these realms as such.

* * *

Based on the peripatetic doctrine, Aquinas writes: *nihil est in intellectu, quod non prius fuerit in sensu*, “Nothing is in the intellect that was not previously in sense” (*Disputed Questions on Truth*, q 2, a 3, argument 19).¹⁰⁹ This sentence has become one of the most important directives of

107 Aristotle, *Metaphysics*, p. 387.

108 The term translated as “definition” is originally “horismos;” in Greek, the verb “horidzo” means “to be separated by drawing boundaries” (cf. “horizon”) – and thus the word perfectly reflects the intellectual procedure of detaching objects from the whole undifferentiated element of phenomenal experience.

109 Translation of Robert W. Mulligan SJ, [http://www.documentacatholicaomnia.eu/03d/1225-1274,_Thomas_Aquinas,_The_29_questions_on_Truth_\(Mulligan_Translation\),_EN.pdf](http://www.documentacatholicaomnia.eu/03d/1225-1274,_Thomas_Aquinas,_The_29_questions_on_Truth_(Mulligan_Translation),_EN.pdf) [2020.05.29].

early modern European thought, defining for many centuries to come the basic principle of empiricism. And yet, despite it, Europe still believed in the text, even in modern times. Why did this happen? Where did the radical abstraction and decontextualization of the philosophical message come from? Why did it lack so much sensual experience?

This was because for Aquinas, just like for Stagirite, between the domain of the “senses” and the domain of the “intellect” extends the domain of text, in which what is sensual acquires a visual and conceptual form – and only then can it settle down firmly in the reflective mental realm.¹¹⁰ The essence of this problem is that the domain of text was completely transparent to them and, as such, did not play any role in conscious reflection – although it shaped the very form of that reflection. Such an approach to the problem made it possible to consider that individual acts of experience and concrete individual phenomena of the human world – both in the social and individual dimensions – fall under the categorial description of the kind presented by Aristotle, because this description contains all possible concrete realizations, which, again, is possible because, in spite of its generalizing abstraction, Aristotle’s description – in its realizations carried out by thinkers and lawmakers of culture – has the potential to embrace experience. For the link between experience and the text has not been broken, but only deeply concealed in the supposed real beings hidden behind metaphysical notions such as “form” or “accident” and captured by the intellect, not by the senses. Great intellectual narrations were built on such a fragile basis until the twentieth century.

110 Such a radical approach to this issue does not mean the rejection of cognitive concepts about mental processes during which abstract concepts are created in the human mind. However, I think that, at least in those epochs and cultures in which alphabetical writing and text dominate as tools for collecting, processing and transmitting knowledge between individuals and human communities, the presence of these tools influences at least significantly, if not decisively, the process of conceptual abstraction of consciousness data. In radically illiterate cultures, and in those that have adopted nonalphabetical writings, the conceptual systems organizing experience are based on differently defined cognitive processes – hence the great difficulties of European researchers in the era of pioneering attempts to understand and interpret these concept systems through the prism of “textual-alphabetical awareness.”

Aristotle's "empiricism" is therefore only an alleged phenomenon from the point of view of the history of cultural media, as it is based on "experience" mediated by the instances of the text. It is the textual notation, the written algorithm of the cognitive process that rules "empiricism." While in the model of cognition developed by Plato we have been dealing with a complicated tangle of written and oral communication, analytical reflection and emotional arousal, Aristotle demands that we build our cognitive processes solely on the basis of the rules of written records. The consequence of this requirement is that for the post-classical antiquity epochs and for a large part of the European Middle Ages, a non-sensual understanding of sensuality in cognitive and intellectual processes has become dominant. The only legitimate form of report from experience was the form of a text record governed by rules, which was carefully separated from that experience, maintaining with it a fake bond based on a number of conceptual pseudo-entities that were supposed to connect the realm of the ordered intellect with the realm of disordered sensuality. Aristotle codified these principles, which his predecessors used in the field of textualization of experience, to a large extent intuitively, as I tried to show on examples of the earliest works of "professional literature."

During the Hellenistic period and later, these principles were applied in accordance with the Stagirite's guidelines, and over time they gained such a powerful influence that they were considered "natural" in the European cultural circles for the processes that incorporate the content of sensory experience into intellectual categories. Even today, a large part of cognitive and epistemological inquiries, even if they were based on naturalistic variations of the philosophy of mind, still remain in the orbit of "textual thinking," in which all human cognitive processes are understood as a kind of **writing** into the mind what was captured and categorized in perceptions, as if the mental-corporeal set of human reflexive consciousness were a cross between a typewriter and a library catalogue, and both of these tools were to be used by the human "self" to construct an image of exteriority; or, to use a newer technological metaphor, it would be a small computer installed in the head of each newborn baby with an operating system and loaded with specialized software during the first twenty years of life. When we look for a solution to a puzzle that we are for ourselves, we often grasp our own creations, but they do not give us answers other than the ones we put in them.

At the end of these inquiries,¹¹¹ let us note that, in Aristotle's *History of Animals*, there are two mentions of the pseudoscorpions, small arachnids that live in books and feed on their pests, and, as it appears from these mentions, they also lived in ancient papyrus scrolls. Their presence in the text of *History of Animals* is a small contribution to the *Lebenswelt* of Aristotle, which Plato is said to have called the "Reader" (*Anagnostes*), while his apartment was known as "the home of the reader" (*oikia anagnostou*).¹¹²

111 Perhaps, it should be supplemented by an analysis of the concepts of "theory" and "practice" (*theoria* and *praxis*) in Aristotle's thinking, but they usually appear in his writings already subordinated to the cognitive and textual assumptions that I have presented, so examining their explicit content contained in the parts of *Corpus Aristotelicum* dedicated to social life (*Nicomachean Ethics*, *Politics*, spurious *Economics*) would not contribute much to this issue.

112 The mentions of the pseudoscorpions: *History of Animals* 532 a 18 and 557 b 8; *Anagnostes*: *Vita Aristotelis Marciana* 6 (98 Düring), *Vita Aristotelis Vulgata* 5 (132 Düring), *Vita Aristotelis Latina* 6 (152 Düring), see: Alice Swift Riginos, *Platonica. The Anecdotes Concerning the Life and Writings of Plato*, Brill 1976, p. 132.

Chapter 5 Theophrastus: the world in the text

Aristotle's direct successor in the work of textualization of knowledge and experience for the use of European and Arabic cultural circles of the Middle Ages was his pupil and a successor in the office of the scholar of the Lyceum, Theophrastus of Eresus on the island of Lesbos (ca. 370–287 BC). He is a very important figure for our deliberations as the most distinguished of the Stagirite's students, whose work is known to us.¹¹³ But because, unlike the authors discussed previously, Theophrastus' oeuvre has been preserved only in scattered fragments, I adopt the method of "serializing quotations," that is – from the stock of fragments of the remaining works of this author and their paraphrases in other authors, I choose those which, in my opinion, are of particular importance for showing the next phase of the process of textualization of experience in the world of Western culture.¹¹⁴

The Byzantine encyclopedia *Liber Suda* under the lemma "Theophrastos" (theta 199, II 701 Adler) informs us that Theophrastus

died after becoming worn out from continual writing and then letting up for a few days on account of a student's marriage.¹¹⁵

113 Despite newer partial editions, ten small volumes of *Die Schule des Aristoteles* published by Fritz Wehrli (Basel 1945–1978) still remain a non-superseded image of the Peripatetic school in the period immediately after Aristotle's death. This edition gives a relatively clear picture of the fields of knowledge which were developed by the intellectual heirs of the Stagirite, but it does not indicate that they have made any purposeful division and appropriation of these fields among themselves, which means that, in the Hellenistic Peripatos, there was no clear division of knowledge into disciplines, either intellectually or, even less so, institutionally.

114 The most complete edition of texts on Theophrastus and texts written by him is currently: *Theophrastus of Eresus. Sources for His Life, Writings, Thought and Influence*, edited and translated by William W. Fortenbaugh, Pamela M. Huby, Robert W. Sharples (Greek and Latin) and Dimitri Gutas (Arabic), Brill, Leiden-New York-Köln 1992–. So far about ten volumes have been published. Most of the quotations from and on Theophrastus in this book are quoted in English versions according to this edition.

115 Fortenbaugh I, 1, 2 (p. 47).

This is one of the first messages about the lives of the creators of Greek culture, in which the motif of the “immersion in the text” is signaled in such an unambiguous way, and Theophrastus is chronologically the first figure known to us, about whom we learn that he was exhausted by writing understood as a physical activity, and not as a state of mind.¹¹⁶ Writing in this view becomes a self-contained, independent, and self-sufficient practice whose effects (“works,” “writings,” “texts,” etc.) are less important than the practice itself and its influence on the physical condition of the person who practices it. Neither Aristotle, nor Plato, nor any of their predecessors, whether sophists or tragedians, were – at least for us, with what we know about them – **writing** people, in the sense that among the testimonies of their lives, fragmented and scattered as they are, we encounter no mention of writing or writing practices as such, and we certainly have no information about the impact of these practices on their health or physical condition. When a hundred years earlier Aristophanes mocked Euripides for “bookishness” (*Frogs*, verse 1409), he referred to the dependence of his tragedy on earlier versions of the myths they depict, not his writing activities. Given the role played by writing and text in the thinking and work of the Greeks as early as the fifth century, this lack – compared to the part of *Suda*’s entry concerning about Theophrastus’ death – is significant. Against the background of his predecessors, Theophrastus appears not only as a worthy follower but also as a man who made writing understood as a motoric activity into a compulsion, or perhaps even an addiction. The information from the Byzantine encyclopedia is a contribution that enables us to look at

116 Even if this message is not authentic, however, it tells us how the Ancients perceived the figure of Theophrastus and that is the source of its value. This observation applies to many of the messages I analyze in this book. It is very likely that this kind of stories have gone into the knowledge of late antiquity and the Byzantine Middle Ages from the comedy repertoire of the Hellenistic era, in which parody must have been a frequent trick. However, I would like to stress once again that even if these are not actual details, but exaggerations and caricatures, their very existence is a testimony or symptom of real cultural situations. Diogenes Laertius does not convey this tradition about the cause of Theophrastus’ death, but says that he died after he stopped working for a short time, which comes close to *Suda*’s account, but with differently distributed accents.

the progressive process of alienation of writing practices from the realm of experience. The fact **that** one writes becomes more important than **what** one writes – or at any rate, this is the viewpoint of the *Suda*'s account, because its author, probably relying on earlier sources, remains silent about the subject of the text or texts whose writing was supposed to fatally exhaust Theophrastus. And even if we are to understand this record as a summary of the entire work of the scholar, it is all the more symptomatic: in such a case, Theophrastus would write himself to death, sacrifice himself to the deity of the text.¹¹⁷

117 The catalogue of his works in Diogenes Laertius (V 42–50) has 227 titles, and the number of verses in whole Theophrastus' oeuvre is 232, 808 (this number probably comes from sources related to the Library of Alexandria). Even with a modest estimation (thirty characters per verse), this gives more than six million characters (without the then absent spaces and punctuation), which is perhaps not a staggering result when compared with the collected works of Lenin or Barbara Cartland, but makes the account of Theophrastus' death out of exhaustion more likely, especially given the difference between ancient writing tools and their modern counterparts and the resulting differences in physical effort required for writing. Amongst all ancient philosophers about whom we know anything concrete today, only the stoic Chrysippus (ca. 277–208 BC) outperformed Theophrastus in terms of the volume of his writing production, because his works were to occupy more than seven hundred scrolls, and his contemporaries called him a "polygraph" – but also, as Diogenes Laertius and several other sources testify, Chrysippus was known for his redundancy, sloppy style, and building his own texts mainly from quotations (Diogenes tells us that someone who read a text of Chrysippus based on quotations from Euripides' *Medea*, when asked what he was reading, replied: "Chrysippus' *Medea*"). The last of these traits testifies not only to his intellectual dependence on other authors but also to a very profound textualization of this philosopher's thinking. More than a thousand fragments of his works have been preserved, but in print they take up only about four hundred pages, and Francis M. Cornford, in his essay *The Unwritten Philosophy*, summarized this situation as follows: "If the excavators of Herculaneum should bring to light the 750 books of Chrysippus – which Heaven forbid – any student would cheerfully exchange them for a single roll of Heracleitus." (Francis M. Cornford, *The Unwritten Philosophy and Other Essays*, Cambridge 1950, p. 28).

Nevertheless, as distinct from the case of many modern erudite writers, writing – even compulsive – did not take away Theophrastus’ speech. Strabo (XIII, 2, 4) says that:

Theophrastus was called Tyrtamus before, but Aristotle changed his name to Theophrastus, partly avoiding the ugly sound of the former name, partly signifying his keenness for speech. For Aristotle made all his students eloquent, but Theophrastus most eloquent.¹¹⁸

“Theophrastos” means “he who speaks divinely.” So the author of the bulk of texts strikes us also as a man so eloquent that he stands out in this respect even in the world of eloquent Greeks. The juxtaposition of these two fractions of knowledge about the character of the author of *Characters* gives us a picture of the extraordinary personal intensity of verbal and written practices, both oral and written. However, these practices have already changed in relation to the state of affairs, which marked the time of the great speakers of the classical era, who did not use writing and text as radically as Aristotle and his pupils. At this point, from a perspective of several hundred years, Cicero sees changes in the verbal practices of rhetoric and philosophy at the time when Greek culture was becoming increasingly textualized:

For although some philosophers have spoken elegantly – if indeed Theophrastus acquired his name from his divine manner of speaking, and Aristotle challenged Isocrates himself, and they say that the Muses, as it were, spoke in the voice of Xenophon, and of all by far who ever wrote or spoke Plato stood out as leader both in dignity and in charm – nevertheless, their style has neither the sinew nor the sting of orators and the forum. (*Orator*, 62)¹¹⁹

Cicero formulates this sentence in such a way that it is not known when he means the “oral speech” of the people he mentions, and when he means their “written speech.” Indeed, it seems highly possible that he has not seen functional differences between the two types of verbal practices, although he has seen qualitative differences between them. It is obvious that he himself could only deal with the “written speech” of his Greek predecessors, and that he had access only to written testimonies on the subject of oral speeches and their effects on the listeners. At any rate, the meaning of

118 Fortenbaugh, I, 1, 5A (p. 53).

119 Fortenbaugh, I, 1, 5B (p. 55).

Cicero's statement boils down to the idea that philosophers express themselves (in speech and in/on writing) in a way that is less clear than that of rhetors. By this, I mean that their statements make their subject less visible to the audience. And if I am right, Cicero notes the same phenomenon that is the subject of analysis here: the progressive textualization of experience in Greek culture.

In another place, Cicero mentions a certain specific feature of Theophrastus' pronunciation, this time concerning not style, but phonetics:

So I am not surprised at what is said to have happened to Theophrastus when he asked a little old lady how much she would sell a certain item for. She answered, and added, "Foreigner, it's not possible [to sell it] for less." It annoyed him that he did not escape the appearance of being a foreigner, although he spent his life in Athens and of all people spoke excellent [Attic Greek]. (*Brutus*, 172)¹²⁰

Here, we can see the difference between the particular layers of "parole" and "langue" of the nascent textualized language of cultural communication. Regardless of the mastery of the written and spoken word in terms of its power of expression and depth of thought, Theophrastus has not lost the accent that betrayed his non-Athenian origin throughout his life. The fact that this was a problem for him is not only a proof of his personal pride and the prestige of Athens as a cultural center, but also of the development of a type of cultural consciousness whose content is the canonical or standard approach to verbal practices and its positive evaluation as compared to other forms of implementation of these practices, such as those which in later periods will take the form of "provincialisms," "colloquialisms," "argotisms," "dialects," "subdialects," "slangs," "pidgins," etc.

This phenomenon will develop on a large scale during the period of Second Sophistic (ca. second century AD), when the fashion for Atticism will cause lively activity of lexicographers compiling catalogues of standard words and phrases of literary language. The Greeks will then see their ideal speech in writing first and foremost, and their medieval Byzantine followers will lead to one of the widest gaps in the history of mankind between "spoken" and "written" language. Theophrastus' dissatisfaction with the deficiency of his own pronunciation with the ideal of the Attic dialect is an

120 Fortenbaugh, I, 1, 7A (p. 57).

early harbinger of this process, whose maturity I will discuss in one of the next chapters of this book. Suffice it to mention that the very concept of the “pattern of linguistic practices” stems from the distance to them that their users gain from the progressive proliferation of the textual image of their own language, which results in the development of self-referential reflection practices concerning the linguistic system, such as “grammar,” “spelling,” “orthoepy,” or “style.” The alienation of experience in the text concerns not only the external world, whose sensual perception is imperfectly reflected in the notation, but also the universe of the very language practices that render this experience.

We already know that Theophrastus is a prolific writer and a great, though somewhat lisping speaker. When discussing Aristotle’s *Metaphysics*, I pointed out that, for the Stagirite, the activity combining speech and writing functionally was a school lecture. What kind of lecturer was Theophrastus? In *The Learned Banqueters* (21 a–b), Athenaeus reports:

Hermippus says that Theophrastus used to arrive punctually at the Peripatos, looking splendid and all decked out. Then sitting down, he [used to] present his lecture, refraining from no movement nor any gesture. And once while imitating a gourmet, having stuck out his tongue, he repeatedly licked his lips.¹²¹

For Theophrastus, intellectualized speech practices still combine with ostension, which remains here as a dwarf remnant of old performances. The rhetorical *actio* contains recommendations for similar behavior: the speaker should, to some extent, play mimicry, demonstrating with his own body what he is talking about. Although there have been less and less similarities between rhetoric and philosophy since Plato’s time, Theophrastus sometimes returns to this combination of a textualized word and an active gesture. As I have mentioned before, in the culture of Europe, the text displaces the body from the realm of reflection, but never completely removes it – even though many authors have dreamt of this, and many fields of culture have done so declaratively – and in the situation of the transmission of the text by living speech, i.e. in a situation appropriate for every process of school teaching, the body of the teacher or lecturer does not disappear, but necessarily takes part in the process of transmission,

121 Fortenbaugh, I, 1, 12 (p. 63).

even when the participants of the situation strive to free it as much as possible from the contingencies which result from non-reflective realms of the human condition. We know that Pythagoras taught his students by speaking to them from behind the curtain so that they would not be distracted by the sight of his figure, but the acroamatic method did not find followers and the speaker's body did not stop interfering with the text he/it was performing.¹²²

Let us now turn to Theophrastus' views, which we know from the preserved parts of his work. From the catalogue of his writings given by Diogenes Laertius, it appears that he dealt with all the fields of knowledge of the time, and from a modern perspective we consider that he constituted several of them (among them botany and history of philosophy). Before I try to formulate comments on the general characteristics of his thinking in the context of the cultural processes examined here, I will again cite some important quotations.

In a work on rhetoric read at the end of the nineteenth century from a papyrus discovered in the ruins of Herculaneum, Philodemus stated that:

was not capable of writing on government [*peri politeias*] [...], but Theophrastus spent his whole life in private [*en idioteiai*] and (in) philosophy [*kai philosophiai*]

122 Diogenes Laertius reports (V, 2, 37): "About two thousand students came to his school. In the letter to Phanas the Peripatetic he discussed, among other things, matters concerning the lecture-hall as follows: 'Not only is it not easy to get a public assembly, but not even a small company of listeners such as one would like. Public readings lead to revisions. The present generation no longer tolerates the deferring of everything and lack of care.' In this letter he used the term 'scholastic' [*scholastikos*]" (Fortenbaugh I, 1, 1, p. 23). Both the number of listeners and the quotation from the letter testify to the complexity of the communicational situation in which Theophrastus was involved in the field of education. His lectures – already fully institutionalized and professional – were not held in a narrow circle of trusted students, but were apparently events open to all those who wanted to attend, which is why the lecturer had to face ad-hoc critical remarks formulated by a "random" audience. This situation is therefore closer to political debate on the Agora than a university lecture in its modern form – even if purely intellectual issues remain under discussion. In the Middle Ages, this energy of vivid-word discourse will find its vent in the institution of *quodlibet*-type university debates. The term *scholastikos* in the Late Hellenic Greek took on a pejorative meaning ("wiseacre," "know all"), which could be related to the low quality of oral discourse practiced by the lesser representatives of the intellectual world of that time.

and (in) ignorance of the affairs of monarchs [*kai basilikon apeiriai pragmaton*]. (P. Herc. 240, 16, 3–10; II 277, 13–20 Sudhaus, text reconstructed by modern editors)¹²³

This observation may indicate a rapid progress in the separation of *bios praktikos* and *bios theoretikos* in the post-Aristotelian Greek intellectual community, not only because of the growing internal diversity of types and practices of intellectual activity but also because of the political changes that have taken place with the achievements of Alexander the Great and his successors. In the emerging Hellenistic kingdoms, the making of politics – especially as communication practice – was very different from the political life of the classical *polis*. Instead of a relatively narrow circle of equal citizens exchanging views, arguing and constituting a fragile legal order in the constant polyphony of the public debate, sharply hierarchized centers of local and supra-local power emerged, whose powers did not depend on the efficiency of their representatives in the art of persuasion but on the current balance of power at the highest levels of the global political system, including areas whose reach would have been difficult to imagine for demagogues of the Peloponnesian war. In this situation, the rank of the political oratory understood as autonomous art had to decrease – which was perfectly visible in the output of Second Sophistic, striking audiences in the following epochs with the abstractness of its subject matter, often treated by enthusiasts of the Golden Age of the classical era as vane and secondary. This state of affairs was compounded by the progressive institutionalization of intellectual life in Plato and Aristotle’s philosophical schools, which involved a separation of the reflection practiced in them from the current social life, its confinement within exclusive, narrow circles, and finally, the specialization of intellectual activities forced by political and social circumstances. All these tendencies were only strengthened by their growing dependence on the medium of writing.

Thus, while Socrates and the sophists in their thinking were committed to the political life of their communities in different ways, Plato showed personal political ambitions, and Aristotle could influence at least Alexander’s views, if not his actions, so, Theophrastus and his colleagues from the

123 Fortenbaugh I, 1, 27 (p. 79).

second generation of the Peripatetic school were already much closer to the modern model of the academic scholar-theoretician, who is busy collecting and producing pure knowledge in isolation from current affairs, and his competence in the field of current public life is at best poor, although this is not necessarily due to his personal detachment from reality, but rather to the structure of that reality itself.

The critical tone of Philodemus is perhaps a reference to the older ideal of the citizen, in which devoting oneself exclusively to private matters (*en idioteiai*) was considered a disability, and such matters included the accumulation of theoretical knowledge, but seen from the perspective of over two thousand years. Bearing this in mind, the figure of Theophrastus, who is unfamiliar with politics, who regrets the deficiencies of his own pronunciation, and finally dies from the exhaustion of writing, is an unavoidable symptom of the diversification of the cultural life of the Greeks that took place at the turn of the fourth and the third centuries, not only because of the widening of their *oikoumene* but also because of the growing diversity of writing practices and the associated forms of textualization of experience. Let us recall that, for Aristotle, the word *theoria* meant knowledge but at the same time observation of reality, which is at least the declared basis for this knowledge, and it is from these two dimensions of *theoria* that *praxis* emerges as an application of knowledge. In Theophrastus, however, *theoria* comes closer to modern “theory,” and the opposition of theory and practice – which has strongly influenced Western thinking, often leading to the detriment of the former – is precisely a result of the processes in which Theophrastus was an important early participant. By the way, Philodemus, a proponent of the Epicurean philosophy, himself preferred personal self-improvement over active participation in public affairs, so it is possible that his opinion of Theophrastus is more a report, rather than a critique.

There is also a story of Theophrastus’ oratory defeat which is even more telling in respect to his uncertainty (let us recall – he was supposed to be Aristotle’s most eloquent pupil). The story is quoted by Aelian in his *Historical Miscellany* (VIII 12):

Not only did Demosthenes suffer this in Macedonia, although he was a very forceful speaker, but also Theophrastus the Eresian. For even he broke down while speaking before the council of the Areopagus and put forward this

excuse: that he was dumbstruck at the majesty of the council. Then in a very stinging and quick-witted manner Demochares replied to his explanation, saying, “Theophrastus, the judges were Athenians, not the twelve gods.”¹²⁴

Here, we observe a loss of fluidity of speech against the political body in a man known for his extraordinary level eloquence. This is probably due to the difficulty in defining the situation by the speaker, a difficulty which, in turn, is due to the diversification of speech practices, their division into intellectual and pragmatic, philosophical and political. Let us note that Plato did not speak at public gatherings at all (the exception is the lecture on *The Good* mentioned by Aristoxenus, which is the basis for the speculation of the Tübingen school about the Platonic unwritten science). Nor do we know about any such speeches on the part of Aristotle. Socrates, on his part, went beyond the institutions of his contemporaries in the Athenian *polis*, both political and educational, which was one of the reasons behind the ban on his teaching imposed by the political authorities.

In the fifth century AD, Proclus commented Aelian’s story in this way (*Comm. in Platonis Primum Alcibiadem* 114 b-d):

Therefore objectors ought not to say, “Then how was Theophrastus, who was most persuasive in his private conversations [*en tais idiais synousiais*], unable to persuade the members of the Areopagus?” For those persuaded in private were not part of the unpersuaded many, nor were they unpersuaded in matters in which Theophrastus was knowledgeable, but in matters in which he was inexperienced.¹²⁵

The complicated syntax of the Neo-Platonic philosopher does not obscure his accurate diagnosis of Theophrastus’ “dumbness,” as Proclus perceived the diversity of both the situation of the communication message and its target groups. An excellent lecturer, a subtle intellectual discussant, turns out to be helpless in confrontation with politicians and people of power. However, it is not because he lacks competence, but because his competences – both intellectual and communicative – are not the same as those of his partners in this failed interaction. In short, they have absolutely nothing to say to each other, or rather have no desire nor need to listen to,

124 Fortenbaugh I, 1, 32A (p. 81–83).

125 Fortenbaugh I, 1, 32B (p. 83).

and try to understand, each other. This problem, which is very common in the social life of modern times, was already evident in Hellenistic Greece.

From all these fragmentary messages, there emerges a picture of an increasing variety of verbal practices in the realm of social and intellectual communication in which Theophrastus was involved. Moreover, it seems that both he and his contemporaries not only submitted to this diversity but also showed the growing awareness of it – something utterly missing from Plato and Aristotle’s discourse. The world in which Theophrastus operates is already a world of fully independent cultural texts in an increasing number of varieties, and thus it is also a world whose inhabitants are clearly aware of the impact of the presence of such a text on their lives, or rather on certain, increasingly specialized areas of that life.

Let us now proceed to discuss Theophrastus’ texts in their stylistic and substantive layer. In his commentary on Aristotle’s *Hermeneutics*, Boethius conveys such an information (12, 3–7 Meiser):

There is also the fact that Theophrastus, as is his custom in other works as well, when he is dealing with matters similar to those which have been dealt with by Aristotle, in the book *On Affirmation and Denial*, too, uses some of the same words as Aristotle used in this book [i.e. *Hermeneutics*].¹²⁶

In Theophrastus’ times, the phenomenon, which in the era of copyright would have been called “plagiarism,” and earlier “imitation,” was, I think, a manifestation of the nascent and solidifying consciousness of the textual circulation of the content of cultural thinking after its separation from the realm of current social events. Indeed, Theophrastus continues the themes taken up by his teacher, literally taking over his thought and developing it in a written message – thereby removing the obstacle of time distance between them and the absence of late Aristotle (the motif of “the text as presence” comes to mind, and in this case it makes both its own intellectual content and that of its author present). This also means, however, that the course of thinking of both authors, as presented in the record, is separated from non-textual factors which could transform it on an ongoing basis differently from their will.

126 Fortenbaugh I, 1, 72A (p. 131).

It is in this very phenomenon that the postulate of the objectivity of scientific thinking, inherent in the understanding of science by the textualized instances of European culture, finds its origin – together with its underlying concept of objectivity of the mental image of the world mediated inter-subjectively by textual description. For literacy theorists, such as Ong and Havelock, this kind of decontextualization of the written message was a great advantage, but they did not see the price that western thinkers would have to pay for the benefits of timeless communication: the growing isolation of their thinking both from the realm of phenomenal experience and the realm of ongoing social communication, which, to be sure, can be also carried out by means of writing practices, but on utterly different terms: written record is an aid to the practice, its correlate, component, instruction, or score, and usually it is not a primary and independent practice.

Theophrastus was probably aware of these problems. Among his works preserved to our times is the treatise *On Sense Perception* (*Peri aistheseon, De sensibus*), which in itself is a good example not only of reflection on these issues but also of their very presence. It is a treatise that mainly deals with the views of Theophrastus' predecessors on sensual perception, and thus falls within the framework of Theophrastus' "history of philosophy" based on a textual dialogue with earlier thinkers. But here we can see an interesting feature, which is the philosopher's attempt at a textual analysis of the process of sensual perception. This attempt is based not only on textual abstraction of this process but also on a text-centered, archiving approach to the subject, where the primary role is played not by the inclusion of the flowing reality itself in the reflective record (this approach could not be universal or objective for Aristotle's successor), but by the author's self-definition in relation to the views formulated by his predecessors about the realms of reality under investigation. At the same time, in *De sensibus* we are dealing with a typically Aristotelian reduction of experience to the physiologic-phenomenological realm, without paying attention to its possible psychological and cultural conditions, thanks to which one can get rid of the problem of the momentum and randomness of the approach. Similar features are characteristic of Theophrastus' works about tastes and smells, or about sweating and moisture, and it is probably not without significance that in these works he considers natural phenomena extremely strongly

connected with the realm of sensual experience as if he wanted to try out how far one can go in a textual analysis of the human sensorium.

Moreover, a large part of Theophrastus' philosophical output is the development and detailing of the material contained in Aristotle's works, especially in the *Organon* and naturalistic works, such as *History of Animals*. As far as we can judge by the preserved fragments, it was an activity planned by Theophrastus as a conscious work of constructing a "text on text" in order to complete the image of the world contained in it. In my opinion, this process went in two directions – one of them, to which I will move on later, was the continuation of the work on textual evidencing of the phenomena of the natural world and, to a lesser extent, cataloguing the world of human culture. However, Theophrastus was also interested in working out the technical details of the textual approach to reality, the main outline of which the Stagirite gave in the *Organon*, and which – like the "grammar," "spelling," and "stylistics" mentioned earlier – are the result of alienation of both the experienced reality and the linguistic practices describing it, the alienation occurring in the medium of text. Let us look again at some quotations.

In the work *On Affirmation* (*peri kataphaseos*), summarized by one of the commentators of Aristotle's *Hermeneutics*, one can read:

Since the sentence is related to two things, according to the distinction made by the philosopher Theophrastus, on the one hand to its hearers, to whom it also conveys some meaning, and on the other to the facts, about which the speaker aims at convincing his hearers, poetry and rhetoric are concerned with its relation to the audience. Hence it is their business to select more dignified words, and not common and hackneyed ones, and to weave them together harmoniously, so that through them and what goes with them, like clarity and sweetness and other qualities of style, and again length and brevity of speech, all used on the right occasions, the hearer is pleased and amazed and forced into conviction. But the philosopher will take care especially of the relation of the sentence to the facts, refuting the false and demonstrating the true, in each case aiming to deduce the truth or falsity of a disputed statement by means of statements that are self-evident. (Ammonius, *Comm. in De interpretatione* ad 17 a 6; Wimmer 65; CAG vol. 4, pt. 5, p. 65 [Busse])¹²⁷

In my opinion, this statement testifies to a huge change in the treatment of language phenomena. Theophrastus easily solves a difficulty that neither

127 Fortenbaugh I, 1, 78 (pp. 137–139).

Gorgias, nor Plato, nor Aristotle were able to overcome: he conceptually establishes the difference in the meaning of language practice due to its subject and its recipient, pushing the question of the meaning of a linguistic sign as such into the background. In this gesture, Theophrastus confirms his sense of the diversity of language practices functioning in his world and dependent on both the medium of the message and the situation of the message. Therefore, he partly departs from the absolutist position of the Stagirite, which hinged on a belief in the unambiguity of the textual message, and comes close to the dilemmas of Plato or Gorgias – but, as I said, he has a simple solution to them, which, in turn, is based on an essential understanding of the nature of speech and writing in their mutual relationship. At the same time, Theophrastus demonstrates in this statement the final phase of the process of conceptual separation of the object of linguistic expression from its individual situational and perceptual context. This is also the beginning of a “theory of language” based on principles which are not limited to the analysis of abstract expressions. Moreover, Theophrastus highlights the aspects of linguistic entities that have only begun to be studied on a larger scale in the twentieth century.¹²⁸ The fact that this view of Theophrastus was widely known is also evidenced by one of the anonymous scholia to *Hermeneutics*:

Theophrastus says that speech has an attitude to the listener and an attitude to things, and that poets and speakers are responsible for the attitude to the listener and philosophers for the attitude to things.¹²⁹

In his commentary on *Hermeneutics*, Boethius points to another, related feature of Theophrastus’ thinking about speech practices:

Theophrastus, too, in that book which he wrote *On Affirmation and Denial*, dealt with indicative speech [*enuntiativa oratione*]. (9, 24–26 Meiser)¹³⁰

To which he adds elsewhere:

128 In the Polish language, there is an excellent dissertation on this subject written by Izydora Dąmbska: *Wprowadzenie do starożytnej semiotyki greckiej: studia i teksty* [Introduction to ancient Greek Semiotics: Studies and Texts], Wrocław 1984.

129 Anonymus Coislinianus, *In Aristotelis De interpretatione* (CAG vol. 4, pt. 5, p. xxiii, vv. 15–17).

130 Fortenbaugh I, 1, 79 (p. 139).

For some man can as well be Socrates as Plato or Cicero or any one of the individuals whose properties differ naturally by reason of their individuality. Hence Theophrastus very aptly called particular propositions [*particulares propositiones*] of this kind, like “Some man is just,” “indefinite particular” [*particulares indefinitas*]. For it takes a part from man, which is universal in name [*vocabulo*] or in nature, but it does not determine or define which part it is, or by what property it is described. (140, 3–12 Meiser)¹³¹

Thus, on the one hand, Theophrastus extracts and conceptualizes the difference between the abstract content of an utterance and the context of its transmission and reception, and on the other hand, deepens the procedure initiated by Aristotle to generalize textual statements in terms of proto-formal description. The fact that the lost treatise *On Affirmation and Denial* had to contain very important conceptualizations of intellectual and cognitive practices related to the presence and circulation of texts is also evidenced by the information preserved in Alexander of Aphrodisias’ his commentary to *Prior Analytics* (*Commentaria in Aristotelem Graeca*, vol. 2, part 1, p. 11, vv. 13–16 Wallies):

But Theophrastus too, in the *On Affirmations* [*Peri kataphaseos*], seems to think that “proposition” [*protasis*] has several senses. At any rate he defines not it, but [defines] “affirmation” [*kataphasis*] and “denial” [*apophasis*].¹³²

The following excerpts also prove this thinker’s sensitivity to the issue of different meanings of linguistic expressions due to their medium-dependent function:

The so-called beautiful words too make the style charming. Theophrastus defined them as follows: “Beauty in a word is that which is pleasant in regard to hearing or in regard to sight, or that which suggests in thought great value.” (*On style* [*Peri lekseos*], Demetrios, *De elocutione* 173, Wimmer 95)¹³³

Theophrastus defines the maxim as follows: “A maxim is a general assertion concerning matters of conduct.” There are several classes of maxims: some of them are paradoxical, some in agreement with accepted opinion, some disputed. (*On style* [*Peri lekseos*], Gregorios Corinthius, *In Hermogenis De methodo* VII 1154 Walz)¹³⁴

131 Fortenbaugh I, 1, 82B (pp. 141–143).

132 Fortenbaugh I, 1, 81A (p. 139).

133 Fortenbaugh I, 2, 687 (p. 535).

134 Fortenbaugh I, 2, 676 (pp. 521–523).

This is, in the first case, a distinction between the aesthetic value of expression (taking into account both linguistic media: voice and writing, as evidenced by the mention of hearing and sight) and its cognitive value, related mainly to the increasingly important epistemological component of the text as a tool of organizing cognitive processes. In the second quotation, we get an indication of the growing differences between the changing experience and the unchanging notation.

If we were to go through all or at least a substantial part of Theophrastus' works on the development of Aristotle's theses from the *Organon*, we would perhaps see how, in the generation in which Greek culture passed from the classical to the Hellenistic period, among the heirs of the achievements of the giants of classical Greek philosophy, intensive work is carried out to determine the effects of the already fully developed alphabetical writing on different types of social and cultural practices, from literature to politics, rhetoric and philosophy. Until the end of the fifth century all these areas were not clearly differentiated for the Greeks and were components of the great whole of the social life of the *polis*, which, of course, was internally differentiated, but, according to intensive research in the area of cultural anthropology, its differences were based on different assumptions. In the fourth century, the specificity of "our" areas of Greek spiritual life began to deepen both in the practices themselves and in the theoretical reflection on them, and this went hand in hand with the differentiation of cultural practices in the context of social stratification. At the turn of the fourth and the third centuries, as we see in preserved fragments of Theophrastus' writings, this division was fully established. On this ground – transferred in the texts to the Library of Alexandria – the text-centered culture of Hellenistic Egypt will flourish, which, together with its very deep differentiation in terms of cultural competence of particular groups and social strata, I described in my previous book.

Before I proceed to sum up the role of Theophrastus in the process of textualization of experience, I will devote a little more attention to his activities in the field of textual approaches to natural reality. I will start with two quotations, which many contemporary readers may find somewhat humorous.

Now Theophrastus somewhere says that a double heart is seen in the partridges in Paphlagonia.

(*On Differences with Regard to Locality* [*Peri ton kata topous diaphoron*], cited by Athenaeus IX, 390 c, Wimmer 182)¹³⁵

A few sentences before, Athenaeus gives the second quotation, probably even funnier:

Theophrastus at any rate, in *On Difference of Voices in Creatures of the Same Kind* [*Peri heterophonias dzoon homogenon*], says, “At Athens the partridges on this side of Corydallus, towards the city, cackle [*kakkabizein*], but those beyond it twitter [*tittybizein*].” (Ath. IX, 390 a-b, Wimmer 181)¹³⁶

Such quotations are often related when one wants to demonstrate the absolute unsuitability of knowledge about antiquity for anything. And indeed, the information about the two hearts of the Paphlagon partridges and about the cackling or twittering of the Athenian partridges is not, by itself, useful in any way, except perhaps for satisfying the lusts with which the lovers of antiquarian scribblings burn. What is noteworthy, however, is the aim that Theophrastus may have pursued when collecting and writing down such information. The first of them is a model example of the transferring into the text of some specific individual observation of nature, the result of which was given as a permanent textual element of a “catalogue of phenomena.” Perhaps, Theophrastus recorded here the discovery of some anatomical anomaly, which was considered a norm in the area where it was found. The importance of the text as a permanent image of reality – rarely contested after Aristotle – made it possible to consolidate this accidental information in the chain of text messages and to put it into the circulation of knowledge conserved, archived, and multiplied in the intellectual work centers serving such purposes, where the texts of the “classics” were studied and copied. Probably such processes were one of the foundations of the medieval image of the “world in the text,” which seems so unreal to us. It was only in the modern era that Europeans developed procedures that made it possible to verify text data inherited from tradition – after all, this was to a large extent the core of the scientific revolution in the seventeenth and the eighteenth centuries. But these procedures themselves were created in

135 Fortenbaugh I, 2, 356 (p. 145).

136 Fortenbaugh I, 2, 355B (p. 145).

accordance with the textual image of the world as a set of precisely defined elements that could be described in detail.

The second quotation is even more interesting. Theophrastus tries to reproduce in an alphabetical text notation the sounds made by birds. In other words, he tries to use the tool that is writing for the purposes for which it is at best poorly suited, since it was created mainly as a means of preserving the symbolic and semantic content inherent in the exchange of information between individuals of the human species. Bird chants, although they may have an aesthetic value for humans, do not have semantic or symbolic values – and even if such values can be spoken of in relation to birds' behavior in their possible biosemiotic context, such meaning values do not in any way correlate with the transcription of the sound of these voices into an alphabetical notation.¹³⁷ And yet, attempts at such transcriptions have been made to this day, because it is required by the idea of the “world in the text” resulting from the principles of the textualization of experience and imposing on the researchers of reality the obligation to reproduce all elements of physical reality as faithfully and precisely as possible. In this light, the difference between “kakkabi” and “tittybi” takes on a deep sense.¹³⁸

137 I set aside the symbolic values that were given to the voices of birds in romantic or sentimentalist aesthetics, since they had no connection with the faithful transcription of these voices into a written form.

138 See for example: Jan Sokołowski, *Ptaki Polski* [*The Birds of Poland*], Warszawa 1965 and reprints. Sokołowski consistently gives a voice record for each species, here are some examples: “cyli cjur cyli cjur” (great spotted woodpecker's chicks, *Dendrocopos major* (L.), in the nest), “dziurrryk, cerwik kirrek” (grey partridge, *Perdix perdix* L.; we notice a big difference from Theophrastus' version), “bit bit, cyt crr” (European pied flycatcher, *Ficedula hypoleuca* Pall.), “tjo tjo, ju-i-lio, ksz-i-a-jak” (lesser white-fronted goose, *Anser erythropus* (L.)). The obvious for a Polish reader association with Julian Tuwim's children's poem *Bird's Radio* with its many onomatopoeias is only seemingly frivolous, since Tuwim in many of his “frivolous” works and lyrics indirectly referred to quite serious issues concerning the relationship between the word, especially the written one, and the cognitive processes taking place in the human mind, while he devoted Chapter 19 of *Pegasus Rears Up*, entitled *Outline of Tweetology*, to various quasi-literary variations on the subject of bird voices. From yet another perspective, Olivier Messiaen took up this problem when composing the cycle *Catalogue d'oiseaux* (1956–1958) for

Finally, let us also note the only piece by Theophrastus known to non-specialists and read in modern Europe not only by scholars: the *Characters*, a source of the whole literary genre, represented e.g. in the seventeenth century by La Bruyère. Theophrastus' work is not a collection of universal human types. Indeed, his characters preclude any generalized image of reality. What are dealing with is a free collection of descriptions of certain specific situations, not an analytical and reflective argument; a collection of generic images similar to those preserved in Greek mimes, not a classification according to Aristotle's principles. One might have the impression that *Characters* are a sketch of some "more serious" study, or that Theophrastus considered this kind of subject unsuitable for a strict approach, and that it is possible to abandon the new textual precision in favor of an older method – a description of specific, individual elements of reality, in which literary fiction (*belles-lettres*) will specialize again in the future, although in a completely different functional way. But this little collection can also be understood as the first or one of the first European attempts to perpetuate types of behavior and social interactions in a textual form, made in a way far removed from the later generalizations of sociological nature that the Stoics, for example, will try to develop.

* * *

In Hellenistic culture, and especially in Alexandrian philology and science, a new textual way of thinking about reality and the cultural creations of the mind has become fully visible, the foundations of which were laid by Aristotle and Theophrastus. They have led to the full autonomy of writing and its transition to the form of a text, not a transition in strict sense, since texts as material traces of writing activities had already existed in Greece centuries before, but to make the text an autonomous, self-sufficient instance of meaning that can interact with similar items, but is no longer, at least by definition, dependent on the particular social conditions in which it exists. In fact, of course, this dependence always exists, even in the form of the destruction of texts in the course of historical turmoil, but the content of a text, its meaning, receives full autonomy and its reception and further transmission

piano from motifs which, as his biographers claim, he wrote down with notes from nature, listening to birds with a notebook at hand.

are organized in such a way that their stability is not affected. By “stability” I mean something other than the question of an unambiguous division of words in the notation, their correct (loud or silent) reading, and possibly flawless copying. For it is also a matter of categorizing the experience of culture in textualized notations. There is no place in such a categorization for tacit knowledge, which lies not only in non-verbal areas of people’s minds but also in their bodies. The non-somatic nature of the text message protects it from the fluidity of phenomenal experience, but at the same time removes a large area of existence from it, and attempts to convey the quality of this area in the text are usually not fully successful.

Where he had to deal with pure reflection detached from the phenomenal realm, Theophrastus would pave the way for his successors and build bridges between them and their predecessors. The history of philosophy begins with his writings – in the form of doxography, a description of other people’s views, not the author’s own views in the written text. Theophrastus’ work on this subject was reconstructed by Hermann Diels in the outlines, and one can see in this work a great difference from Aristotle’s analogous texts, even from the second half of the *Book Alpha* of *Metaphysics*, which is sometimes called “the history of philosophy.” Well, Theophrastus does not cite the views of his predecessors in order to show their shortcomings, errors, and deficiencies in the light of his own system, but in order to report them objectively and organize them in the text for the benefit of other readers. This is a huge change in the function of the text: it is no longer merely a **tool** for thinking or describing the world and it becomes a **transmitter** in the sense to which modern readers are accustomed. Theophrastus also had to – at least to a certain extent – textualize the views of the Presocratics, because some of them probably either did not write at all or did not write “philosophical works” in modern manner. The problem of his sources has been the concern of many eminent scholars, but it has not been, and rather will never be, resolved, if only because Theophrastus’ own texts on the views of former philosophers have been preserved fragmentarily.¹³⁹

139 Seminal for this question is a study by John B. McDiarmid: “Theophrastus on the Presocratic Causes,” *Harvard Studies in Classical Philology*, 1953, vol. 61, pp. 85–156. Among newer issues, see e.g.: Han Baltussen, *Theophrastus against the Presocratics and Plato. Peripatetic Dialectic in ‘De sensibus’*, Brill 2000.

Theophrastus is also regarded as the creator of botany – just like his master as a creator of zoology. A comparison of Aristotle's *History of Animals* with Theophrastus' botanical writings reveals similar methods of transferring the world of living beings to the world of text. Attentive, careful observation of specific features, qualities and processes taking place in nature is supposed to lead to the creation of an unambiguous, ever-true image of nature in the text, whose internal structure should correspond to the structure of nature itself – and, in fact, construct it, placing the element of the organic world in a classification, in a standardized description and in a nomenclature so meticulous as to render the granularity of the structures of the physical or biological world down to the smallest details.

It is worth emphasizing the diversification of Theophrastus' thinking into the realm of autonomous text and the realm of experience mediated by text. He works consistently on the development of both these areas, and in a much more conscious way than his predecessors, including Aristotle. For Theophrastus, it is already obvious that thinking takes place more in the written record than in the living voice, more in the reasoning mind than in the experiencing body, and more in intellectual isolation than in social action.

It has already been mentioned several times that the existence of the alphabetical text in the cultural system, with its power to detach the mind of readers from experience, the presence of such a text, its circulation, creation and reception, the writing and reading practices, and finally the translation of fluid world of life into a stable world of writing – all this serves people to oppose the entropy of physical reality in which, by laws of physics they have discovered, they must experience their existence. However, only the first lawmakers of the text, Plato and Aristotle, and their direct successors were able to trust without reservations the security that the recording of reality gave them. It soon turned out that the texts, although they indeed do not have the permanent instability of the real *Lebenswelt*, are subject to entropy of another kind.

The rigid record of the Truth, a uniform picture of the structure and dynamics of the world that was to emerge from the writings of these philosophers, is susceptible – and this proved to be the case several decades after their death – to an unlimited multiplicity of possible deformations, readings, and understandings. Already the undertakings of Alexandrian

philologists – the establishing of the corpus of texts and their form as the truest of the many available versions – were the result of this “textual entropy.” The lack of a situational context, the discrepancy between the written word and the situation to which it is supposed to refer, the targeted but never achieved uniformity of meaning of the written message, the changeability of cultural and social contexts of the circulation of text records, and finally the imprecision of their manuscript reproduction – all these factors caused the texts, first to be established and interpreted, and then to be openly disputed in terms of their meaning and use. The ambiguity of quasi-unambiguous records led to misunderstandings in their reception, and these, in turn, provoked not only the creation of hermeneutics, as described by Dilthey, but also endless disputes over the proper understanding of the written word, which, in turn, had a huge impact on the entire history of Western civilization. When Russell and Wittgenstein pointed out at the beginning of the twentieth century that the history of Western philosophy could be reduced to a history of misunderstandings that multiplied around the meaning of concepts used by philosophers, and ultimately to the fact that philosophers do not understand the meaning of words used in philosophical discourse, they had in mind the same phenomenal... only that they saw it from the side of its effects, not the causes. More precisely, they did not attach importance to the communicative aspect of philosophers’ activities, to the fact that what they fail to understand each other, rather than “objective” meanings of their vocabularies.

To see other dimensions of this phenomenon, it is enough to think about the religious doctrinal disputes that have torn Christianity apart for most of its history. These disputes were summed up by Gibbon with the irony of the enlightened freethinker, when in one of the footnotes to *Decline and Fall...* he stated that Christians were willing to murder each other because of one letter. He meant the difference between “homoousios” and “homoiousios” in the dispute over the nature of Christ, but by the way, he pointed to the deepest degree of textocentrism of the whole problem, in which the truths of a once revealed faith materialized in the further process of history as signs of writing, not just of Scripture.

The textuality of the great monotheistic religions is a fascinating issue which deserves a separate, comprehensive monograph. At this point, however, I would like to show “textual entropy” on an example that is much

tinier in terms of its social impact, but also clear and powerful in its impact on cultural processes and textual phenomena, which I will be discussing in later parts of this book.

Both Aristotle and Theophrastus mention hundreds of animal and plant names in their biological writings. It is symptomatic that, in principle, they do not give them any more precise definitions, as if it were clear to themselves and to the closest recipients of their texts in time and space what kind of creatures these names designate – and this is probably a case, which proves that the Fathers of the Text were not fully aware of the future range of influence of their own writings. But already in the Hellenistic Alexandria it was not at all clear to what plants and animals many of these names referred, and modern scientists studying the body of the biological writings of the Stagirite and his disciple, as well as later sources, put much effort – often in vane – into identifying them. Dictionaries of Greek names of birds and fish developed by nineteenth-century polyhistor D'Arcy Wentworth Thompson are an excellent example of these efforts.¹⁴⁰ Many of the entries in these dictionaries contain a reservation regarding the identification of species hiding under ancient names, in many others Thompson could only explain that it is “a fish” or “a bird,” not only because the word has been preserved without any closer characteristics, usually in one of the late-antique lexicons, but also in case the description of it was not sufficient for a clear identification. Problems with matching old zoological and botanical names with modern nomenclature were also felt by researchers dealing with closer epochs. In his monumental *Dictionary of Polish Names of Genera and Higher Clusters of Plants, preceded by a historical dissertation on sources* (Kraków 1900), Józef Rostafiński confesses that he is unable to determine which real plants are referred to by some of the names he collected – and yet these folk names were used (this time in illiterate culture) only a few centuries before his research.

The incompatibility of the real, processual world of nature with its linguistic images is another great research topic that I can only mark here. This world escapes words, both written and spoken, and even centuries

140 D'Arcy Wentworth Thompson, *A Glossary of Greek Birds*, Oxford 1895; D'Arcy Wentworth Thompson, *A Glossary of Greek Fishes*, London 1947.

of scholars' efforts cannot fully prevent this escaping, perhaps because the quantization of reality in writing, proper for the literate thinking, necessarily limits our possibilities of a cognitive approach to the experience of nature, although on the other hand it gives us unprecedented pragmatic power over it. Linnaeus' binominal classification was a turning point in the history of biological sciences in terms of the textualization of the nature, which made it possible to grasp living beings relatively unambiguously in the notation, although even here it is difficult to speak of the total unambiguity of the "world-text" representation, since scientists have never agreed on the definition of a biological species and, consequently, on the scope of the individual items of nomenclature. Their discussions on the methods and assumptions of assigning conceptual taxa to particular elements of the actual biocenosis are in themselves fascinating material for the researcher of the textualization of scientific experience.

In the history of natural sciences, there is also a strong current that links the word and the image, whose outstanding representatives are, for example, Ernest Haeckel (1834–1919) and John Audubon (1785–1851), who devoted a great deal of effort to creating artistic paintings as illustrations of their texts about the world of living beings.¹⁴¹ Let us note, however, that this trend also has its origins in antiquity – the word and the image are combined in the famous botanical-medical manuscripts of Dioscorides' works, whose authors, among them perhaps Dioscorides himself, apparently felt the need for iconic confirmation of the textual descriptions of the plant species they discussed, and at the turn of the fifth and the sixth centuries AD the good will of the princess of the imperial house, Juliana Anicia, made it possible to immortalize their intentions in one of the most marvelous ancient manuscripts that have survived to our times, known today as the *Vienna Dioscorides*. Yet another trend was represented by Alfred Brehm (1829–1894) and Konrad Lorenz (1903–1989), for example, who created quasi-literary narratives about the natural world, strongly ideological in

141 Ernest Haeckel, *Kunstformen der Natur*, first ed. 1899–1904; John Audubon, *The Birds of America*, first ed. 1827–1838. Audubon's work, in the form of huge volumes with colorful plates, is an outstanding work of printing art; in our times, the first copies of *The Birds of America* reach millions of dollars at bibliophile auctions.

Lorenz's case.¹⁴² In the face of their achievements, the natural works of Aristotle and Theophrastus are only preliminary works, but it should be remembered that the whole edifice of naturalistic texts built by modern Europeans rests on the foundation of these works.

The textual world of Theophrastus, as far as we can see it today in its surviving remains, was the first extensive attempt to apply the methods of textualization of experience developed in Greek intellectual culture throughout the fourth century BC to the whole range of natural and cultural phenomena. The following centuries, largely thanks to the achievements of this author, saw a lively development of the Greek *Fachliteratur*.

142 Alfred Brehm, *Illustriertes Tierleben*, first ed. 1864–1869; Konrad Lorenz, *Das sogenannte Böse*, first ed. 1963.

Chapter 6 The dried body of Philitas

An interesting example of the problems resulting from the early phase of a strict textual approach to cultural phenomena is the work of Philitas of Kos (ca. 340 – ca. 285, sometimes mentioned as Philetas, which results from variations in manuscripts and phonological changes in Greek language). Philitas was a teacher of the poet Theocrite and Zenodot, the first of the great Alexandrian philologists, and was also the tutor of Ptolemy II Philadelphus, founder of the Alexandria Library. The philologist and poet (or rather, a proto-philological researcher of words), Philitas is considered the predecessor of Callimachus in both literary and scientific fields. He was respected not only by the Greeks but also by the Romans, as can be seen today in the flattering references to him in Propertius (III, 1) and Quintilianus (X, 1, 58). But Philitas' work has been preserved in such small remains that it is difficult to build on them a broader picture of his role in the transformation of Greek culture. Therefore, Callimachus' work is more often taken as their example, as I myself did in my previous book. However, what we know about Philitas enriches our knowledge of the progress in the process of textualization of experience by Hellenic Greeks. As with Theophrastus, I will first discuss his biographical tradition, and then I will deal with his work.¹⁴³

While we read in the source that Theophrastus died of exhaustion with writing, Philitas appears to us as a man permanently exhausted by the mere contact with books and texts, and here too a comic origin of the picture is not excluded, because the basis of this picture is the physical complex

143 The main modern editions are: Konstantinos Spanoudakis, *Philitas of Cos*, Brill, Leiden-Boston-Köln 2002; Emanuele Dettori, *Filita grammatico. Testimonianze e frammenti: introduzione, edizione e commento*, Roma 2000; Livio Sbardella, *Filita. Testimonianze e frammenti poetici: introduzione, edizione e commento*, Roma 2000. Two articles are particularly interesting in critical literature: Alan Cameron, "Thin Gentlemen," in his: *Callimachus and His Critics*, Princeton 1995, pp. 488–493; Peter Bing, "The Unruly Tongue. Philitas of Cos as Scholar and Poet," in his: *The Scroll and the Marble. Studies in Reading and Reception in Hellenistic Poetry*, Ann Arbor 2009, pp. 11–32.

of the mocked character, which is connected with his mental qualities.¹⁴⁴ Thus, Claudius Aelian, an erudite from the third century AD, is skeptical, when he tells in *Historical Miscellany*:

Philitas of Cos is said to have been extremely thin [*leptotaton*]. Since he could very easily be knocked over by anything, he wore shoes (they say) with soles made of lead, so as not to be blown by the wind whenever it was gusty. But if he was so weak that he could not stand up against the wind, how was he able to carry such a burden around with him? The story does not convince me, but I report what I have found out about him. (IX 14)¹⁴⁵

From these words, it only follows that Philitas was by nature a thin, peculiarly skinny man. In contrast, Athenaeus, who, by the way, also mentions the lead soles on Philitas' shoes, emphasizing his *somatos ischnoteta* [*dried body*] (552 b), also conveys further details, as he quotes an extensive fragment from the elegy of his pupil, the poet Hermesianax:

You know also of that bard in whose honour the townsmen of Eurypylos, the men of Cos, raised a bronze statue beneath the plane-tree; he, Philitas, sang his love for the nimble Bittis, versed [*tryomenon*] as he was in all the terms of love and in all its speech.

Athenaeus 598 f [in original literally: “devastated by all expressions and all kinds of speech”, with the original word “lalien” [*speech*] being the subject of a lively debate, as a result of which contemporary researchers agree in principle that it means as much as “dialectal expression”]¹⁴⁶

Here, the physical weakness of the poet-erudite is directly linked to his intellectual activities, and specifically to the research of certain verbal practices,

144 A detailed discussion of possible comedy patterns is conducted by Cameron in “Thin Gentlemen,” but Bing criticizes his approach in “The Unruly Tongue. Philitas of Cos as Scholar and Poet.” The issue of the “authenticity” of the messages with physical characteristics of Philitas is, however, rather unresolved and, in fact, not very significant, as the very presence of these messages is significant as such.

145 Aelian, *Historical Miscellany*, edited and translated by N. G. Wilson, Harvard University Press, Cambridge (Massachusetts), London 1997 (Loeb Classical Library 486), pp. 293–295.

146 Athenaeus, *The Deipnosophists*, with an English translation by Charles Burton Gulick, in seven volumes, vol. VI, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press MCML (Loeb Classical Library 327), p. 227.

the specificity of which I will discuss in more detail. The link is made by the author, who was his pupil and therefore must have maintained strong contact with him. We also learn from Athenaeus that Philitas died of exhaustion because he was so buried in books that he apparently forgot to take meals:

Thereupon Democritus said: It is always your custom, Ulpian, to decline your share of any dish until you have learned whom the use of the word for that dish is ancient. Like Philitas of Cos, therefore, who pondered what he called “the deceitful word,” you run the risk some day of being quite dried up, as he was, by these worries. For he became very much emaciated in body through these studies, and died, as the epitaph on his monument shows: “Stranger, I am Philitas. The deceiving word [*logon ho pseudomenos*] caused my death, and studies of riddles late at eve.” (401 e)¹⁴⁷

There are many very interesting details hidden in these testimonies. Let us note at the outset that the cause of Philitas’ death is not writing, as in Theophrastus’ case, but the mere contact – intensive as it might have been – with the texts. It is not clear, however, whether it is about immersing oneself in books written by someone else, which would make Philitas a pioneer of erudite mongrels, bookworms, and *Buchfressers* neglecting the ores of everyday life, or about maniacal rereading one’s own texts in an effort to give them final perfection and reject all unnecessary or false words – and such perfectionism is attributed to Philitas by Denys Page, among others.¹⁴⁸

If we were to accept Page’s interpretation, we would be dealing with the first (at least in the Western civilisation) case of an artist who absolutizes the text record of his work to such a degree that in the process of giving it an ideal form, he rejects *Lebenswelt* and the experience of the realm of existence to the point of reducing his own realm of sensation and phenomenality to the dimension of experiencing the text – as seen, read, written, reflected on and transformed. In the process, the text becomes completely detached from the reality outside the text, a detachment so great that its results are visible in the form of the artist’s poor physical condition ridiculed by his contemporary comedians as *leptotes* (leanness,

147 Athenaeus, *The Deipnosophists*, with an English translation by Charles Burton Gulick, in seven volumes, vol. IV, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press MCXXX (Loeb Classical Library 235), p. 319.

148 Page’s opinion is quoted by Cameron, p. 490.

lightness, cachexia, miserable appearance). However, there is a striking similarity here to a large number of modern literary creators with Franz Kafka at forefront, who, as we know from his correspondence, fed mainly on vegetables (which for his father, the solid and massive German *Bürger*, was a sign of his son's mental imbalance), and being about one hundred and eighty centimeters tall he was worried when his weight exceeded sixty-five kilograms and dreamt of being locked in a basement with paper and pen? And isn't Borges – who barricaded himself in front of the unstable stream of reality behind the infinite shelves of the Library of Babel and dreaming about Aleph, a single word describing the whole world – another spiritual relative of Philitas?

Thus, Philitas provides us with the first example in the history of Europe of a man so immersed in the written word that he literally gets rid of his body as much as possible, disembodies his mind not only in the purely intellectual dimension, as Plato and Aristotle have already done, but also in the physical, organic, and physiological dimensions.¹⁴⁹ However, there are differences between him and the modern writers mentioned here, because their cultural and media situations are very different.

The case of Philitas can be generalized as follows: the medium affects not only the form and content of the message, as McLuhan has already noted, and not only the functioning of the message in social and cultural circles. For it also affects the physiology of the people who use it. And this form of media influence has not yet been given more general reflection because most of the studies on the relationship between the means of communication and the human mind are located in the field of cognitive science, and this one usually omits strictly somatic issues. When we read in the press or in the Internet about young Asians who died of exhaustion after a few days of uninterrupted computer use, we treat it as a curiosity or as a sad manifestation of the madness of our times. But since the Sumerian temple scribes and the Homeric rhapsodes have been active, every medium of communication

149 In earlier literature it was often assumed that references to Philitas' *leptotes* should be understood symbolically or even allegorically as signs of the lightness and subtlety of his poetic style. Bibliographical references on this subject can be found in Cameron ("Thin Gentlemen") and Bing ("The Unruly Tongue. Philitas of Cos as Scholar and Poet").

has taken over not only the mind of the user but also his body and, in extreme cases, absorbed them. Perhaps, some of the rhapsodes weakened during particularly emotional recitations (as happened to Dickens when he read his novels in front of the audience), and the Mesopotamian scribes lost power in their hands after years of squeezing cuneiform signs in the clay. The torments of European medieval scribes, the image of which emerges from the subscriptions on the manuscripts preserved to this day, will be described later in this book. Although in modern times it is difficult to point out an unequivocal case of “reading to death” (although probably many erudites were close to it), we know of cases of loss of sight due to many years of poring over the texts¹⁵⁰ and degeneration of the joints of the right hand after years of constant pen writing. The physiology of Romantics’ handwriting, the physiology of reading a modern scientific text, writing philosophical treatises in the era of great systems, typing (in case of novelists and in case of stenotypists) – these are just some of the problems waiting for their researchers, who would treat them not only as clinical cases or curiosities.¹⁵¹

150 Apart from the best known, Borges, one of the pioneers of modern palaeography, Wilhelm Studemund (1843–1889), is one of them. In both cases, congenital visual impairment was aggravated by the constant reading of large numbers of texts.

151 In a very extensive footnote, I can only give a preliminary draft of one of these problems. It concerns the writing of Polish Romantics.

The characters of Chopin and Słowacki’s writing were very similar. They both wrote not very legibly, but usually very precisely, and above all – finely. There is nothing “romantic” in these writings, in their graphic form, as long as the word “romantic” still evokes in anyone associations with such traits as “sweepingness,” “momentum,” “fantasy” or “ascension.” Two giants of Polish romanticism wrote in the writings of pharmacists and notaries. Many notaries drew much more lush letters. Chopin and Słowacki wrote on modest quarters of paper, saving space. Looking at the words they wrote, whose duct does not reach more than half a centimeter, and is often just over a millimeter long, one can realize and even imagine how tiny, insignificant, almost invisible the movements of their hands must have been while writing.

For medieval scribes, copying for years texts that they sometimes did not understand at all, the practice of writing must have been an activity affecting the mind in a completely different fashion from that of a romantic artist pouring his own self on paper. But it would be too easy to construct a binary psycho- and mediological opposition based on such a common-sense statement. It is enough

Another noteworthy detail in our information about Philitas is the motif of a “deceitful word” or maybe “wrong word” [*logos pseudomenos*], whose search was to contribute to the physical destruction of this writer, along with all kinds of linguistic expressions in general. Sources also underline, as we have seen, his “care for words.” Peter Bing, whose interpretation I will refer to here, notes that Philitas represents a new type not only in comic literature, but also in the historical reality of Greek culture – a man “whose particular obsession was with words.”¹⁵² However, does all verbal

to look at the manuscripts of abovementioned romantics to understand that their creative process – although it was realized in writing – was not a violent eruption of inspiration of the kind ascribed to them by cultural myth. Writing of scribes was not just recreation, writing of romantics was not just creation. Such an intuition is also confirmed by reading the critical apparatus in the edition of Słowacki’s works, most of which was made under the direction of Juliusz Kleiner, and the whole of which was influenced by him. Kleiner’s positivist method applied to the complicated threads of Słowacki’s thoughts resulted in hundreds of pages filled with enumerations of “varieties of text” – the bard changed numerous words in his manuscripts two, three, four times, overwriting them side by side, and sometimes one over or on top of another. In the absence of a pure text, i.e. in the case of all of Słowacki’s works not published in print during his lifetime, it was up to the researchers to read these scribbled manuscripts and decide which of the words contained in them was the final word. The creative process of the Romantics is undoubtedly visible in the notation, but it does not manifest itself in the “momentum” of the writing itself, but rather in its opacity, not in the grand calligraphic arabesques, but in the modest economy of hand movement that fills the tight space of a sheet of paper so thin that incaust often pierces the other side. The romantic spirit may have been powerful, but the writing directed by it rarely reflects this power in its material form.

Seeing the autographs of these artists at close quarters, it is easier to imagine Słowacki comparing the courses on the Paris Stock Exchange, and Chopin spitting out the contents of sick lungs. The writing immortalizes, but the writing humanizes too. And there is no need to complain that the keyboard dehumanizes. After all, five hundred years earlier, printing obscured this “human” dimension of writing. We had to make a considerable effort to see it again. And we saw it just when it finally began to fade away.

152 Bing, p. 12. Bing even supposes that Philitas’ “destruction,” of which Hermesianax speaks, was to be seen in the monument that was erected to him by his countrymen from his home island and to which Hermesianax’ work relates – but in the preserved text this connection is not clear. Instead, it can be seen in the description of another statue of Philitas, commissioned by Ptolemy II and poetically described by Poseidippos, emphasizing the manifestation of

creation in general not involve some form of obsession with words? Were the rhapsodes, whose life consisted of constantly reciting hundreds of thousands of words in a special way, not “obsessively” focused on them? And yet we do not have any messages on this subject, while Phemios in *Odyssey*, although blind (which in his case, and in Homer’s case, is rather not due to the relationship between the body and the medium, which for them is only living speech, but to the ancient motif of the “inner insight” of the wise man into the essence of reality, for which no sense of sight is needed), does not seem in any way “abnormally” involved in his singing practice. The “obsession” of Philitas and his successors must therefore result from the special relationship between them – their minds and bodies – and the words they use in writing and in text.

From the point of view of the modern man, the most obvious association here is with features such as meticulousness and pedantry, otherwise commonly attributed to philologists and other members of the “Order of the Text,” such as bookkeepers, editors or proofreaders (or rather their female counterparts, but at least for the time being I would prefer not to introduce the gender dimension into the question of the body writing and reading). However, the label of a pedant-particularist will not do justice to Philitas. At the same time, referring to the mysticism of letters, the Kabbalah or Mallarmé’s “Book” would perhaps be a little too high-flying. Since the repertoire of ready-made clichés of humanistic interpretation does not satisfy our needs, let us move on to the analysis of Philitas’ work with particular emphasis on his philological achievements.

He was the author of the work entitled *Ataktoi glossai*, which can be translated as *Unordered Words* or *Irregular Words*. This unusual title, unique in its kind, attracted the attention of many scholars, especially philologists, who were intrigued by the mysterious relationship of this work to their own works. It was probably not yet a product of the mature lexicography we know from late antiquity. Some scholars suppose that Philitas collected these words that were not required or not suitable for precise definition, others believe that it was a collection without a superior

the difference between the figure of the old, huffed-up poet-erudite and the statues of powerful heroes and warriors (analysis of this fragment in Bing, pp. 13–14).

compositional principle, a kind of *silva rerum*, and still others – that Philitas collected local expressions, dialectisms.¹⁵³ Each of these possibilities, which are not mutually exclusive, presupposes a very high degree of textualization of Philitas' intellectual activity – in each of them he is the author, whose work consists in picking out other people's words from other texts. His great successors, Alexandrian philologists, will build in the second century BC a powerful building of analytical texts explaining and improving the mass of other, earlier texts that were collected and archived in the Alexandria Library. They will notice Philitas, because it is known that Aristarch of Samothrace wrote a work *Against Philitas* (mentioned by two scholia of Didymos to *Iliad*, testimonium 6 a–b Dettori).

But Philitas is apparently a pioneer here, whose work is not aimed at constructing an unambiguous, definitive picture of the texts, as we see later in the concept of *diorthosis* – the “edition” of one or other classic developed comprehensively through painstaking comparative research carried out on a vast array of manuscripts. He is also not a natural born exegete, a professional explainer of the meanings of rare or forgotten words. Rather, Philitas strikes us as a free wanderer roaming around other people's texts in a pioneering way, unrestrained by the rigors of the philological method, and finding out more interesting details along the way, without much concern for arranging them in a precise scheme recommended by Aristotle or Theophrastus. We know nothing about Philitas' teachers, and it is not ruled out that he was a self-taught man who never received a full education, like students at the Academy or Lyceum – this could explain his specific approach to the text.

However, despite this freedom, his behavior is already completely immersed in the world of text. The point is that Philitas, as far as we know, does not collect his rare words when he travels like an ethnographer (or like Herodotus) through the lands of Greece and the *oikoumene*, but rather comb through the resources of the Alexandrian Library, which is currently under construction. He is a Text traveler, and it is the Text that captures his attention in a way that Peter Bing without exaggeration calls obsessive;

153 The most comprehensive presentation of views on the meaning of this title gives Spanoudakis, pp. 384–388 (*Title, Content and Form of 'Ataktoi Glossai'*).

it is the Text that absorbs his strength and destroys his body. Thus, even if *Ataktoi glossai* do not have a strict rule to order the material contained in them, it is just this material that is morbidly absorbing for the author. But why it is so?

We do not know what shape *Ataktoi glossai*'s original version had, or how Philitas discussed the words he collected. About twenty fragments have survived from this work (and a few further, disputable or doubtful ones), almost all of them in Athenaeus, who inscribed them in the course of his own argument in *The Learned Banqueters* so that it is impossible to distinguish Philitas' *ipsissima verba*. Here are examples: "*Amphoxis* is a wooden cup which Philitas says is used by rustics, who do their milking into it and so drink." (783 d); "*Aoton* among the Cyprians means drinking-cup, according to Pamphilos. Philitas says that it is a cup without a handle" (783 a); "Philitas in *Irregular Words* says that the Megarians give this term to cups: *gyalai*." (467 c); "*Kreion*. A cake or loaf, which among the Argives is carried from the bride to the groom. 'It is baked on charcoal and the friends are invited to partake of it, served with honey;' so declares Philitas in *Irregular Words*" (645 d).¹⁵⁴

One can get the impression that, in this kind of intellectual undertakings, the order of the cognitive process is reversed – instead of naming the phenomena, we are explaining the phenomena hidden in the names the researcher found in the text alienated from their situational context. This effect is probably amplified by Athenaeus, an author active five hundred years later than Philitas and busy collecting words in a way in which Philitas' "obsession" is a very mild obsession. Nevertheless, for Philitas, too, the words, the very names seen in the texts, were probably already more important than the experience of the phenomena they defined. All the surviving remnants of *Ataktoi glossai* indicate a special type of lexical passions of their author – Philitas is particularly interested in words coming from provincial dialects and denoting various local customs. This circumstance led some researchers to suppose that he had to travel through the Greek

154 Athenaeus, *The Deipnosophists*, with an English translation by Charles Burton Gulick, in seven volumes, vol. V, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press MCXXXIII (Loeb Classical Library 274), p. 47, 49, 61; vol. VI (LCL 327, MCML), p. 485.

lands and collect these words *more ethnographico*, but Bing rightly points out that the resources of the Alexandrian Library must have contained a large number of texts written in dialects and containing “ethnographic” descriptions during his lifetime – so, the personal presence in the places where these words were used and direct experience of the taste of cakes and the shape of the dishes was not needed by Philitas. Rather, he was more likely to satisfy the need for experience by text-based mediation of the widest possible areas of existence, which will also become a feature of many addictive, voracious readers in later periods.

I also believe that Philitas’ interest in dialects and the internal diversity of the language system at the level of regional practices is confronted with the norms of linguistic textual practice imposed in a textualized environment. He senses, perhaps, an irremovable tension between the *langue* visible in the texts collected in the Library and the *paroles* of individual dialects, conditioned regionally and happening primordially in living speech. And it is not excluded that this is where his own frustration with *logos pseudomenos* comes from. He sees that different words mean the same thing, but never in the same way. He begins to see the problem of references differently than the sophists, Plato, and Aristotle saw it: not from the viewpoint of the abstract relations established within the linguistic system, whose very existence is conditioned by textual categorization, but from the viewpoint of the pragmatic circumstances of word usage. The blurring of relations seen in this way frustrates him in confrontation with the apparent stability of the text. This is the *logos pseudomenos*, these are the “types of speech,” the study of which destroys him deadly because it does not lead to the final result, but, on the contrary, it makes him more and more aware of the irremovable contradiction between text and reality.

The previously quoted views of researchers, who see Philitas as either a tracker of someone else’s mistakes or a perfectionist in relation to his own work, result from treating him as if he were a modern man of the text, while he was a man of the text – but an ancient one. When he freshly entered the text, which had just become the main medium of information about the world, he went out of it back to experience and discovered that this return is no longer possible, because even the widest range of textual knowledge does not compensate for the lost non-verbal wealth of phenomenal experience, and yet it makes one aware of its inner incoherence, which

in the course of its experience is irrelevant to the experiencing subject, but becomes painfully relevant to the subject, who reflects on textual records of the experience and, through such records, becomes familiar with the reality that the text both reproduces and makes present. The text makes Philitas potentially present at the same time in Thessaly and Argolid, for example – but only with a mind that will be busy not absorbing the phenomenal data provided by the senses, but examining dialectal differences between words that describe the same elements of reality in both lands. For modern linguists and literary scholars, this is an obvious thing worth only a shrug, but for one of the pioneers of textualization, this state of affairs may have been a source of irremovable frustration. Frustration and fascination at the same time, because, as Bing puts it, “it is as though Philitas had wanted to see how dissimilar is a usage he could find, how far one could depart from the culturally authoritative norm.”¹⁵⁵

Another aspect of this interest is the growing awareness in the Greek *oikoumene* since the beginning of the Hellenistic era of the changeability and transitoriness of the states of culture, so that the people of the text began to understand their occupation not only as creation but also as the archiving of what was created – the environment centered around the Alexandrian Library became the first great cultural archiving center in the history of the Western world. Moreover, in the Hellenistic world, to which Alexander the Great gave the size unthinkable for the Greeks of the classical period, the presence of linguistic dialects, whose knowledge no longer required traveling through the lands where they were spoken, clashed with a uniform literary style based on the Attic dialect, and with the expansion of the *koine*, common everyday speech of the entire Greek-speaking world. In the face of such a situation – let us once again quote Peter Bing – “a sense arose that dialect was a precious marker of identity that might be lost, should be studied, needed preservation.”¹⁵⁶ Just as in the later poets-erudites, Callimachus, Theocrite, and Apollonios of Rhodes, in Philitas bookishness or the textuality of the experience of culture, which is an experience that is already subject to the general principles of textualization,

155 Bing, p. 20.

156 Bing, p. 26.

is connected with a great fascination felt in the face of its richness and diversity – and because the resources of texts available to these authors free them from the need for time-consuming personal experience of cultural phenomena, so they can freely and enthusiastically put together even the most exotic words without worrying about their original contexts (which they reconstruct according to the knowledge taken from the books) or their (un)understandability for potential audiences, which has no practical meaning for anyone’s *Lebenswelt*. The richness of the text preserving at least some dimensions of reality is a value whose price becomes the morbidly emaciated body of the author.¹⁵⁷

Bing also notes the relationship between Philitas’ studies on dialectal expressions and his Homeric studies. Although he was not the first, Philitas was one of the early researchers of Homer’s vocabulary as seen in the text, not heard in the performance. From a scholion we learn that another work by Philitas was entitled *Hermeneia* (*Explanation*). Thus, Bing claims that the contrast between “normative” and “non-normative” use of words was created in Philitas’ consciousness precisely because of the clash of peculiar dialectal or local expressions with the vocabulary of Homeric epics, which (it should be added – itself extremely varied internally in the process of several hundred years’ accumulation of oral performances) constituted as a textual whole a pattern of usus in Greek, at least for the intellectual elite, and to some extent for every educated user of Greek language. If this is an accurate assumption, it follows that Philitas’ textual world was an

157 The lush development of Greek lexicography in the Hellenistic era is also linked to the phenomena indicated in this paragraph, and it is a particular and noteworthy variation of the textualization of experience. After the first introductions in the form of home-made glossography, which was created back in the classical era, after the early experiments of the sophists and after the first attempts of Philitas and his contemporaries, there appeared a number of authors working on extensive lexical corpuses covering either the vocabulary of specific authors or types of writing, or a stock of words that came out of use or rare words, or dialectisms. Most early lexicographic works have been lost (a concise review of them is given by Tolkiehn’s lemma “Lexikographie” for *Realencyclopädie der klassischen Altertumswissenschaft*), but their traces are found in great late-antique compendia, such as the lexicon of Hesychius, *Synagoge lekseon chresimon* [*A collection of useful words*] or the Byzantine *Etymologikons*.

incoherent world in which the absolutist principles of the textualization of experience established a little earlier by Aristotle and Theophrastus were not applicable – either because Philitas did not know about them or, more likely, because he did not want to submit to them and preferred to be a poacher (in the sense given to this word by Michel de Certeau in his work *The Practice of Everyday Life*). This is yet another opportunity to understand the term “*ataktoi*.” But this anti-systemic poaching of words was not a form of entertainment for him, since – let us repeat – he paid for it by drying his own body.¹⁵⁸

Peter Bing analyzing “*ataktoi*” cites other uses of the word in the preserved Greek material and mentions on this occasion Simonides of Keos, the same one who was quoted in the first chapter of this book as the inventor of the art of memory. He was also supposed to be the author of a collection of narrations called *Ataktoi logoi*, and we owe this information to Alexander of Aphrodisias, who, commenting some *passus* in the book N of Aristotle’s *Metaphysics*, says:

Simonides in his narrations [*logois*], which he named [*epigraphēi*] *Ataktoi*, imitates and tells the stories that slaves use to tell who have messed up something and their masters command them to make excuse. He presents their apologies, long, detailed, foolish and unconvincing, from which the opposite of what they said at the beginning ultimately follows. Such [statements] are proper for barbarians and uneducated people.¹⁵⁹

The existence of a narrative text of this kind in such an early period (let us recall that Simonides lived between 556–468 BC, i.e. he was already an old man at the beginning of the classical era) is intriguing in itself. If one believes a commentator living around 200 AD, that is, seven hundred years later, Simonides wrote a work that mocked a low register of colloquial speech

158 Philitas’ fame as an expert on rare words was undoubtedly wide. His contemporary comedian Straton describes a scene in which the master tries to communicate with a slave, an erudite cook using only archaic words and phrases (this is the fragment to which a scholion just mentioned referred). In the end he speaks desperately: “I had to get some of Philitas’s books and look up the meaning of every single word.” (Athenaeus 383 b, Gulick’s translation, vol. IV, LCL 235, p. 233).

159 Translation is mine, according to the Greek text cited by Bing (p. 22) after the critical edition *Commentaria in Aristotelem Graeca* (I, 818, 4–8 Hayduck).

in text, just for the purpose of ridicule, which means that the readers of this work had to consciously perceive the difference between the linguistic norms of the upper and lower social strata, and what is more, they had to consider the presence of this difference as an opportunity for entertainment, which could be excited to read the re-styled text. However, such a situation is conceivable in the context of the archaic, aristocratic culture of *symposion*, whose members could use the text as yet another opportunity to demonstrate their superiority over “rude folk.” At this point, let us rather focus on the possible meaning of the word “ataktoi.” Bing suggests that its meaning here concerns the internal disorder of the arguments that Simonides presented as statements of punished servants rather than the diversity of the set of stories themselves, so that *Ataktoi logoi* is not the same as *silva rerum*. I think this is an apt remark which, despite the several hundred years of difference between Simonides and Philitas and the completely different cultural conditions in which they acted, strengthens the understanding of intellectual and writing activities also in relation to the younger of these authors. In both cases, the point is that the textual notation reflects the entropy of reality in a way that is safe for the viewer, not just consolidates it in a rigid network of categories and conceptual relations. Based on this assumption, a set of cultural practices connected with writing and reading texts, which we have been calling literature since about three hundred years, will develop.

Another element worthy of interpretation from the tiny legacy of Philitas at our disposal today is the name appearing in the quoted excerpt from Hermesianax – Bittis. Bing devotes two pages to the debate on the identity of this character,¹⁶⁰ which has lasted for a hundred years. Seemingly, it is a girl’s name, and Philitas is a part of a long line of ancient poets who sang about the objects of their real or finged feeling. The thing is, however, that the name Bittis can be understood as a “speaking name,” and it can mean as much as “Chatterbox” (like the name Lalage in Horace’s *Ode I 22*) or “The Stuttering.”¹⁶¹ Since our sources emphasize Philitas’ stubborn obsession with words, there is a tendency in science to consider

160 Bing, pp. 24–25.

161 The second possibility comes from Bing, the first from one of Philitas’ former editors, Wilhelm Kuchenmüller, whose edition has been published in 1928.

this name not as the name of a real person, but as a personification of the Word, the object of Philitas' probably greatest infatuation. If one were to follow Bing's proposal, then "Stuttering" could be associated with both the "disordered" words and Philitas' devastating frustrations concerning the "logos pseudomenos." In the twentieth century, a similar concept will be used by Thomas Mann when, in *Doctor Faustus*, he will make Wendell Kretzschmar – a teacher who introduces young Leverkühn to the secrets of the knowledge of music – the stammer, thus emphasizing, with his famous irony, the non-transmissibility of the essence of a musical work in any words. In fact, the very possibility of blurring the difference between a person and a word is a proof of Philitas' immersion in the world of text and the textual substitution of the world of experience.

If we knew more about Philitas, we could verify at least a part of these conjectures formulated here quite resolutely. However, Philitas as a person and as an author is, even in the pathetic state of his legacy, a fascinating example of what the early phase of the absolutist aspirations of Greek culture to frame the realm of experience could have led to. For us, his work bears witness to the development of textocentrism not only in the "external" direction, that is to say, the methods of collecting and distributing knowledge of the world, from which modern science will emerge after centuries, but also in the "internal" one, that is to say, the development of psychological profile of "book erudite," for which the text is both an ecstasy and agony, giving him an image of the infinite richness of reality, making it present in a specific way, offering an instrument of its unlimited mapping and multiplication – and separating him from that reality by an impassable barrier. The two processes are probably closely linked, because in relation to the periods and areas for which writing and text do not play a leading role in cultural epistemology, it is difficult to imagine the existence of people who fit into the profile of a "bookworm" or "sage-erudite."

Thus, there are two paths of ancient erudition: one leads to the accumulation of knowledge in the text by the author-researcher, the other leads to the absorption of this knowledge by the disembodied mind of the reader, whereby both forms might get compulsive. At the same time, the text becomes a tool that both broadens experience (since we learn a lot of things from the text that we would never know otherwise, even from the greatest singer or during the farthest journeys) and limits it (since, in the face

of its overwhelming presence, the sensual and motoric realm disappears). However, it should be stressed once again that these phenomena concerned only a very narrow circulation of texts – because practices related to craft or utility literacy, to the realm of “documents of social life” did not undergo these processes either in the Hellenistic era or later, and their evolution was marked by other traits. As for the cognitive properties that I tried to extract from the writings of Aristotle, Theophrastus and Philitas, they will also mark the mature Hellenistic and late-ancient *Fachliteratur*, which will only strengthen them in the course of its development. This may seem paradoxical, but only seemingly: in fact, it provides evidence for the illusory claim of the culture of the text to control the entirety of experience.¹⁶²

162 It would be worthwhile to consider, since when erudition has existed in Greek culture as an independent phenomenon. The very concept of erudition is, of course, linked to a highly developed culture of the text and book. We would not say about the aoides and rhapsodes that they were erudite, not even those who kept in memory a particularly large number of plots and narratives. One of the early (and already critical) testimonies of an independent understanding of erudition in Greek culture is perhaps an excerpt from the Callimachus’ poem *Acontius and Cydippe* (75, 8–9 Pfeiffer): “He polyidreie chalepon kakon, hostis akartei / gloses, hos eteon pais hode maulin echei” (Surely much knowledge is a grievous thing for him who controls not his tongue: verily this is a child with a knife [Callimachus and Lycophron with an English translation by A. W. Mair, London, William Heinemann, New York, G. P. Putnam’s Sons MCMXXI, LCL 129, pp. 205–207]). The word “polyidreie,” however, already appears in Homeric poems, where it means “great knowledge,” so one cannot be sure whether Callimachus has text-based knowledge in mind. The great erudite works of late antiquity by Strabo, Diodorus, Varro, or Athenaeus are very interesting examples of the advanced process of textualization of experience (this time not so much phenomenal as cultural), but their analysis would exceed the scope of this book.

Chapter 7 Archimedes and his *Sandreckoner*

Literate man undergoes much separation of his imaginative, emotional, and sense life, as Rousseau (and later the Romantic poets and philosophers) proclaimed long ago.

Marshall McLuhan, *Understanding media. The Extensions of Man*, chapter 9: “*The Written Word. An Eye for an Ear*” (Routledge Classics edition, 2002, p. 88).

The development of specialist literature in the Hellenistic era and subsequent centuries was too broad to be analyzed within a single study, which, moreover, would have to include data from not only philology, but also science and history of science, not to mention detailed knowledge within individual fields. The number of texts belonging to this area overwhelms the recipient. It should be remembered that it is precisely in these epochs – from the end of the fourth century BC to the end of the second century AD – the majority of the ancient Greek-language literature preserved to our times was created. Most of this bulk of texts today is known only to specialists, precisely because it consists almost exclusively of “specialist” texts, i.e. non-literary, non-narrative, and intended for specific reading by a narrow circle of expert audiences, not by a wide literary or theatrical audience. The structure of these texts, the assumptions about their cognitive status and relation to reality, and finally their projected circulation in society are very different from the analogous properties of the texts from the earliest periods of developed Greek literate culture, in which their functioning and social roles were still strongly connected with the pre-literary forms of cultural messages, and thus maintained an integral bond with the whole of social life, they were not subject to internal specialization or limited to strictly defined proliferation and receiving circles. The phenomenon of specialization of the text began to be visible only at the very end of the classical era, which I tried to show in the previous parts of this book. In the Hellenistic period, it became the norm.

The most extensive biographical encyclopedia of ancient scholars today, whose editors proudly point out that they have collected more material than can be found anywhere else, including the *Realencyclopaedie der klassischen Altertumswissenschaft*, contains 2,043 personal entries, the chronological distribution of which shows that the largest percentage of the authors of the *Fachliteratur* is in the first and the second centuries AD, but the beginning of the upward trend falls on the Hellenistic era.¹⁶³ Nevertheless, as always in relation to antiquity, it should be remembered that we are dealing with a small fraction of the total text production of that time. One should also remember a certain arbitrariness in assigning ancient authors to the category of “scientists,” especially in the light of the investigations conducted here. Thales of Miletus is commonly regarded as the father of science; we are not sure whether he used the writing at all, and if so, whether he treated it as a fully-fledged tool for his thinking about reality. Almost certainly it was not for him what it was for Aristotle and his successors, who, by the way, nominated Thales as their spiritual protoplast knowing little more about him than we do.

If one wants to go beyond the traditional division of this literature in line with the network of modern scientific disciplines,¹⁶⁴ then the antique professional literature, in its broadest sense, can be divided into two great disciplines shaped in accordance with the logic of cultural processes, which I try to illustrate in this book and whose foundations were laid by Aristotle and Theophrastus. The first one can be described as “structuring reality in the text.” This includes authors whose texts are “catalogues,” “systematics,” and “codes” of nature, that is, they are attempts to design

163 See the diagram: *The Encyclopedia of Ancient Natural Scientists. The Greek tradition and its many heirs*, edited by Paul T. Keyser and Georgia L. Irby-Massie, Routledge 2008, p. 939.

164 As far as the general history of Greek science is concerned, two small books by G. E. R. Lloyd remain the basic studies: *Early Greek Science. Thales to Aristotle*, New York 1970; *Greek Science after Aristotle*, New York 1973. In the field of pure factography, George Sarton's work is still irreplaceable: *Introduction to the History of Science*, three volumes in five parts, Baltimore 1927–1948 (antiquity is dealt in the first volume). Examples of contemporary elaborations about *Fachliteratur* are given in one of the footnotes to the chapter of this book devoted to Xenophon.

the structure of reality available in research and in previously prepared descriptions so that the streams of chaotic sensory data are given the form of uniform, precise elements whose sets or aggregates make up a scientifically-acquired intelligible world. According to the modern classification, these works belong to such fields as zoology, botany, astronomy, and astrology, mathematics, musicology (called harmony in the antiquity), metrology, geography, paradoxography, and physiognomy. Within their framework, the physical reality available to the human mind at the then stage of development of observation techniques is included in text descriptions that design (and, from the point of view of the authors and readers of these texts, reproduce) its ordered structure by means of ordered structures of notation and description – divisions of the text into component elements designed to give, as a whole, a meaningful image that can be used for further theoretical investigations. The structuring tools here are textual tools shaped in the way I described earlier. The result of such scientific activities is to transfer the textual world order to the world itself – the world order in the text is considered to be the world order as such. This is the world in words. The project of the grainy, quantized structure of reality developed in the text is considered by human minds familiar to the text to be – if one can paraphrase Plato – truly existing essence.

The second great field of *Fachliteratur* is composed of textual instructions of practices, similar to those I analyzed on the example of Xenophon, but subject to the principles of textual absolutism derived from the writings of the Stagirite. These instructions – in the form of treatises on mechanics, agronomy, gromatics (delineating areas of cultivation), breeding, medicine, pharmacy, veterinary medicine, belopoics (constructing war machines), war strategy, alchemy, architecture, optics – include mainly manual and motoric practices, related to classes of repetitive activities that play a significant role in the functioning of the social system or in the influence of people on the natural world inhabited by them. What the instructions require, too, is specialist knowledge and performance skills.¹⁶⁵ In addition to textbooks

165 This literature shows a lack of studies on, for example, shipping technology or those aspects of the martial arts that are directly related to field combat. While this absence is not due to the poor preservation of the texts, it may mean that those classes of practices that were most dependent on non-verbal

devoted to various technical and practical skills (also as “common” as gastronomy), this group also includes works more akin to “learning” in the modern sense, i.e. devoted to pure knowledge, not directly applicable in practice. However, this knowledge itself can also be regarded as a special class of practice – its collecting and processing often depend on careful observation or the design and execution of thoughtful experiments.

In this sense, ancient (and, to a large extent, modern) science is a class of specifically defined motoric, social and linguistic practices, whose characters influence each other, while remaining primordially dependent on the textual recordings of reality, which, in turn, make it possible to accumulate knowledge of all these practices in a way that exceeds the limits of direct human contact, which enables unlimited growth of the base material – and this arrangement forms the basis for the concept of “scientific experience,” which, as one can easily see, has little in common with the “experience” in the title of this book, although both types of “experience” are somehow linked to sensory data. However, the problem is that the material growing in the *Fachliteratur* texts does not contain non-verbal qualities of experience – also scientific – which, in turn, lies at the root of the problem of tacit knowledge in scientific procedures, a subject of a fierce discussion among philosophers and theoreticians of science for at least two hundred years. Nonetheless, most modern approaches to this problem assumed that tacit knowledge should not play any role in the constitution and development of scientific experimental knowledge, because it is not suitable for inter-subjective textual communication.

Still, the boundaries between types of texts such as textualized practice, textual practice instruction, textual score of performance of a practice, catalogue/systematics/code, and finally the absolute text, i.e. mainly concerning itself and other texts – these boundaries have always (i.e. since the period in question here) been fluid in European culture. Even the most abstract philosophical inquiries sometimes manifest a connection with the realm of experience, even the most formalized theoretical descriptions are meant to confront experience. An absolute text – that is to say, one devoid

aspects of the knowledge of action were not then textualized. The problem of functional usefulness of the practice textbooks I have already pointed out when discussing Xenophon.

of external references – is not possible in its pure form, even though it has permeated the dreams of many authors to come, and its closest realizations can be found in some experiments of twentieth century literature. But let us return to the Greek *Fachliteratur*.

I will try to demonstrate at least some of its important features – especially in relation to the first of the types distinguished here – on the example of a text which has gained fame in the history of mathematics and whose author is considered to be the most outstanding scientist of all antiquity (in the modern sense of the term “scientist”). What I have in mind is the shortest of Archimedes’ surviving works: *Psammites*.

Archimedes of Syracuse (ca. 285–212) is not only the greatest – in the opinion of his modern successors – but also the best-known antique scholar in contemporary popular culture, even though we know almost nothing about his life and person. Here, I do not consider him as a mathematician, whose ingenuity is the object of great admiration for modern scientists,¹⁶⁶ but I consider his work as one of the important examples of a text-centered method of analyzing the reality present in the sensual experience of people using alphabetical writing according to the principles defined by the pioneers of abstraction, autonomy, and alienation of text from experience. In the case of Archimedes, we are dealing with an experience which, already at a phenomenal level, is detached from the *Lebenswelt* realm, because it is a proto-scientific experience that results from the textual bias in a particular way, very close to the modern scientific method¹⁶⁷ and unprecedented in any of the previous authors discussed in this book.¹⁶⁸ The profound admiration

166 See e.g.: *The Works of Archimedes* edited in modern notation with introductory chapters by Sir Thomas Little Heath, Cambridge 1897 (2010), *Preface*, pp. V–IX.

167 Despite erroneous estimates of all the physical quantities that Archimedes calculates in *Psammites*. Anyway, the mistake in these estimates is not only due to the primitive nature of the observational techniques available in his era but also to the essentially text-centered position of all reasoning, which consists mainly in manipulating the textualized elements of physical reality.

168 Perhaps mathematicians earlier than Archimedes, especially Eudoxus and Euclid, also used similar methods of transforming proto-scientific experience into text. However, only small fragments of Eudoxus’ works survived, and the works of Euclid with *Elements* at the forefront have, according to philological research, undergone numerous interpolations that disturb the

of modern scientists for Archimedes resulted, among other things, from the fact that he wrote about mathematical, physical, and mechanical problems almost as much as they did, at least in terms of textual reasoning structures. Before I move on to comment on this work, I will again pay some attention to biographical testimonies.

In popular books on the history of science, Archimedes appears mainly as a somewhat crazy person who jumps out of the bathtub, runs around the city naked, and shouts “eureka!” (or rather “heureka!”). Of course, the reason for his joy, unclear to the audience of this peculiar spectacle, was that he discovered – when looking at the water pouring out of the bathtub under the pressure of his body – a physical law later named after him. This picture perfectly fits the modern stereotype of a scientist “detached from reality” and, by the way, is also a model picture of the process of scientific heuresis. However, what interests me here is not the manifestations of this “detachment,” but the phenomena that led to it. It is impossible to prove the historicity of the episode with the bathtub, although it is not as fantastic as one often thinks, because “bathtub” in this case does not mean a white-enameled free-standing container, but an element of equipment of an ancient bath.¹⁶⁹ However, it could be treated in the same way as I have previously treated the information about Theophrastus and Philitas,¹⁷⁰ and

image of their original version. Previously, when mentioning Oenopides, I had already pointed out the difficulty in understanding how the earliest Greek mathematicians formed their reasoning in text messages. As we will see, Plutarch sheds some light on this problem in an information about Archimedes included in *Life of Marcellus*.

169 The ancient source of this message is Vitruvius (*On architecture*, book IX, preface 9–12), but we do not know where he got this information from.

170 Then it should be emphasized that although the stimulus of the intellectual process is a very expressive sensual experience – immersion of one’s own body in a bathtub filled with water – this element of sensuality is immediately alienated from the world of experience and transferred to the area of mental abstraction, where it becomes the basis for reasoning, which results in the formulation of a universal physical law. A completely identical structure has many other half-mythical stories about the heuresis of scientists, the most famous of which is the anecdote about Newton’s apple. The body of the scientist in these stories is an auxiliary tool of reasoning, not a tool of existence in the *Lebenswelt*. Such an attitude can only emerge in a culture with a very

the whole of Archimedes' biographical tradition – which, despite the gaps in our knowledge mentioned above, is nevertheless richer than that of all other ancient scholars – also remains suitable for such an analysis.¹⁷¹ Its most important component is, of course, the story of his death at the hands of a Roman soldier as a result of a communicational misunderstanding during the conquest of Syracuse by the Romans led by consul Marcus Claudius Marcellus during the Second Punic War. We know this story mainly from Plutarch, who gives it in three versions.

For it chanced that he [Archimedes] was by himself, working out some problem with the aid of a diagram [*epi diagrammatos*], and having fixed his thoughts and his eyes as well [*ten te dianoian kai ten prosopsin*] upon the matter of his study [*te theoria dedokos*], he was not aware of the incursion of the Romans or of the capture of the city. Suddenly a soldier came upon him and ordered him to go with him to Marcellus. This Archimedes refused to do until he had worked out his problem and established his demonstration [*pros ten apodeiksin*], whereupon the soldier flew into a passion, drew his sword, and dispatched him.

Others, however, say that the Roman came upon him with drawn sword threatening to kill him at once, and that Archimedes, when he saw him, earnestly besought him to wait a little while, that he might not leave the result that he was seeking incomplete and without demonstration; but the soldier paid no heed to him and made an end of him.

There is also a third story, that as Archimedes was carrying to Marcellus some of his mathematical instruments [*ton mathematikon organon*], such as sun-dials and spheres and quadrants, by means of which he made the magnitude of the sun appreciable to the eye, some soldiers fell in with him, and thinking that he was carrying gold in the box, slew him. (Plutarch, *Life of Marcellus* 19)¹⁷²

high degree of mediating phenomenal experiences by communication media that are alienated from the realm of primary sensual experience.

- 171 The testimonies concerning Archimedes' biography were collected by Johann Ludvig Heiberg in his doctoral dissertation (*Quaestiones Archimedeeae*, Hauniae [Copenhagen] 1879, this work also contains the first modern edition of *Psammites* with an extremely detailed critical apparatus). Heiberg (1854–1928) was a Danish scholar who specialized in editing of Greek mathematical and technical texts, until his time virtually untouched by classical philologists (if we do not count a little bit earlier works of Hultsch and Friedlein).
- 172 *Plutarch's Lives* with an English translation by Bernadotte Perrin in eleven volumes, vol. V, Cambridge (Massachusetts), Harvard University Press,

Of these accounts, the third is, so to speak, the most banal and repetitive in history. The first two, in turn, contain details that say a lot about the specifics of Archimedes' intellectual work. He considers problems, which no longer rest on an experience of physical reality (i.e. "view" – "theoria" in the original sense of the term). Such experience, as we remember, provided the basis for the construction of the argument in Xenophon's textbooks, its residual form still manifested itself in the epistemologies of Plato and Aristotle, while its absence became the cause of physiological problems of Theophrastus and Philitas. For Archimedes, this absence is no longer a problem, either physiological or even more so psychological or intellectual. On the contrary, the proper vehicle of his thinking is a record, text, chart, diagram, drawing: generalized written forms of mediating the reality experienced sensually in an insignificantly accidental way. The problems that haunted Plato and Aristotle do not exist at all for Archimedes because he does not see the need for any connection between the written record – which he sees as the vehicle and the means of thinking about reality – with that reality itself. In short, the record is for him a fully independent and alienated, natural and primordial entity. That is why it is submerged in "thoughts and eyes" to such an extent that his senses and mind stop receiving and processing any other external signals. The scientist's perception is reduced because, in order to formulate judgements about the world, he does not have to experience the world at all. Instead, all that he needs is a symbolic notation of it, and not even on any solid ground, since one can draw figures on sand. What is more, the judgment derived in the form of a mathematical proof or physical law from such a generalized picture of the world is as universal as no judgment based on individual, ad hoc, and random sensory experience could be. Aristotle, making in *Metaphysics* sophisticated intellectual overturns in order to legitimize abstract textual categories, would probably be astonished to see how easily Archimedes omits the problem of their legitimacy because he no longer sees the need for such legitimacy. Undoubtedly, it was Stagirite who paved the way for him.

In the second version, where Archimedes wants to ask the Roman soldier to let him finish the proof, we can hear the overtones of some idealized heroism, but here too we can see the effects of the alienation of the mind and body of the scientist from the realm of experience. These take the form of disregarding one's own condition, which, when seen from the outside, is indeed very similar to heroism.

Plutarch's accounts are not the only versions of Archimedes' death. Here is the version presented by Livy:

While many shameful examples of anger and many of greed were being given, the tradition is that Archimedes, in all the uproar [*tanto tumultu*] which the alarm of a captured city could produce in the midst of plundering soldiers dashing about, was intent upon the figures which he had traced in the dust [*intentum formis quas in pulvere descriperat*] and was slain by a soldier, not knowing who he was... (XXV, 31)¹⁷³

Livy omits the very act of murder, which is unsuitable for his ideological purposes because it does not give the glorious testimony of the intelligence of the Roman soldiers, but emphasizes, like Plutarch, the scientist's deep focus on graphic representations of the problems on which he worked and his ability to "exclude himself" from the current, even extremely dramatic situation. Here, too, we get an example of the immersion of the mind in the medium of recording to the point of sensory deprivation, and this precisely how Livy understands Archimedes' detachment. Cicero, in turn, interprets it differently:

A passion for miscellaneous omniscience no doubt stamps a man as a mere diletante; but it must be deemed the mark of a superior mind to be led on by the contemplation of high matters to a passionate love of knowledge. What an ardour for study, think you, possessed Archimedes, who was so absorbed in a diagram he was drawing in the dust [*in pulvere quaedam describit attentius*] that he was unaware even of the capture of his native city [*ne patriam captam esse senserit*]! (*De finibus bonorum et malorum*, V 49–50)¹⁷⁴

173 Livy with an English translation in thirteen volumes, vol. VI, *Books XXIII–XXV*, translated by Frank Gardner Moore, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press MCMXL (Loeb Classical Library 355), p. 461.

174 Cicero, *De finibus bonorum et malorum*, with an English translation by H. Rackham, London, William Heinemann, New York, The MacMillan Co. MCMXIV (Loeb Classical Library 40), p. 451.

For Cicero, Archimedes' behavior is a gesture of conscious intellectual heroism, not an effect of the medium of communication acting on the mind. Cicero values this behavior, placing it in a specific moral and political order. To see a similar symbolic interpretation of the scene of the Archimedes' death in the twentieth century, let us look at the quotation from Alfred North Whitehead:

The death of Archimedes by the hands of a Roman soldier is symbolical of a world-change of the first magnitude: the Greeks, with their love of abstract science, were superseded in the leadership of the European world by the practical Romans. Lord Beaconsfield [Benjamin Disraeli], in one of his novels, has defined a practical man as a man who practises the errors of his forefathers. The Romans were a great race, but they were cursed with the sterility which waits upon practicality. They did not improve upon the knowledge of their forefathers, and all their advances were confined to the minor technical details of engineering. They were not dreamers enough to arrive at new points of view, which could give a more fundamental control over the forces of nature. No Roman lost his life because he was absorbed in the contemplation of a mathematical diagram.¹⁷⁵

While remaining in the orbit of the humanistic interpretation of cultural history, Whitehead understands Archimedes' death as an emblem of the conflict between the unselfishness of the pure thought of the Greeks and the brutal, interesting practice of the Romans. Today, the evolution of cultural phenomena is rarely seen in this way, but it should be noted that this evolution, as seen from the perspective of the investigations conducted here, also differentiates between Greeks and Romans. It seems that the culture of Roman antiquity has not brought significant innovations or even qualitative changes to the set of writing and reading practices produced by the Greeks. The only such phenomenon was the transition of the book shape from a scroll to a codex, which, while making it very easy to maneuver large parts of the texts to be read, did not change the essence of the relationship between the text and experience formed in the world of Greek culture.

The Roman erudite from the first century AD, Valerius Maximus, encloses the account of Archimedes' death with a symbolic frame, saying that his abilities at the same time gave him life (because Marcellus wanted to get him alive as a great engineer who could be very useful to the Roman

175 Alfred N. Whitehead, *An Introduction to Mathematics*, Williams & Norgate, London 1911, pp. 40-41.

armies) and took it away due to a misunderstanding, and moreover, like all the previously quoted authors, he emphasizes his focus on written diagrams. It is also here where the most famous detail – the last words of the scholar – appears for the first time:

At is [Archimedes], dum animo et oculis in terra defixis formas describit, militi, qui praedandi gratia domum intruperat strictoque super caput gladio quisnam esset interrogabat, propter nimiam cupiditatem investigandi quod requirebat nomen suum indicare non potuit, sed protecto manibus pulvere “noli” inquit, “obsecro, istum disturbare”, ac perinde quasi negligens imperii victoris obruncatus sanguine suo artis suae liniamenta confudit. Quo accidit ut propter idem studium modo donaretur vita, modo spoliaretur.

But as Archimedes was drawing diagrams with mind and eyes fixed on the ground, a soldier who had broken into the house in quest of loot with sword drawn over his head asked him who he was. Too much absorbed in tracking down his objective, Archimedes could not give his name but said, protecting the dust with his hands, “I beg you, don’t disturb this,” and was slaughtered as neglectful of the victor’s command; with his blood he confused the lines of his art. So it fell out that he was first granted his life and then stripped of it by reason of the same pursuit. (Valerius Maximus, *Memorable doings and sayings* 8, 7, ext. 7)¹⁷⁶

In the context of the comments made here, the words of dying Archimedes complete the picture of the textual alienation of experience.¹⁷⁷ Placed in an extreme situation in which his own life is threatened, Archimedes does not show any self-preservation instinct at all, but he shows concern for the written record. This means that the truth about the world is hidden for him just in the record, and not in his own mind and body: not because Archimedes is not creative, but, on the contrary, because his great power of discovering and creating knowledge depends on the presence of the record, because its effects are no longer suitable for oral transmission, because they are expressed through concepts and relations of a strictly written nature,

176 Valerius Maximus, *Memorable Doings and Sayings, Volume II, Books 6–9*, edited and translated by D. R. Shackleton Bailey, Harvard University Press, Cambridge (Massachusetts), London 2000 (Loeb Classical Library 493), p. 235.

177 The most famous version of these words in later epochs – “Noli tangere [or ‘turbare’] circulos meos” [Do not touch/destroy my wheels] – does not appear in any of the ancient sources.

and from this it follows that the presence of the text is more important for their permanence than the presence of the mind which produced it.

This scene, together with the last words, was also described by the Byzantine authors. John Tzetzes (XII cent.) in *Chiliades* (II 145 Kiessling) attributes to him words: “apostethi, o anthrope, tou diagrammatos mou” [man, get away from my charts], and Joannes Zonaras, another Byzantine author from the twelfth century whose historical credibility in this case is, unfortunately, very low, cites probably the most interesting of all the versions of the story about Archimedes’ death, because, strangely enough, the last words of the scholar recalled (or invented) by this author are a strikingly accurate manifestation of the text’s advantage over experience:

...and they killed Archimedes. When he drew a diagram [*diagramma gar ti diagraphon*] and heard a soldier approaching him, he said: “**in the head, not in the record**” [*par’ kephalan, ephe, kai me para gramman*]. And when that soldier stood in front of him, he thought for a moment [*brachy te ephrontise*] and said, “man, go away from the record” [*apostethi, anthrope, apo tes grammes*] with which he angered that one and was killed. (*Epitome historiarum* IX, 5; II 264–265 Dindorf, emphasis PM)¹⁷⁸

The phrase “in the head, not in the record” can be understood either metaphorically, as “let it go on my head, not on the charts,” or in the more literal sense “let it hit my head, not the charts.” In both cases, Archimedes appears in an even clearer way as a man who cared more about the text than about his own mind and body. Here, however, he is already the phantasmatic Archimedes of Byzantine medieval erudites.

If we go back to Plutarch for a while, we will find other interesting biographical details with a little more credibility. In the *Life of Marcellus* (chapter 14, 4), he tells us about the magnificence of Archimedes’ scientific and engineering achievements:

To these [i.e. technics and mechanics] he had by no means devoted himself as work worthy of his serious effort, but most of them were mere accessories of a geometry practised for amusement [*geometrias de paidzouses*], since in bygone days Hiero the king had eagerly desired and at last persuaded him to turn his art somewhat from abstract notions to material things [*apo ton noeton epi ta*

178 Ioannis Zonarae *Epitome Historiarum* cum Carolii Ducangii suisque annotationibus edidit Ludovicus Dindorfius, vol. II, Lipsiae 1869 (Bibliotheca Teubneriana), pp. 264–265.

somatika], and by applying his philosophy somehow to the needs which make themselves felt [*ton logon hamos ge pos di' aistheseos miksanta*], to render it more evident to the common mind. (*Life of Marcellus* 14, 4)¹⁷⁹

In Plutarch's words, one can find confirmation of the theses presented here on the separation between the phenomenal experience and the textual record in the Hellenistic era. Archimedes, who, as already mentioned, omits the phenomenal realm in his intellectual work, is urged by the ruler to make politically beneficial use of his theoretical achievements. This theme is common as such – in the twentieth century we see it in the Manhattan Project, among others – but Plutarch uses characteristic expressions to discuss it: “*apo ton noeton epi ta somatika*,” which literally means “from what is thought/intellectual, to what is bodily/material,” followed by the terms *logos* and *aisthesis*, which can be expressed in this context as “text” and “experience.”

Plutarch unintentionally captured in these remarks the essence of one of the most important cultural processes accompanying the development of science. After Aristotle's successors led in the Hellenistic period to an almost complete detachment of text records from the stock of given phenomenal experience, they received as a result a “pure theory;” an example of this is Archimedes' *Psammmites*, to which I will soon proceed. But their theoretical, abstract generalizations have not ceased to apply to the world of human life, although the sensual experience of this world was no longer at their root. This means that the theoretical texts revealed the potential for a reverse in their perception to the world of experience – **but instead of being the results of that experience, they started to be its sources.** Their content allowed to transfer it pragmatically back to *aisthesis* and to *somatikon*. The case of Archimedes is one of the first examples of the practical application of knowledge produced on the basis of a theoretical text. It is on such or similar practices of reverse recontextualization of textual abstractions that the edifice of modern science will be built. However, I stress again that for Archimedes himself, as we can infer from the quoted sources, the possibility of practicing his own theoretical knowledge was of no importance.

179 *Plutarch's Lives*, p. 471.

However, the highly tensioned relationship between scientific theory and practice, defined in this way, did not arise only in the time of Archimedes. In the following sentences of *Life of Marcellus*, Plutarch continues his digressions on mathematics and engineering:

For the art of mechanics [*organiken*], now so celebrated and admired, was first originated by Eudoxus [of Cnidus, 408–355] and Archytas [of Tarent, his teacher, 428–347], who embellished geometry with its subtleties, and gave to problems incapable of proof by word and diagram [*logikes kai grammikes*], a support derived from mechanical illustrations that were patent to the senses [*di'aistheton kai organikon paradeigmaton*]. [...] But Plato was incensed at this, and inveighed against them as corrupters and destroyers of the pure excellence of geometry [*geometrias agathon*], which thus turned her back upon the incorporeal things of abstract thought [*apo ton asomaton kai noeton*] and descended to the things of sense [*epi ta aistheta*], making use, moreover, of objects which required much mean [*somasi*] and manual labour. For this reason mechanics was made entirely distinct from geometry, and being for a long time ignored by philosophers, came to be regarded as one of the military arts. (14, 5–6, emphasis PM)¹⁸⁰

These comments are interesting for many reasons. First of all, we learn that diagrams and charts have been present in Greek writing practices at least since the beginning of the fourth century (the case of Oenopides discussed earlier is unfortunately older, so the message of Plutarch does not clear our doubts about him; an even older case, which is Pythagoras' mathematical thought, is almost entirely within the scope of legends and myths – however, it is worth recalling that Archytas and Eudoxus were Pythagoreans). Second, their abstract written form did not always meet the needs of early mathematicians, so they combined it with engineering practices, seamlessly combining abstraction of writing and experience of practice. Third, finally, Plato speaks on this issue and separates the realm of manual activities from the realm of abstract inquiries based on the “pure” text (and, in his own opinion, on Ideas). This decision is motivated by aesthetic and social arguments (“pure thought” is clearly a status symbol), and his overwhelming authority causes long-term degradation of the class of engineering practices in Greek society. This detail from the history of the Greek textualization of experience is another example of the

180 *Plutarch's Lives*, pp. 471–473.

interference of mediological and ideological factors in the history of the means of communication.

However, the conviction about the qualitative superiority of written abstraction over activities carried out in the world of sensual materiality gradually took root in the minds of Greek culture creators. Probably the progressive textualization of their intellectual practices overlapped with the perennial social rivalry in this culture for a position in the status hierarchy. Thus, Plutarch provides a suggestive account of Archimedes' engineering successes in the fight against the Romans besieging Syracuse (in Plutarch's report, we find the famous words of chief Marcellus about the "Briareus of Mathematics," with which the fight is almost hopeless: here, Marcellus compares Archimedes to the mythical titan with hundred hands). After remarking on this, however, Plutarch quickly moves on to another subject:

And yet Archimedes possessed such a lofty spirit [*phronema*], so profound a soul [*psyches*], and such a wealth of scientific theory [*theorematon*], that although his inventions had won for him a name and fame for superhuman sagacity, he would not consent to leave behind him any treatise on this subject [*syngramma*], but regarding the work of an engineer [*peri ta mechanika pragmateian*] and every art that ministers to the needs of life as ignoble and vulgar, he devoted his earnest efforts only to those studies the subtlety and charm of which are not affected by the claims of necessity. These studies, he thought, **are not to be compared with any others**; in them the subject matter vies with the demonstration [*pros ten hylene apodeiksei*], the former supplying grandeur and beauty [*to megethos kai to kallos*], the latter precision and surpassing power [*ten akribeian kai ten dynamin hyperphye*]. For it is not possible to find in geometry more profound and difficult questions treated in simpler and purer terms. (17, 3–5, emphasis PM)¹⁸¹

Archimedes' intellectual pride stems from the detachment of the subject matter of his thoughts from any practice, any connection with action in the *Lebenswelt* realm. His proper domain is *psyche*, *fronema*, and *theoremata*, i.e. those intellectual entities for which the proper, natural, material environment is the written record, and this record has a very high degree of autonomy in the world of practical actions. In this clear appreciation of the alienation of the thinking subject from the world of life, apart from psychological factors, there is also a role to play for the precision of written reasoning, which can be disturbed when combined with practical actions.

181 *Plutarch's Lives*, pp. 479–481.

Again we can see a reversal of the original relationship between the world and the text. The text is no longer a representation of the world, nor of its presence. Rather, it is the world that becomes a minor addition to the text. It does not completely disappear in the text – in this case the text would not be understood by anyone other than its author – but it succumbs to something like the Hegelian *Aufhebung*; deprived of existential autonomy, it becomes a silent, seemingly absent component of pure thought, supported and expressed in an autotelic record. **The world is included in the text.**

As Plutarch continues:

And therefore we may not disbelieve the stories told about him [Archimedes], how, under the lasting charm of some familiar and domestic Siren, he forgot even his food and neglected the care of his person; and how, when he was dragged by main force, as he often was, to the place for bathing and anointing his body, he would trace geometrical figures in the ashes, and draw lines with his finger in the oil with which his body was anointed, being possessed by a great delight, and in very truth a captive of the Muses. And although he made many excellent discoveries, he is said to have asked his kinsmen and friends to place over the grave where he should be buried a cylinder enclosing a sphere, with an inscription giving the proportion by which the containing solid exceeds the contained. (17, 6–7)¹⁸²

The first part of this testimony is usually omitted by researchers and commentators with a somewhat embarrassing silence, but as long as it is authentic, it leaves no doubt as to the impact of Archimedes' intellectual practices on his emotional and sensory realm. Once again, it should be reiterated that the problem of the physiology of higher intellectual processes awaits the researcher, who will finally move from the area of anecdotal curiosities to a serious discussion, the subject of which is worthy, if only because even the highest-class abstractor does not stop inhabiting his own body. Plutarch's account confirms the previously formulated remarks about Archimedes' sensory deprivation caused by the deep immersion of his mental realm in abstract writing categories – so deep that he uses as a writing medium the ashes then used in hygienic treatments. What is more – and this should be considered an extreme manifestation of his mental state – he also writes on his own body anointed with oil (the Greeks cleaned the

182 *Plutarch's Lives*, p. 481.

body by rubbing it with oil mixed with ash and scraping it off with dirt) and this activity, as Plutarch discreetly suggests, brings him satisfaction that is close to sexual one, but it does so only in passing, as if on the occasion of the main activity, which is drawing on himself figures and diagrams associated with the current abstract intellectual process.

So what, to Archimedes, is his own body? Well, it does not perform any of the roles distinguished by modern psychology or phenomenology. It is neither a tool of existence in the world, nor a tool of action, nor of sensory perception, nor even of communication. It is a handy notepad used to write down the latest ideas. In Greek sources, we have messages about the records on the human body (the most famous of these bodies is the body of the semi-legendary lawgiver, Epimenides)¹⁸³ but these are records of great importance and relevance to the social, religious, or political community to which the person having this body belongs. Archimedes' body, in turn, is completely postponed, both as a carrier of the person and as a tool of being, and this disregard goes all the way to the grave where, according to Archimedes' wishes, an image of one of his important mathematical discoveries was to be engraved – which indeed was the case, as Cicero later reports to have found exactly such an engraving (*Tusc.* V, 65). Looking at how Archimedes treated his own body, it is hard to imagine a greater advantage of an alienated text over the world of phenomenal experience.¹⁸⁴

The depth of the recordings was, as we can see, at least as intense for Archimedes as for Theophrastus and Philitas, and ultimately had the same fatal consequences, but again – as when comparing these two cases – we

183 This message is interpreted by Jesper Svenbro in the book *Phrasikleia. An Anthropology of Reading in Ancient Greece*, Cornell Univ. Press, Ithaca 1993 [French original 1988], ch. 7: *True Metempsychosis: Lycurgus, Numa and the Tattooed Corpse of Epimenides*, pp. 123–144. But his approach is completely different from the one presented here.

184 There is a certain similarity to such behaviors today with people who write “urgent matters” or telephone numbers on their hands or wrists – but in this case we are only dealing with an ad hoc use of the body surface as a recording surface, not with a deeply internalized practice embedded in the mainstream of someone's life. In the Appendix, devoted to medieval scribes, I will come back to the issue of the somatic dimension of intellectual practices related essentially to the presence of the text.

can see an apparently subtle and indeed fundamental difference. Well, the reason why Archimedes dies is not because the texts he writes or reads destroy him physically, but it is because external circumstances suddenly interrupt his text-centered reflection on the generalized qualities of experience (commonly called “detachment from reality”). As was the case with Alexandrian philologists, whose attitude I analyzed in my previous book on the example of Didymus Chalkenteros, for Archimedes, too, the physical reality, the realm of existential and sensual experience, is only an insignificant addition to what is really important: pure thought, whose realization is a written record and which is connected with the *Lebenswelt* realm in a very indirect way. The difference with the Alexandrians, in turn, lies in the fact that for them the center of textual thinking was the past of their culture archived in the Library. For Archimedes, however, the text has no connection with the cultural situation, it is a tool of strictly abstract thinking, and its historical and cultural provenance has no meaning – that is why it can be written on sand or ashes, because the existence of the truth about the world contained in it does not depend on its presence and permanence, unlike in the case of culturally conditioned texts.

This is how the difference between the *Naturwissenschaft* and the *Geisteswissenschaft* within the meaning of Dilthey or, in more recent terms, between sciences and arts, is outlined. The basis of the two great fields is always the text, but their position in relation to their own historical conditions is different. In other words, a mathematician does not have to be interested in where the symbols and notations he uses come from (even if their shape and the extent to which they can be manipulated in the notation influence his thinking), while a literary critic or literary theorist should know the origin of the concepts he uses. Otherwise, he is in danger of falling into a cliché or nonsense – that is, he needs to have at his disposal a collection of past records recorded in a library or archive. However, as I will try to show, the separation of Archimedes’ thinking from the *Lebenswelt* realm is also not complete, at least in *Psammites*. The attempt I will make here to read this text will show, I hope, that even the human mind most abstracted from its own sensory system must maintain its connection with the realm of existence experienced in the body.

Psammites (in the Latin version *Arenarius*, in the English version *Sandreckoner*) is a short text that Archimedes addressed in the first sentence

to the Sicilian ruler Gelon II.¹⁸⁵ This text can serve as an example of a radical abstraction of the argument in a text practice alienated from the world, which mathematicians will then use, even if not directly influenced by it. Theoretical reasoning supported by recording tools is here freed almost entirely from sensual experience and retains only very few traces of it, which Archimedes uses as a basis for some parts of its reasoning in a way similar to that we have seen in episodes with bathing.

But first I propose a brief comment about the handwriting and the relationship between the oldest mathematical and astronomical inquiries and writing practices. As with most ancient Greek writings, the oldest manuscripts of Archimedes, the traces of which survived to our time, come from medieval Byzantium. Heiberg dated the archetype (the manuscript from which all known manuscripts originate) to the ninth/tenth century, and it is known that this manuscript still existed in the sixteenth century, but was later lost.¹⁸⁶ Based on philological analyses, the scholars found that the present form of the text was distorted in relation to the author's version, which is more than a thousand years from the archetype. This was deduced mainly from the frequency of dialectal forms in Archimedes' vocabulary. For me, however, a more interesting issue is the form of mathematical notation in his works; unfortunately, it is completely unresolvable.

185 I use the Heiberg edition: *Archimedis Opera omnia cum commentariis Eutocii*. E codice Florentino recensuit, latine vertit notisque illustravit J. L. Heiberg, vols 1–3, Lipsiae in aedibus Teubneri 1880–1881. The critical apparatus both in this edition and in *Quaestiones*... shows no major problems with the constitution of the *Psammites*' text, even in parts containing numerical notations (most of the number names are written there in words). To understand the course of Archimedes' speeches, Ilan Vardi's commentary, available on the Internet under the title: *Archimedes, the Sand Reckoner*, is helpful. The works in earlier syntheses of Greek mathematics (among them especially the works of T. L. Heath, quoted here) also retain their value.

186 A detailed description of Archimedes' textual tradition can be found in *Prolegomena* to the third volume of the Heiberg edition; see also a brief account in Heath, *Works of Archimedes...*, *Introduction*, pp. xxiii–xxxviii. nineteenth-century scholars (Hultsch, Heiberg, Heath, Schiaparelli) also deliberated whether the terms “graphie, graphesthai,” which are used in reference to the oldest Greek astronomers, should be understood as “writing” (i. e. “books, works”), or as “diagrams.”

Medieval manuscripts of ancient mathematical texts often contain figures and diagrams illustrating the course of the argumentation, but we have no way of knowing how they relate to the original versions. Thus, we do not know what Archimedes' original notation looked like, but almost certainly he used diagrams and graphical schemes when considering geometrical problems, as evidenced by the quoted references by Plutarch to his mania of drawing figures everywhere he could find useful surfaces. Graphic, but not textual presentation of ideas or mathematical problems is a very old phenomenon, much older than the Greek civilization. Therefore, it is not possible to say clearly what role such figures played in the written visualization of thought processes in the history of the Greek textualization of experience.

What is more, graphical visualization of numerical and spatial relations has had a strong connection with both mathematics and astronomy since the dawn of history – from the point of view of the history of written practices it is a very special connection. The numerical relations and spatial regularities observed by people since the beginnings of civilization coexisted in their minds with myths and religious beliefs about “what is above.” The experience of the starry sky was probably one of the earliest conscious experiences of our ancestors, long before the first pictograms have been drawn – this is evidenced by prehistoric buildings used, as we can assume today, for astronomical observations or for performing rituals related to phenomena in the sky. As a result of this eternal intimacy, the early mathematical and “diagrammatic” approaches of the Sumerians and Babylonians were born, followed by the astrological poems of Aratus and the figures, names, and mythical plots of the constellations, which gave the heavens (understood as both physical and cultural beings) a rich semantic and symbolic content. It can be assumed that the presence of writing and writing practices does not so much trigger a current of reflection here, but rather facilitates or accelerates it thanks to the aforementioned graphical and symbolic visualizations, which, however, were not created for the first time in the Greeks, but two thousand years earlier in Sumerians.¹⁸⁷

187 An additional complication in thinking about the relationship between astronomy and writing is the special type of experience specific to the observation of the sky without the use of technically advanced observational

In *Psammites*, which occupies about a dozen pages of modern printing, Archimedes takes up the following problem: how many grains of sand would fill the whole cosmos?

The very existence of such a problem, the very possibility of formulating it and, above all, the intention to answer it in the form of a specific number rather than a symbolic suggestive verbal term, testify not only to the mental format of the author, but also to the advancement of “thinking techniques,” in the form of a notation and text, which Archimedes used to carry out the reasoning leading to the answer to this question. The point is that his whole reasoning was carried out in an environment of the text which enabled Archimedes to maintain the accuracy, scope, and precision that even the most developed oral-memory message could not provide. If we would like to defend Havelock and Ong’s theses about the unambiguously positive influence of alphabetical writing on human minds and civilization, *Psammites* could serve as a strong argument here, because it is a great example of the extension of the space available to the mind through text.

Let us start with the sand. Why does Archimedes choose this component of reality for his thought-observation-text experiment?

The motif of “sand incalculability,” present in human culture also since its oldest written history, is probably important here. Something is like grains of sand, when there is too much of it for the human mind to embrace

instruments – namely, an exclusively visual experience, which means that “the sky” is an extremely unobvious element of the human *Lebenswelt*, at the same time close and distant, visible and unattainable. This state of affairs, resulting primarily from the physical and biological circumstances that shape our bodies and minds in the physical world, has had a great influence on the cultural perception of human position in the world. See Otto Neugebauer, *The Exact Sciences in Antiquity*, Dover Publications 1969, as a basic study on the early stages of mathematics in connection with the observational sciences. The fact that today’s astronomers still use the division of the celestial sphere into constellations whose images were mostly created in ancient times, and most of the stars visible without the help of optical instruments still bear their ancient names, is a clear example of the sustainability of culturally conditioned conventions in science. On astronomy in connection with historical periods of culture (i.e., the so-called archaeo-astronomy), see especially the extensive synthesis: David H. Kelley, Eugene F. Milone, *Exploring Ancient Skies. A Survey of Ancient and Cultural Astronomy*, 2 ed., Springer 2011.

and mark with numbers. The figure of the incalculable sand appears twenty-one times in the Bible,¹⁸⁸ it is present in the Homeric epic, in Greek lyric and, as it seems, in a great number of other cultural texts from different eras, which, however, as far as I know, no one has ever calculated¹⁸⁹ – and also certainly in the colloquial linguistic usage of many cultures and nations. This conviction, probably common to all people living in sand regions, results from the phenomenal experience enclosed by the work of symbols, from the feeling of astonishment and helplessness in the face of a stream of tiny grains passing through the fingers or in the footprints fading at the first blast of wind or the influx of a wave. Let us add to this image the still invincible monotony of the movement of the grains and the thought of the tiny thing growing to the enormity. This is enough to say that Archimedes' intellectual choice – although it was probably partly due to practical, computational reasons – was also a clear provocation and challenge for his countrymen. To count what is incalculable and to fill the whole world with it – to prove the power of one's own mind, going against the common idea.

Let us also think about the silent passivity of the sand. It is one of those elements of nature we experience, which – although it intrigues us with its extremes, both small and large – is strikingly indifferent to us. We cannot attribute to it any anthropomorphic intentions, as we do with so many other objects, creatures, and elements. Maybe European desert travelers or Bedouins or Tuaregs, struggling to survive in a sandstorm, had a different impression, as did the people who dug the Sphinx in Gizeh from the sands of the Sahara that absorbed it, but on a global scale almost all people who come into contact with sand perceive it, consciously or not, as an extremely passive existence. Even a stone provokes us to want to open it, but the grain of sand is too small for human stubborn inquisitiveness. The sea invites us, absorbs us, carries us, destroys us or shows the vanity of our efforts

188 Ilan Vardi, p. 12 with reference to Strong's biblical concordance.

189 My attempts to find any scientific or even popular studies of the motif of "incalculable sand" in the literary and cultural imaginary have failed. On this occasion, however, I came across scientific reports from recent years, which concerned research aimed at experimentally determining the number of grains of sand in a certain unit of volume, which should be considered an involuntary and somewhat grotesque confirmation of the permanence of human fascination with this problem.

(also intellectual, as St. Augustine testifies). The sand can only show us the indifference of the passage of time. Therefore, being a part of the world of life, sand does not take part in it, it does not respond to the calls of human consciousness. This is also why sand is so well suited to introduce it into abstract reasoning.

Psammites begins with:

There are some, king Gelon, who think that the number of the sand is infinite in multitude; and I mean by the sand not only that which exists about Syracuse and the rest of Sicily but also that which is found in every region whether inhabited or uninhabited. Again there are some who, without regarding it as infinite, yet think that no number has been named which is great enough to exceed its multitude. [...] But I will try to show you by means of geometrical proofs [*apodeiksion geometrikan*], which you will be able to follow [*hais parakoloutheseis*], that, of the numbers named by me and given in the work which I sent to Zeuxippus, some exceed not only the number of the mass of sand equal in magnitude to the earth filled up in the way described, but also that of a mass equal in magnitude to the universe [*tou megethos ison echontos to kosmo*].¹⁹⁰

The opening of the argument consists in pointing out a certain element of the *Lebenswelt* with its reference to human consciousness – but only to immediately question the given colloquial experience and move on to abstract textual notions, because from the next sentence Archimedes enters into a polemic with Aristarchus of Samos (ca. 310–230 BC) about the size of the universe and its structure. Here is a fragment of this discussion:

His hypotheses are that the fixed stars and the sun remain unmoved, that the earth revolves about the sun in the circumference of a circle [*tan gan hypotitheitai peripheresthai*], the sun lying in the middle of the orbit, and that the sphere of the fixed stars, situated about the same centre as the sun, is so great that the circle in which he supposes the earth to revolve bears such a proportion to the distance of the fixed stars as the centre of the sphere bears to its surface. Now it is easy to see that this is impossible [*touto g'eudelon hos adynaton*]; for, since the centre of the sphere has no magnitude, we cannot conceive it to bear any ratio whatever to the surface of the sphere. (ch. 1)¹⁹¹

190 *The Works of Archimedes* edited in modern notation with introductory chapters by T. L. Heath, Cambridge University Press 1897 (reprint 2010), p. 221.

191 *The Works of Archimedes*, p. 222.

In these words, Archimedes gave us information about the heliocentric system which was over fifteen hundred years earlier than the Copernican one (Aristarchus' writings on this subject are lost), but what is more important at this point is his rapid – within a few sentences – transition from phenomenal experience (the motif of sand) to full text abstraction, which is the discussion of proportions of celestial bodies, i.e. the conceptual analysis of such relations between elements of experience which are no longer perceptible in experience. *Psammites'* whole is based – after the initial signaling of the motif of sand – only on such textual abstractions. In the subsequent sentences of this text, Archimedes constructs a geometrical reasoning, the aim of which is to determine the size of the cosmos, and the assumptions are derived from observational data concerning the size of the Earth and the apparent size of the Sun in the sky, and from the geocentric model derived from the discussion with Aristarchus, in which the center of the Cosmos coincides with the center of the Earth and its boundary is the sphere of fixed stars. The scarce observational data are superimposed with a system of notions reflecting in the text large-scale spatial relations, which remain far beyond the *Lebenswelt* boundary given to the human mind in the sensual experience, and this system itself has the primordial textually provenance – the notion record is here a matrix of physical space and relations taking place in it, similarly to what will happen in modern scientific texts (these are, however, supported by more advanced observations).

After such preparation, Archimedes begins to match both components of its concept – tangible sand and abstract space:

Given that the diameter of the universe is less than a myriad earth diameters it is clear that the diameter of the world is less than one hundred myriad myriad stadia [myriad=10,000]. These are my hypotheses regarding sizes and distances. Here now is what I assume about the subject of sand: if one has a quantity of sand whose volume does not exceed that of a poppy-seed, the number of these grains of sand will not exceed a myriad and the diameter of the grains will not be less than a fortieth of a finger-breadth. I make these hypotheses following these observations: poppy seeds having been placed on a polished ruler in a straight line in such a way that each touches the next, twenty five seeds occupied a space greater than one finger-breadth. I will suppose that the diameter of the grains is smaller and to be about a fortieth of

a finger-breadth for the purpose of removing any possibility of criticizing the proof of my proposition. (ch. 2)¹⁹²

Archimedes collides the extreme points of the scale of physical quantities known to him, one of which represents the smallest elements of physical reality discernible to the human eye, while the other – a large-scale structure of the cosmos accessible (as it is today) only through theoretical tools (that is, abstract verbal or mathematical notations). Let us note, however, that the estimation of the size of poppy seeds and the number of grains of sand corresponding to one grain of poppy is at least loose and Archimedes himself admits that he selects them in such a way that they best fit his deductions. This means that the elements he draws from the realm of *Lebenswelt* have no phenomenal significance, they are not components of the reality he actually experiences – they are quasi-realistic components of purely textual reasoning, embedded primarily in detached concepts, and their “experimental” provenance is a rhetorical trick by which Archimedes wants to make his reasoning more accessible to a layman, like King Gelon, and to have the strongest possible effect, colliding the nullity of grains of sand and poppy seeds with the vastness of space. We can see here a cluster of proto-scientific reasoning, rhetorical and persuasive practices, and the influence of the means of communicating the state of knowledge available to Archimedes on the form of knowledge which he created.

The next part of *Psammites* is devoted to deriving a nomenclature of numbers, which allows Archimedes to name the number of grains of sand filling the whole universe, the size of which he calculated earlier. The largest number having its own name in ancient Greece was myriad, corresponding to ten thousand in our notation. Without breaking the rules of Greek grammar, it could be multiplied at most to the form of myriad myriads myriads (*myriakis myriais myriadessin*, i.e. $10,000 \times 10,000 \times 10,000 =$ trillion, 10^{12}), and already such a multiplication was not needed by the Greeks for anything, because in their world of life there were no phenomena whose description would require numbers of this order. It should also be remembered that they did not have a digital notation and all numbers in the positional notation were marked with letters, which made arithmetic and

192 Since the translation of Heath is largely a paraphrase in manner of modern mathematical notation, here I pass from this quote on to the literal translation of Ilan Vardi available at: <https://www.lix.polytechnique.fr/Labo/Ilan.Vardi/archimedes.html> [2020.05.31].

algebra very difficult for them (this is one of the reasons why these fields of mathematics developed much less well in ancient Greece than geometry).

Archimedes was fully aware of these conditions. This can be seen in the following sentence from the third chapter of *Psammites*:

It so happens [*symbainei de*], that tradition has given to us the name of numbers up to a myriad... [ch. 3, Vardi, p. 5]

The verb “symbaino” mainly means “to happen by chance,” and using this verb to describe any phenomenon gives it a clear mark of randomness. It seems that Archimedes wanted to emphasize the contingency of arithmetic terms that he had to use. With all the more freedom, therefore, he exceeded the conditions he had found and, using the exponential method, determined the number of grains of sand filling the cosmos at 10^{63} . He did so on the assumption that the largest number of a particular row is the smallest number of the higher row, and then iterated this procedure into successive rows of numbers. Furthermore, he stated explicitly that the whole thought experiment with sand and the universe was just an excuse for him: Numbers named in this way could certainly suffice but it is possible to go still further. [ch. 3, Vardi, p. 6]

Then he freely develops his notation system (it is a purely verbal notation) and comes to the number which in our notation is $10^{8000000000000000000}$ (one with eight quintillion zeros). The intellectual self-confidence of Archimedes, as emphasized by his researchers, allows him to go beyond any, even imaginary, relationship with experience to the purest mathematical abstraction; he demonstrates the potential of a system of notation based solely on in-text principles, because the numbers that eventually occur no longer determine anything, any size that is possible in the real world, not only that which people experience sensually but also any physical world at all possible within the human mind supported by theory and writing. I mentioned before that an absolute text is not possible – but *Psammites*’ final conclusions are close to it, and in later periods Archimedes will be followed by mathematicians developing theories and models that do not describe any of the worlds we know even the most theoretically. However, it is not certain whether a mathematical notation can be called a “text” in the sense in which scholars of humanities use it.¹⁹³

193 There are many views on the meaning or meanings of the term “text” depending on different theoretical schools. In the semiological and structural

Psammites' final sentences prove that Archimedes was fully aware of his intellectual alienation, but at the same time he defended his cognitive position with a sense of irony, in words addressed to the son and successor of Hieron II, the ruler who, according to Plutarch, strongly urged him to put the results of his intellectual works into practice:

I conceive [*hypolambano*], King Gelon, that among men who do not have experience of mathematics, such a thing might appear incredible. On the other hand, those who know of such matters and have thought about the distances and sizes of the earth, the sun, the moon, and the universe in its entirety will accept them due to my argument, and that is why I believed that you might enjoy [*ouk anarmoston*] having brought it to your attention. [ch. 4, Vardi, p. 9]

Psammites is an example of a radical departure of the textualized reflection beyond the *Lebenswelt* thanks to textual tools that organize and expand the realm of reflection as much as possible under the culturally defined conditions of notation (lack of digits, lack of possibilities of exponential notation, grammatical syntax of the Greek language). It shows textual traces of a generalized sensual experience, independent of the current historical, social, and cultural state of affairs. But this very approach to the physical reality in the textualized quasi-experience is already the result of specific processes in communication technology that lead to the production of abstract mental entities according to the instructions of the text, which is itself a collection of abstract post-Aristotelian concepts. The figure and work of Archimedes is one of the early examples of the advanced stage of “textual thinking” in European culture, in which the price for a huge extension of the range of reality available to the reflective human mind is a deep alienation of this mind and its associated body from the *Lebenswelt* realm – or, from a reality experienced and relived sensually, somatically. If we recall that Xenophon’s writings were created less than one hundred and fifty years earlier, we can realize how far the Greek text practices in the

sense, the notation of a mathematical proof, in which there are no signs of natural language at all, but only symbols of mathematical notation, is a text, but it is not a text in the sense of literary theory and literary studies. In the introduction, I have explained the understanding of “text” adopted in this book.

Hellenistic era have evolved – and the effects of this evolution have affected European culture throughout all centuries to come.¹⁹⁴

194 Continuing this theme, one should analyze the writings of Hellenistic authors specializing in mechanics and engineering, not just in pure theory. These included, for example, the Archimedes' contemporary, Philo of Byzantium (ca. 280–220), the author of an extensive work called *Mechanike syntaxis*, which describes the principles of building seaports, artillery machines, pneumatic machines, automatic machines, and siege machines. In the same period, Ctesibius was active in Alexandria. His writings have not survived, but it is known that he invented a water clock, water organ, and valve. The culmination of Hellenistic engineering are the achievements of Hero of Alexandria (ca. 10–70 AD), mentioned in all the popular references to the history of science as the inventor of the first steam machine (the so-called “Hero’s engine”), which could not find practical applications in the ancient world. His writings, like those of Philo of Byzantium, have survived, but their analysis would go beyond the framework of this book. They represent a further stage in the design of scientific and technical practices based on a theoretical text, i.e. a return from the world of text to the world of life mediated by a theoretical text image. We do not know how widely used were the technical and engineering designs contained in the writings of Philo, Ctesibius, or Hero, but it can be assumed that at this stage of the development of specialist writing, mutual alienation of the text and experience is growing. We are probably dealing here with an alienation of specialist practices, dictated by text instructions, in the current social system, well visible in the case of Hero’s engine, which for positivist and Marxist historians of science and technology was a model example of “overtaking one’s own era and social formation by a brilliant underestimated inventor.” Authors such as Philo and Hero often stress the need for accuracy and precision in the execution of textbook instructions and contrast these features with the randomness of traditional older methods. Here is an example from the *Belopoeika* (*Building Ballistic Machines*) of Philo: “I assume you know that most people find this skill [*ten technen*] difficult to master [*dysthoretton kai atekmarton*]. [...] For my purposes, therefore, the statement by the sculptor Polyclethus will be suitable: ‘Perfection [*to eu*] comes from many numbers thanks to the precision of [*dia mikron*].’ The same is also true of this skill, because its effects depend on many numerical ratios, where even a slight deviation leads to serious errors in execution.” (Chapter 2, *Philons Belopoiika* (*Viertes Buch der Mechanik*) griechisch und deutsch von H. Diels und E. Schramm, Berlin 1919, pp. 7–8). The statement of the great sculptor, given by Philo, seemed quite mysterious to the scholars and became the subject of many conjectures which I cannot discuss here. In the following sentences, Philo speaks about the “ancient” people [*archaious*] whose designs worked only by chance, and they could not explain why that

is and why the others did not work as well. Here, Philo clearly contrasts the “tacit knowledge” that comes from the non-verbal transmission of practical experience and, as such, is – as in Aristotle’s *Metaphysics* – elusive and unworthy of attention, and precise knowledge based on the principles contained in the textbook, which is his own work filled with very detailed technical instructions for the design and construction of ballistic machines of greatest effectiveness. It is worth noting the disregard shown by Philo for the old traditional methods, which according to him can only be effective by chance. We see the same attitude in modern scientists when confronted with, for instance, “folk medicine.”

Appendix. Two medieval traces of experience in the text

1) The structure of Isidore's of Seville *Etymologies*; or, about the discontinuity of the European cultural remembrance

Isidore (ca. 560–636), the bishop of Seville, whom pope Clement VIII canonized in 1598, Innocent XIII granted him the title of Doctor of the Church, and John Paul II made a patron of the Internet, computer scientists and computer users, is treated by many modern scholars somehow condescendingly. Although Ernst Robert Curtius described his *Etymologies* as “Grundbuch des ganzen Mittelalters” [a basic book for the whole Middle Ages], Isidore enjoyed, and often still enjoys, the ambiguous fame of a naive erudite, rewriting everything he read from the earlier authors without order or composition. Even William M. Lindsay, a great connoisseur of late and early medieval lexicographers and erudites, the author of the only complete critical edition of *Etymologies* to date, wrote:

An editor's enthusiasm is soon chilled by the discovery that Isidore's book is really a mosaic of pieces borrowed from previous writers, sacred and profane; often their “ipsa verba” without alteration. For example, the accounts of Logic in Book II and of Arithmetic in Book III are practically transferred word for word from Cassiodorus. And the huge number of MSS. scattered throughout the libraries of Europe demands not merely enthusiasm but time and money from an editor. Still, although a great part of the *Etymologiae* is already available for us in the works of extant authors, a portion comes from authors whose works have been lost and offers us the means of recovering them. *The Prata* of Suetonius is to be reconstructed only by the help of Isidore. The presence too of quotations from the lost literature of the Republic demands a reliable text and an adequate apparatus.¹⁹⁵

195 William M. Lindsay, “The Editing of Isidore *Etymologiae*,” *Classical Quarterly*, vol. 5, no. 1 (Jan., 1911), p. 42.

So even Lindsay – who has spent many years and probably also a lot of money on developing a critical edition of *Etymologies* based on nearly a thousand medieval manuscripts scattered all over Europe (at the beginning of the twentieth century, the researcher could only finance this type of research from his own private funds, because nobody had ever heard of grants or subsidized research projects at that time) – even he sees it only as a link in the message of a few otherwise missing ancient texts, which means that he does not give this work an intrinsic aesthetic or cognitive value. And it is worth remembering that Lindsay specialized in authors such as Nonius Marcellus or Pompeius Festus, whose works, antique lexicons, and spelling dictionaries, consisting only of enumerations of thousands of words with concise elliptical definitions, are not narrative texts at all. This means that he mainly worked on texts very distant from the commonly understood spirituality of ancient times and did not expect from the objects of his inquiries either the intellectual depths of Euripides or Virgils' artistic styles. Today, when one appreciates late-Ancient erudites and antiquarianists, such as Athenaeus or Aulus Gellius, and tries to find self-contained cognitive structures in the thousands of quotations and minor cultural facts they have gathered, Isidore is also seen by some researchers with a more gracious look. However, the *opinio communis* of the academic humanities continues to replicate Lindsay's view which, as I have already mentioned, remains to this day the author of the only full critical edition of *Etymologies*, since the new edition – in progress for almost forty years – is far from being completed.

Here, I attempt to place *Etymologies* against their cultural background and to define their role and function in the world in which they were created. It is not my goal to analyze the history of the text of *Etymologies* – so I do not take into account, for example, the fact that the adopted layout of their content divided into books and chapters does not come from Isidore himself, nor do I analyze the form assumed in particular manuscript families by Greek words and other terms exotic to medieval copyists and readers (such problems have so far interested almost all researchers of *Etymologies*). In short, I am dealing with Isidore's work not so much from the perspective of philology as from the perspective of cultural anthropology.

The first problem to be tackled from such a position is the criteria of disposition of the material contained in *Etymologies*. Researchers often claim that the twenty books compiled by Isidore are just a chaos loosely based on the scheme of *artes liberales*, sometimes mocking the supposedly clumsy, naive arrangement of the whole work. I quote here a representative example:

This systematically arranged encyclopedia, packed with information and misinformation on every topic from angels to the parts of saddle, descends so often into false etymologizing and the uncritical parade of absurd bric-à-brac that it cannot be read without a smile. But Isidore wins one's respect, and even affection, by his obvious appreciation of knowledge for its own sake. Hostility to pagan literature is explicit in some of his public pronouncements, and he was more at home in the neutral pages of the scholiast and compiler than in the classical authors themselves, whom with the few exceptions he quotes at second-hand; but his curiosity knew no barriers and he took for granted the independent value of profane culture. When he culls from the fathers of the Church the scraps of classical poetry and pagan learning that they contain and re-allocates them to their proper place in the traditional system of knowledge, this bishop is paradoxically recreating in a resecularized form the basic structure of ancient learning.¹⁹⁶

This recreation, however, was not as simple as the authors of *Scribes and Scholars* see, who, let us add, quite biasedly listed two extreme enumeration points contained in the *Etymologies* – angelic choirs and saddle parts – side by side, giving the reader the impression that this kind of juxtaposition, absurd in terms of functionality and common sense, is on the agenda in Isidore. As I will try to show, it is quite different.

It is precisely the ambiguous, borderline position of *Etymologies* situated in the style of two very different cultures that is one of the main objects of reflection for someone who wants to look at them from a perspective other than strictly textual. The problem is that Isidore juxtaposed elements of ancient culture, which, in Visigothic Spain at the beginning of the seventh century, was a culture completely absent

196 Leighton D. Reynolds, Nigel G. Wilson, *Scribes and Scholars. A Guide to the Transmission of Greek and Latin Literature*, 4th ed., Oxford 2013, p. 85.

from practical life, but still present in the cultural memory, despite its fragmentation during the turmoil after the disintegration of the Roman Empire. But in order to create as coherent a picture as possible, he used the instances of the text that were available to him, that is, the manuscript remains of the previous era and his own – already medieval – handwrittenness. The clash of restored antiquity with early medieval intellectual and writing practices is, in my opinion, a key factor in understanding *Etymologies*.

Considered from the perspective of “modern science” (I will explain later why I put this term in quotation marks), the system of *Etymologies* could be compared to the famous “Chinese classification,” which Jorge Luis Borges included in his essay “The Analytical Language of John Wilkins,” and which has served hundreds of authors as a stand-alone example of the conventionality of text references organizing cultural experience:

On these remote pages it is written that animals are divided into: (a) those that belong to the Emperor, (b) embalmed ones, (c) those that are trained, (d) suckling pigs, (e) mermaids, (f) fabulous ones, (g) stray dogs, (h) those that are included in this classification, (i) those that tremble as if they were mad, (j) innumerable ones, (k) those drawn with a very fine camel’s hair brush, (l) others, (m) those that have just broken a flower vase, (n) those that resemble flies from a distance.¹⁹⁷

Seemingly, in both cases we are dealing with a quasi-rational, but in fact paranoid, or at least nonsensical, division of reality into peculiar categories that do not fit together, do not manifest any overriding principle of organization nor consistent relations that would make it possible to determine why these and such elements were placed next to each other. Isidore’s Visigothic Spain and Borges’ mythical medieval China appear to be the same to a viewer educated in the heritage of modern Western culture – namely, objects of a ridiculous or fantastic tale in which one could possibly find some secret logic, some peculiar principle, especially after having made an obligatory lesson in academic relativism (of the simplest

197 Jorge Luis Borges, “The Analytical Language of John Wilkins,” in his: *Other Inquisitions 1937–1952*, trans. Ruth L. C. Simms, Univ. of Texas Press, Austin and London 1965, p. 103.

possible kind, the one that most often takes the form of a condescending or even mindless gesture of recognition of a “cultural difference”), but this logic, this principle, is certainly too foreign to our safe understanding for us to be able to appreciate its essence. It is a principle on the borderline between reason and dream, it is an illusion or parody of the Order we know from “serious” books, i.e. books whose contents are governed by structures of written alphabetical discourse formulated by Plato and Aristotle, introduced into the practice of the text by their Hellenistic successors, and finally fully developed within the typographic framework of European modernity.

But such a comparison only apparently has any explanatory power. Famous Borges' classification is a melancholic pastiche of the world's textual experience, a pastiche whose author is painfully aware that this experience is just falling apart, losing its legitimacy in the face of the ever more violent detachment of words from things in the process of the disintegration of premodern categories of reality organization. At the same time, Isidore, who lives, acts, and thinks a thousand three hundred and fifty years earlier in a situation very distant from the climates of relativistic irony cultivated on the ruins of modernism, attempts to produce a real representation of the heritage of cultural memory and the structure of the world known to him – and to reconcile them with each other within a single intellectual and textual structure. What is more, he makes this attempt using a handwritten text and performs his work in a pragmatic context dictated by his era.

That is why I put the term “modern science” in quotation marks. It does not mean the refutation of scientific practices as such and their results, but the relativization of the process of the practicing and conceptual modeling of science within cultural history. The results of scientific research, especially in areas other than the humanities, are not subject to this relativization, but from the viewpoint of the anthropology of cultural communication, it is subject to a set of specific language practices that organize within the practices and institutions of science the intersubjective experience of its participants, and it is this set and the relations between its elements that make up the expression of the content of science.

Etymologies are testimony to a different system of such linguistic practices, a system which, in the eyes of positivist humanists operating

with the tools of nineteenth-century science and criticism, seemed ridiculous and naive, but in the time of Isidore himself, it served certain well-defined purposes, which I will try to outline. The primacy of the linguistic practices of the nineteenth- or twentieth-century humanities over those of the early Middle Ages is conditioned historically and pragmatically, but this does not mean that old practices should be ignored just because they are alien to our own – or compared to ours to their disadvantage.

The thesis I want to prove is as follows: Isidore's *Etymologies* are neither an example of naive erudition nor a quasi-scientific classification, but represent an early form of textual absolutism, in which the belief in the permanence of the notation in the face of a break in cultural continuity in the historical process is manifested. Moreover, they are also a manifestation of early medieval textual encyclopedicism as a form of “storage memory” in the sense of Aleida Assmann – and thus a resource of knowledge extracted from the heritage of previous eras, not only to serve as a guideline for current activities but also to create an archive of the past functioning as a generator of timeless cultural values.

The presentation of the structure of *Etymologies* is a difficult task inasmuch as this work consists of twenty books divided into four hundred and forty-eight chapters in total. A thorough analysis of such a rich layout would be lengthy and tedious. I will therefore confine myself to presenting here the division into books to define, on this basis, the internal logic of the structure of knowledge contained by Isidore in his work, which, for the time being, I do not designate with any of the names used in modern culture for texts describing the widest possible fields of reality. In what follows, I cite in full the “table of contents” located in many of the manuscripts of *Etymologies* and focus on its individual elements.

Index librorum [Analytical table of contents]¹⁹⁸

Ut valeas quae requiris cito in hoc corpore invenire, haec tibi, lector, pagina monstrat de quibus rebus in libris singulis conditor huius codicis disputavit, id est

198 All translations from *Etymologies* are taken from the English edition: Stephen A. Barney, W. J. Lewis, J. A. Beach, Oliver Berghof et al (eds.), *The Etymologies of Isidore of Seville*, Cambridge Univ. Press 2006, p. 34.

in libro [So that you may quickly find what you are looking for in this work, this page reveals for you, reader, what matters the author of this volume discusses in the individual books – that is, in Book –]

We are dealing here with a “speaking table of contents,” frequent in the manuscript culture of the Middle Ages, which imitates the voice of a living lector and introduces the reader into the structure of the presented work. At the time of Isidore, this practice was still underdeveloped and rarely seen, because the tools of “text handling,” such as the table of contents and index, did not become widespread until the mature Middle Ages. In this case, it was forced by the volume and complexity of the text structure. We are not sure whether this table of contents was present in the oldest manuscripts. The quasi-oral turn to the reader is in this case an intermediate form between the ancient invocation and the medieval introduction, and it is significant that it does not serve to introduce the reader in general to the diegetic reality of the text, but to explain the intricacies of the layout of the text – from which it results, that the projected viewer was not to read Isidore in order to “feel” the story he was presenting, but to obtain a purely textual knowledge, highly intellectually mediated and already fully adapted to textual (and not quasi-sensory, as in the case of oral narratives) reception. However, one should ask what kind of reality *Etymologies* were supposed to represent and what kind of experience were they supposed to textualize?

I. De Grammatica et Partibus eius. [Grammar and its parts.]

II. De Rhetorica et Dialectica. [Rhetoric and dialectic.]

III. De Mathematica, cuius partes sunt Arithmetica, Musica, Geometrica et Astronomia. [Mathematics, whose parts are arithmetic, music, geometry, and astronomy.]

The first three books of *Etymologies* are devoted to seven *artibus liberales*, which means that they cover the canon of late antiquity and early medieval “higher education.” Here Isidore follows the scheme defined by the lawmakers of ancient culture from Cicero to Martianus Capella, but for him this scheme is not the same as the full foundation of human knowledge. On the contrary, it is only a basis, a starting point for further categorization and classification. At the same time, beginning with grammar (that is, a field roughly corresponding to contemporary

linguistics), Isidore presents the metatheory of his own intellectual activity, as he describes his own cognitive tools – language, writing, and rules of using them.

IV. De Medicina. [Medicine.]

V. De Legibus vel Instrumentis Iudicum ac de Temporibus. [Laws and the instruments of the judiciary, and Times.]

The fourth and fifth books concern areas of theoretical knowledge relevant to social and collective life – medicine, laws and principles of measuring time on small and large scales. In these parts of *Etymologies*, the complexity of their structure begins to be clearly visible, as Isidore gives here both information about his own current historical and cultural situation and information about a very distant historical or even mythical past. For example, he gives information about the foundations of Roman law from the late Republic and about the counting of the years according to the Olympic games in Greece – even though both were dead cultural institutions in his own world. The third type of knowledge that appears here is knowledge that is independent of the cultural situation, for example, knowledge about diseases. All this information is interwoven with “etymologies” based on phonetic or graphemical similarities between supposedly related words, which makes the textual and extra-text order (“theory” and “practice” of knowledge) intertwine constantly in the system adopted by Isidore. For all terms referring to the recipient’s extra-text practice are at the same time treated as elements of a strictly textual reference system created by a network of pseudo-ethymologies. This is a unique model, unprecedented neither in antiquity nor in modern times within one intellectual literary project.

VI. De Ordine Scripturarum, de Cyclis et Canonibus, de Festivitatibus et Officiis. [The order of Scripture, cycles and canons, liturgical feasts and offices.]

VII. De Deo et Angelis, de Nominibus Praesagis, de Nominibus Sanctorum Patrum, de Martyribus, Clericis, Monachis, et ceteris Nominibus. [God and angels, prophetic nomenclature, names of the holy fathers, martyrs, clerics, monks, and other names.]

VIII. De Ecclesia et Synagoga, de Religione et Fide, de Haeresibus, de Philosophis, Poetis, Sibyllis, Magis, Paganis ac Dis Gentium. [Church and synagogue, religion and faith, heresies, philosophers, poets, sibyls, magicians, pagans, gods of the gentiles.]

The books from the sixth to the eighth are devoted to the issues of religion, theology and worship. Interestingly, Isidore not only provides information about Christian, Jewish, and pagan religions on an equal footing, but also includes information about ancient libraries, writing tools, and the circulation of books in the ancient world. Such a juxtaposition indicates that this author is highly aware of the role that writing and text played in the transmission of the most important content of culture and religion. It is likely that, for Isidore, the truths of faith depended not so much on the existential message of revelation as on the textual transmission of that message. It is also important that the issues related to the religiousness of the people of antiquity are linked in his work with data on their philosophy and literature (extremely modest, because in Isidore's time the people of Europe knew almost nothing about these fields of ancient culture, especially Greek). All these areas of human intellectual activity are therefore for him equivalent correlates of textual messages.

It should also be remembered that, for people living in the times of Isidore, the ancient world was a world accessible almost exclusively through texts – unless they were in the immediate vicinity of its visible material remains, for example in Rome or Athens. It can be assumed that even in these cases, the awareness of the historical identity of the ruins of old buildings available for their glance was at best weak.¹⁹⁹ In other words, people of the early Middle Ages imagined and made present the previous epoch only through manuscript texts. This circumstance must be borne in mind when considering the cultural roles of works such as *Etymologies*.

199 To make oneself aware of the experience of “living among the old ruins,” it is enough just to look at the engravings of Piranesi or read the descriptions of early medieval Athens and Rome by Gregorovius. Travelers penetrating the Middle East in the eighteenth and the nineteenth centuries reported that the people who inhabited then the areas dotted with the remnants of ancient civilizations answered the question about creators of these structures that they were some sorcerers or divine beings. Before they became monuments connecting us with the distant past, “Ruins” were, on the contrary, a source of experience of deep alienation.

- IX. De Linguis Gentium, de Regum, Militum Civiumque Vocabulis vel Affinitatibus. [Languages of the nations, royal, military, and civic terminology, family relationships.]
- X. Quaedam Nomina per Alphabetum Distincta. [Certain terms in alphabetical order.]

The ninth and tenth books are devoted to what we would call “social sciences” today. After discussing a number of specific areas in Book 9, Isidore dedicates the next book to an alphabetical listing of several hundred terms related to the social life of the people of his era. All these explanations are also accompanied by pseudo-etymologies that derive the current meanings of words for Isidore and his readers from the supposed meanings of “ancient,” and it is already clear at this stage of his argument that the role of etymology here is not to determine strictly linguistic affinities (as modern philologists have assumed), but above all the cultural affinities. Isidore, in the face of an overt break in the continuity of early medieval culture with the culture of antiquity, tries to restore this continuity at the level of lexical items, operating on an uninterrupted transmission of linguistic material, i.e. on one of the important forms of intangible cultural heritage. In this sense, the substitution of the lost political and social continuity becomes the continuity of language practices, and these are realized on a larger scale as text practices. The text thereby becomes a metonymy of the whole cultural world. Again, as in the case of Theophrastus and Archimedes, but for completely different reasons, the text is a world.

- XI. De Homine et Partibus eius, de Aetatibus Hominum, de Portentis et Transformatis. [Human beings and their parts, the ages of humans, portents and metamorphoses.]
- XII. De Quadrupedibus, Reptilibus, Piscibus ac Volatilibus. [Four-footed animals, creeping animals, fish, and flying animals.]

These two books cover knowledge of the human physiology and zoology, thus starting the second half of *Etymologies*, mainly devoted to applied sciences. Here one can observe the oscillation of textual structures between the knowledge inherited from the Ancients and the attempts to incorporate into this established body of knowledge the new knowledge that is being formed in the current historical circumstances of Isidore. However, the modest number of such attempts clearly shows that Isidore’s aim was not to update the state of knowledge, which would have been

difficult to achieve if only because of the poor circulation of information in seventh-century Europe, but to incorporate the available state of current knowledge into a much broader corpus of “old knowledge.” The parties of *Etymologies* devoted to natural sciences are a good example of the notorious “lack of empiricism” in medieval people’s thinking about the physical world around them. Without going into the details of this problem (different for each phase of the Middle Ages), I merely point out that Isidore provides many examples of a phenomenon in which the textual authority inherited in the message from past eras is accepted without the need to verify it through non-textual experience. Isidore’s world – not only cultural, but also natural and material – is to a large extent a “textual world;” its form, structures and principles of action are determined by the mutual relations of the words recorded in the notation, not by material processes or relations between the practices of the participants of culture, and “naïve” (from the point of view of modern scholars) etymologization is to further strengthen these purely textual relations. In such an arrangement, cultural memory is almost completely reduced to textual memory – a process which found numerous examples in the culture of the entire Middle Ages.

XIII. De Elementis, id est de Caelo et Aere, de Aquis, de Mare, de Fluminibus ac Diluviis. [Elements, that is, the heavens and the air, waters, the sea, rivers and floods.]

XIV. De Terra et Paradiso et de Provinciis totius Orbis, de Insulis, Montibus ceterisque Locorum Vocabulis ac de Inferioribus Terrae. [Earth, paradise, the regions of the whole globe, islands, mountains, other terms for places, and the lower regions of the earth.]

Books 13 and 14 cover meteorological and geographical knowledge. Here, the mutual osmosis of at least three types of knowledge inherited from the “ancients” that Isidore tries to combine – religious knowledge, proto-scientific knowledge, and “naming” knowledge – is particularly evident, which, being the basis for constant etymologization, is at the same time the foundation that corresponds in contemporary cognitive undertakings to both “resources of sources” and the “factual layer, but not being either in the cultural and textual reality of Isidore’s himself, because the components of this knowledge are *nomina nuda*, pure names taken by him from ancient texts and not combined in his experience with extra-linguistic

correlates, even because of the already mentioned lack of visual imagery related to antiquity. Isidore almost always deals with “signifiants” without “signifies” that are lost in the course of the enormous turmoil of history between the end of antiquity and the beginning of the Middle Ages. But he treats them as if these “bare words” were full, complete linguistic, and cultural entities. In this sense, the form of textual absolutism that he practices is different from both his earlier forms (such as Aristotle’s scriptism²⁰⁰ consisting in the textual categorization of cognitive processes) and later forms (such as the primacy of text in positivist science subjecting all other areas of experience to it).

XV. De Civitatibus, de Aedificiis Urbanis et Rusticis, de Agris, de Finibus et Mensuris Agrorum, de Itineribus. [Cities, urban and rural buildings, fields, boundaries and measures of fields, roads.]

In this book, we are dealing with a conglomerate which consists of elements of the history of urban planning, history of architecture, building construction theory and agronomy. The features of the argument, which I indicated in my previous remarks, are repeated here.

XVI. De Glebis ex Terra vel Aquis, de omni genere Gemmarum et Lapidum pretiosorum et vilium, de ebore quoque inter Marmora notato, de Vitro, de Metallis omnibus, de Ponderibus et Mensuris. [Earthy materials from land or water, every kind of gem and precious and base stones, ivory likewise, treated along with marble, glass, all the metals, weights and measures.]

In this book, Isidore, like Pliny the Elder in *Natural History*, combines the knowledge of the natural origin of inorganic substances with the knowledge of their cultural use. The textuality of the argument is marked here not only by constant etymologization but also by the enumeration of the signs with which individual substances and minerals were marked in the manuscripts of that epoch.

200 This concept was introduced by Roy Harris in his book *Rationality and the Literate Mind*, which was already mentioned here, to mark with it a phenomenon almost identical to what I call the “textualization of experience.” The difference is that Harris was not interested in the transferring of the *Lebenswelt* realm into the text, but only in the transferring of mental processes into it, which is why he analyzed mainly the *Organon*, i.e. the corpus of logical and methodological writings of the Stagirite.

- XVII. De Culturis Agrorum, de Frugibus universi generis, de Vitibus et Arboribus omnis generis, de Herbis et Holeribus universis. [Agriculture, crops of every kind, vines and trees of every kind, herbs and all vegetables.]
- XVIII. De Bellis et Triumphis ac Instrumentis Bellicis, de Foro, de Spectaculis, Alea et Pila. [Wars and triumphs and the instruments of war, the Forum, spectacles, games of chance and ball games.]
- XIX. De Navibus, Funibus et Retibus, de Fabris Ferrariis et Fabricis Parietum et cunctis Instrumentis Aedificiorum, de Lanificiis quoque, Ornamentis et Vestibus universis. [Ships, ropes, and nets, iron workers, the construction of walls and all the implements of building, also wool-working, ornaments, and all kinds of clothing.]
- XX. De Mensis et Escis et Potibus et Vasculis eorum, de Vasis Vinariis, Aquariis et Oleariis, Cocorum, Pistorum, et Luminariorum, de Lectis, Sellis et Vehiculis, Rusticis et Hortorum, sive de Instrumentis Equorum. [Tables, foodstuffs, drink, and their vessels, vessels for wine, water, and oil, vessels of cooks, bakers, and lamps, beds, chairs, vehicles, rural and garden implements, equestrian equipment.]

The last four books of *Etymologies* are devoted to practical areas that are important for social life and related to activities undertaken by human communities. In them, Isidore goes through agriculture and horticulture, the military and the institutions of public life, and then discusses the various types of tools and products for meeting human social needs. In the contemporary humanities, these books are probably best suited to cultural anthropology, because it is only in this field that the reflection on material and non-material elements of culture is consistently combined. This is the part of the work, where the greatest number of textual elements have clear material equivalents in the world of Isidore and his contemporaries are found.

At this point, at the end of the “reasoned” table of contents of *Etymologies*, it may be worth recalling that the “angelic choirs” and the “components of the saddle,” mentioned next to each other by ironic Englishmen, are in fact at the extreme, opposing poles of the textual structure of the representation of reality constructed by Isidore.

* * *

What are *Etymologies*? How can we define this extensive text, which was supposed to encompass all the cultural knowledge available to its author, and at the same time provide practical or even advisory information? To whom, and in what way, was it supposed to be useful?

The textual tools available to Isidore were chirographic writing space (where he could write down words and sentences in a generally linear order and draw simple diagrams) and a stock of manuscript texts containing the works of his predecessors, but it is rather certain that this stock contained few ancient texts as such, mainly early-Christian works, the authors of which have quoted extensively the earlier writings (Isidore's dependence on such authors as Cassiodorus, Boethius, or Jerome is obvious, among the "classics" he most often quotes Virgil, the Greeks he knew only from the second or even third hand). Using these tools in the court environment of the Visigothic Spain, Isidore explored heteronomic phenomena, coming from distant historical and cultural contexts covering the world of the ancient Middle East, Greece, Rome, and the circle of myths and cultural symbols functioning within them. However, in constructing a detailed picture of the world experienced in these cultural models, Isidore did not have access to the original contexts in which these particular cultural facts were created and played their main symbolic roles. In other words, most of the elements of knowledge that he operated on could not make sense to him as they had at the source of their existence.

Therefore, the bishop of Seville collected the pure signs of the writing, passed on to him by his predecessors, whose texts he read, but without any extra-textual correlates (references, denotation, pragmatic function). At the same time, however, he knew that such correlates must have existed in the past. One might risk a comparison, according to which the text was for Isidore what the results of excavations are for the archaeologist: an artifact devoid of its own meaning and demanding that the "finder" give it meaning in an act of risky, because based on speculative premises, interpretation. The process of constant **etymologization** that permeated the whole of Isidore's work was an equivalent of modern and modern **interpretation**, its substitute, one might say, if the actual interpretation could not have come about because of the lack of context.

Isidore's work on the construction of a textual world to replace – for both him and his contemporaries – the lost material and mental reality of previous eras resulted in a text that combines the characteristics of several distinct textual genres in later eras, namely:

- a linguistic dictionary (as indicated by the presence of words, names and terms definitions);
- an etymological dictionary (explaining the origin of words and their alleged primary meaning), this layer of text is the main link with the cultural past;
- a lexicon (since *Etymologies* are to a large extent a collection of terms that cover all areas of cultural and social life);
- an encyclopedia (because it is also a set of terms intended to completely cover the common knowledge);
- a classification (because it divides the material according to principles designed to order an extra-text reality, which is in fact absent, but is brought to life as a “textual phantom” – and to divide it into clearly defined areas suitable for unambiguous textual analysis);
- a universal history (since Isidore usually gives concise data on the historical development of the various topics he discusses in most areas).

What cultural functions could result from such a structure and disposition of the text and from such a particular cultural and historical location of its author?

The bishop of Seville was creating *Etymologies*, being at the borderline between antiquity and the Middle Ages. It is not about the “limes” marked out by school periodicals, but about the border separating two worlds of cultural experience. During Isidore's lifetime, Visigothic Spain for more than a century and a half had not participated in Roman culture, which itself had already melted into the turmoil of the barbaric peoples migrations. There was a break in the continuity of transmission and reception in the evolution of the cultural system, but it was not a violent break at all – in whose case there would be no transmission, and both Isidore and we today would know no more about antiquity than about Palaeolithic cultures. Barbaric peoples slowly and gradually disintegrated the structures and processes that defined the culture of the late Empire, leading to its final disintegration in the fifth and the sixth centuries – but at the same time leaving incidentally the narrow channels of transmission of its symbolic forms in the form of texts. Centers such as the Vivarium of Cassiodorus or Benedict's Monte Cassino, and a little later the Iro-Scotic monasteries made it possible to transmit the remnants of ancient

Latin writing (at the time few people in Europe knew anything about the Greeks, if not count the Byzantine territories).²⁰¹ However, in such conditions, it was not possible to transmit knowledge about the extra-text circumstances of the circulation of these texts. The “Dark Ages” were dark mainly because of an impenetrable curtain hung between them and the world that preceded them. This veil did not manage to be removed in any later epoch – neither the Renaissance humanists, nor the Romantic Hellenists, nor the positivistic philologists, nor the supporters of the “third humanism” in the first half of the twentieth century, nor the postmodern anthropologists of antiquity – even though each of these formations introduced new methods of discovering antiquity and reproducing – or rather, as we see today – producing it.

Isidore was in the immediate vicinity of this curtain and was probably not very aware of its existence. He experienced the disappearance of cultural competence in the reception of texts inherited from the decaying world of antiquity, but at the same time his quite favorable geopolitical location made him hopeful of restoring this world, at least in the image he created in his own text for the use of his contemporaries. In this sense, Isidore’s undertaking is somewhat reminiscent of the work of the Florentine Camerata from the end of the sixteenth century, which resulted in the creation of the opera as a replica of Greek tragedy. Both replicas were not entirely successful, but it turned out that they had an independent existence. The difference is that Isidore’s replica was purely and exclusively textual.

201 See, however: Walter Berschin, *Greek Letters and the Latin Middle Ages. From Jerome to Nicholas of Cusa*, tr. J. C. Frakes, Catholic University Press, Washington 1988; this study is dedicated to proving the thesis that medieval Europe has not lost touch with Greek and Greek cultural heritage. I think, however, that we are dealing with a misunderstanding: nobody has seriously claimed that medieval Europeans did not know at all about the existence of Greece, its culture, and language. The thing is that, until the fourteenth century, this knowledge was limited to very narrow circles or even to individuals like Eriugena or Roger Bacon, but there were no solid centers of its cumulation and transmission in Europe. Berschin’s book, which contains testimonies of this “punctual” knowledge of Greek in medieval Europe, in fact confirms the thesis that its author wants to disprove.

The legacy of antiquity appears in *Etymologies* as a text torn out of its own contexts, stripped of pragmatism and cultural practice, and instead endowed with a new, independent existence as a text almost absolute, self-sufficient and independent from its original sources. When Umberto Eco decided to title his first novel with an allusion to the sentence of Bernard of Morlay written in the poem *De contemptu mundi* – “Stat rosa pristina nomine, nomina nuda tenemus” (“The old rose remained only a name, bare names are all we have left”) – he pointed to this very feature of medieval cultural communication through texts, and, in a sense, also a feature of any cultural communication in general, which is being stripped of existential experience and henceforth the main goal of its creators and recipients is to re-construct this experience through the experience of the text.²⁰² Isidore of Seville is one of the precursors of this impossible project, a task which is utopian in its very intention.

The particularity of the cultural communication in which Isidore participated lies in the fact that he wanted to do more than just reproduce records – like the brethren from Monte Cassino or a little later Iro-Scottish monks. He wanted to give the inherited knowledge a new structure, as coherent as it was possible for him in his own conditions. To this end, he filled the context gaps with pseudo-etymologies and “frivolous” juxtapositions of recorded elements of the dead tradition – the only ones he had access to. Thus, *Etymologies* are something different in practice than for example Pliny's *Natural History* or late-antique word lexicons. This has been an attempt to extract meanings from texts that have fallen out of a constant complex cultural message, as a result of which their contextual meanings have been blurred. The “falsities” and “ridiculous naiveties” in Isidore's works, treated with pity by philologists, are the result of a largely “blind” (i.e. without the knowledge of extra-textual aspects of cultural memory) attempts to restore these meanings.

If one compares *Etymologies* as a “basic book of the Middle Ages” with Diderot's *Encyclopedia* as a “basic book of modernity,” the differences in situations and cultural roles of these texts will immediately become clear.

202 See: U. Eco, “An Author and His Interpreters,” in: R. Capozzi (ed.), *Reading Eco: An Anthology*, Indiana University Press 1997, p. 66.

Isidore tried to resurrect the pragmatically dead ancient culture, and the result of this attempt was a qualitatively innovative text-centered image of the world, which had a significant impact on the textual categories of medieval culture. Diderot and other encyclopedists, in turn, aimed to organize and democratize the knowledge of culture, which was currently “here and now” for them, and were fully aware of the non-textual, pragmatic aspects of this knowledge – and the result was the first encyclopedia in the modern sense of the term, and at the same time a model for all the others, right up to Wikipedia.

In many manuscripts of *Etymologies*, there are six letters from Isidore of Seville to abbot Braulio, who was his friend, encouraged him to work, and probably also divided the material collected by the bishop of Seville into twenty books, which I analyzed in this essay, assuming that Braulio did not interfere with the disposition of the text, but only extracted the particular parts of work according to the author’s intention. In these letters, Isidore regularly recalls the topos of “make oneself present,” stressing that in a situation where he cannot meet the addressee himself, his texts will be a satisfactory substitute for his personal presence. “Text as personal presentation” is a theme already known in classical antiquity. However, in the case of Isidore, it may have a slightly different meaning than within either antiquity or the Renaissance, when the circulation of texts took place within coherent systems of material and symbolic culture that gave them the necessary attributes of a process of understanding. The text of Isidore, as I have tried to show in the previous pages, was created in radically different conditions where the presence of pragmatic contexts was at least problematic. In such a situation, Isidore’s words about making his own person present in the handwritten codex that reaches the addressee take on a special meaning, because this text not only makes his author present but also, in a phantomatic and wishful thinking, brings with itself the whole great dead culture of antiquity.

According to the interpretation presented here, therefore, Isidore’s *Etymologies* are a text-based prosthesis of the dead cultural memory, a prosthesis that played a huge role in the process of reconfiguring the structures of cultural memory of Europeans in the early Middle Ages. From this point of view, appointing Isidore of Seville as the patron saint of the Internet and its users acquires at least a double significance.

The work of Isidore is in fact a testimony to the break in continuity of cultural memory on our continent and attempts to restore it. Michel Foucault followed in the footsteps of another “great break” that was to take place at the turn of the seventeenth and the eighteenth centuries and led to the breakdown of the clear relationship between “words” and “things.” I think, however, that the break between words and things has been happening in our culture continuously since the beginning of writing, since the days of the sophists and Plato. This is precisely Benjamin’s “continuous presence of catastrophe” – as well as the textualization of experience occurring “not here” and “not now,” as analyzed in this book. Isidore of Seville is one of the most important witnesses to this catastrophe.

2) The copyist's suffering and the calligrapher's joy: on the psychodynamics of writing in medieval Europe

When reading a translation of *Antigone* or *Aeneid* in a freshly printed book, we rarely think about the fact that the text we have before our eyes is in a certain (sometimes large) degree a translation not of Sophocles' or Virgil's own text, but of a philological construction, about which we can only say with some probability that it reflects something that could be named an autograph. We do not have a single antique autograph²⁰³, not many medieval ones – and this situation will not change significantly in the future. In the case of Greek and Roman works, many centuries have separated our oldest complete copies from the dates of their creation or the first written edition of their texts.

Modern classical philology was involved in the construction of old texts as ideal entities. The physical features of the old manuscripts, on the other hand, have been the subject of areas included in the auxiliary sciences of history – palaeography, codicology and diplomatics for at least two hundred years. Researchers representing these disciplines developed very subtle methods of analysis, thanks to which they were able to present

203 If one does not count the papyrus records as documents of social life. As for texts considered “artistic” or “philosophical,” there are no exceptions.

a coherent picture of the history of Greek and Latin writing and the evolution of old book forms (first of all, the codex, and in cooperation with papyrologists, also the scroll). In their research, they sometimes also drew attention to the cultural contexts of the manuscripts – the forms of their circulation, distribution channels, social conditions of their production – but the methodology of the auxiliary sciences of history, shaped during the period of domination of text-centered models of thinking about Western culture, did not allow them to make too frequent leaps toward such “unspecific” issues. It is for this reason that their work, contained in hundreds of detailed dissertations and dozens of great syntheses, is today often disregarded by cultural scientists, anthropologists and cultural historians who treat it as a useless collection of archives. Meanwhile, the works of nineteenth-century palaeographers and codicologists hide a lot of information which is a valuable source of knowledge for contemporary cultural scientists.

In the middle of the nineteenth century, manuscript subscriptions became a subject of interest for researchers. “Subscriptions” are called written records made by people transcribing someone else’s text – these records almost never appear in modern printed editions of ancient and medieval texts, because they are not an integral part of them, and usually do not even have a loose connection with their content (unlike glosses and scholia, which are usually scholarly commentaries on texts, intensively researched and developed in separate philological editions).²⁰⁴ Subscriptions are a rich source of information on the circumstances of transcription and on the psychophysiological states of the scribes. They can be a signature of the text, a testimony of the identity of its author or scribe, or a guarantee of the accuracy of the copy. Such situations are encountered in the earliest manuscripts, but also when the procedure of transcription of the text takes place in the conditions of cultural crisis experienced by the participants of culture (as it happened, for example, in the fifth century in Rome, when representatives of the dying senatorial aristocracy personally

204 They are sometimes referred to as “colophone,” but it also means the part of the manuscript’s surface on which the subscription appears, not just the text itself.

transcribed decades of Livy). The oldest antique subscriptions available to us survived because they were rewritten together with the texts themselves during subsequent copies. Subscriptions may also include a request to the user to show care for the manuscript he has in hands, to copy it faithfully or to say a prayer for the author/scribe. Many medieval records contain curses against book thieves and people who carelessly handle them. There are also many subscriptions with prayerful thanksgiving formulas in the medieval manuscripts, as well as a lot of subscriptions with humorous or even frivolous content; the authors of the latter were usually young clerics and students who were busy rewriting texts for profit. It is impossible to properly discuss in a few sentences the variety of subscriptions known to us today, which were created in European manuscripts from the fourth to the sixteenth century – their detailed specification can be found in the studies listed below.

A pioneering study on subscriptions was Otto Jahn's dissertation *Die Subscriptionen in den Handschriften römischen Classiker* published in 1851. The author collected the most important subscriptions from ancient Latin manuscripts. The medieval subscriptions were more widely taken up by Wilhelm Wattenbach in his work *Das Schriftwesen im Mittelalter*,²⁰⁵ and later another set of them was given in two articles by Lynn Thorndike, who called them "copyist's final jingles." Based on these studies, an extensive collection of detailed analyses was created in the second half of the twentieth century, whose authors either collected subscription corpuses from different eras and areas, or subjected their resources to attempts at philological, historical or literary interpretation.²⁰⁶

However, the authors of all these works were not interested in the psychology or psychophysiology of the writing process. This lack is shared by contemporary theorists of writing, who analyze cultural processes on

205 Its third, expanded edition was published in Leipzig in 1896 and was reprinted unchanged in 1962.

206 In the Polish literature, it is worth mentioning in this context the extensive book by Mieczysław Mejor entitled *Antyczne tradycje średniowiecznej praktyki pisarskiej. Subskrypcje późnoantycznych kodeksów (Antic Traditions of Medieval Writing Practice. Subscriptions to Late Ancient Codexes, Warszawa 2000)*, which provides a lot of data on the subject I discuss here.

a social or at least community scale. In the works of Clanchy and Stock, which are fundamental for the theory of orality and medieval writing, there is no mention at all on this subject. In the more recent works by Saenger on silent reading and Parkes on punctuation, there are few of them (besides, both of these monographs deal mostly with the process of reading the text, rather than the creation of its record, which is treated in them as a correlate of the reading process). Therefore, I think, it is worth trying to reflect on the psychodynamic meaning of subscriptions. These records bring us closer to the situation of a medieval script probably more than any other testimony. While reading them, we are dealing with a personal testimony which, even if it is shaped by the conventions of the epoch, still retains quite a clear mark of the individual state of consciousness of the writing person – and it is this type of mental state that is most interesting for a researcher trying to reconstruct the psychodynamic properties of cultural practices.

Of the numerous types of subscriptions, the most interesting from the point of view presented here are those, in which the scribes refer to the physical effort and fatigue involved in the activity of writing or rather rewriting.²⁰⁷ I would like to stress that this is only one of many types of

207 It is doubtful whether writing and rewriting are psychodynamically the same thing. The problem is that, as I have earlier observed, we do not have access to ancient autographs (not only because such ancient manuscripts have not survived, but also because ancient authors often dictated their texts and did not write them down personally) nor to most medieval autographs. Therefore, we do not know whether and what subscription records were placed in them by the authors, and in the ancient and medieval texts any information about the author's activities and their psychophysiological states appears extremely rarely. It is known that medieval authors were often the first copyists of their own texts. However, in Lucianus (*Remarks addressed to an illiterate book-fancier*, chapter 4) we find information that Demosthenes prescribed the Thucydides' *Peloponnesian War* eight times at a young age in order to learn it by heart. If this is a fact and not an element of the great orator's myth, this fact would be a good contribution to the topic addressed in the first chapter of this book. In the works of ancient erudites (e.g. Aulus Gellius), there are references to autographs of various classical works, but already then they have a flavor of bibliophilic legends.

subscriptions, and it cannot be said with certainty that it represents a situation that is commonplace, but its themes are repeated with a puzzling regularity. Let us therefore look at some of these entries.²⁰⁸

Laus tibi sit Christe, quoniam liber explicit iste.
 [Hail to you, Christ, for this book has been completed.]
 Laus tibi sit Christe, finite [sic] est liber iste.
 Laus tibi sit Christe, quia finis advenit iste.
 Laus tibi sit Christe, liber et labor explicit iste.
 Finis adest libro, sit laus et gloria Christo.
 Est finis libri, sed stabit gratia Christi.
 Finito libro referamus gratias Christo.
 Finito libro reddatur gratia Christo.

Here is the first of the most common types of subscriptions that relate to the hardship of a scribe – the scribe thanks Christ for having finished his work. One might think that this is not so much about gratitude for the end of physical labor as about a symbolic culmination of the work itself (as can be seen in other entries which compare the completion of a book to the calling of a ship to a safe haven), nevertheless many subscriptions are played with the word “liber/labor,” and the word “labor” quite clearly indicates the concreteness of the physical labor done on real resistive material. In any case, we also find more outspoken entries, for example:

Laus tibi sit, Christe, quoniam liber explicit iste,
 Detur scriptori merces equata labori.

If a scribe postulates a material reward for his work (and one that will match it), it means that he treats it not as a symbolic and glorious effort undertaken for the glory of God, but as an exhausting duty for which he expects concrete gratification. In such entries, the activity of writing appears to be a task that has little to do with the ideal of a pious monk's work.

208 The examples are taken from Thorndike, Wattenbach and Mejer, unless otherwise stated. Specific attributions are omitted. The manuscripts come mainly from the twelfth to the fifteenth century, but some even from the sixth or the seventh century. Each of the quoted entries appears many times, in different manuscripts.

However, should this argument also not seem convincing, another group of entries could be cited, based on the “three fingers” motive.

Alba manus cessa, quia digiti michi fessa.
 Tres digiti scribunt, vix cetera membra quiescunt,
 Dextere scriptoris careat gravitate doloris.
 [The white hand stopped because my fingers got tired.
 Three fingers are writing, the rest of the body is not resting much,
 Let the right hand of the writer not experience the burden of pain.]
 Qui nescit scribere, nullum putat esse laborem.
 Tres digiti scribunt, totum corpusque laborat.
 [Whoever can't write thinks it's not difficult.
 Three fingers write and the whole body gets a lot of effort.]
 Sicut navigantibus proximus est portus,
 sic et scriptori nomissimus [sic] versus. Tris
 digiti scribunt et totum corpus laborat.
 [What's the nearest haven for a sailor,
 that's the last verse for a writer. Three
 fingers are writing, and the whole body is working.]
 Tres digiti scribunt, totum corpusque laborat.
 Scribere qui nescit, nullum putat esse laborem.
 Dum digiti scribunt vix cetera membra quiescunt.

Reading such phrases (and scholars have gathered so many of them that one could juxtapose a large but rather monotonous anthology), one can no longer have any doubt that their authors are primarily concerned with emphasizing the physical effort, fatigue, and inconvenience associated with the writing process. However, knowing the differences between the forms of consciousness of medieval people and people living in later epochs, and wanting to avoid the presentistic error, we should now ask the question – are they expressions or formulas? Do these sentences express the actual experience of specific people, or are they just customary records, similar to colloquial formulas taken from the language of religion or to today's courtesy phrases?

This question may seem important, but in fact it is itself a testimony to presentism, since it presupposes the existence in the minds of people of the Middle Ages a form of subjectivity specific to the modern era. This is the only thing that allows us to distinguish the linguistic expression “authentic” with regard to the experience from the “conventional” empty phrases in which modern literary languages abound. The

subscriptions quoted here are both “formulas” and “expressions,” or rather they are neither, because in the epochs in which they were created there was no such concept of “self” in Western culture that would correspond to modern standards. The very distinction between “authentic” verbal testimony and “non-authentic” convention presupposes that there is a distinct, autonomous subjectivity or subjectivity of the speaker/writer, which enables him/her to be an independent gauge of his/her own existence.

Now, let us take a look at some of the longer notes Wattenbach is quoting. The scribe of the codex of Visigothic laws in the eighth century wrote in the manuscript:

O beatissime lector, lava manus tuas et sic librum adprehende, leniter folia turna, longe a littera digito pone. Quia qui nescit scribere, putat hoc esse nullum laborem. O quam gravis est scriptura: oculos gravat, renes frangit, simul et omnia membra contristat. Tria digita scribunt, totus corpus laborat. Quia sicut nauta desiderat venire ad proprium portum, ita et scriptor ad ultimum versum. Orate pro Martirio indignum sacerdotem vel scriptorem...

O, most blessed reader, wash your hands and only then take this book, slowly turn the pages, keep your fingers away from the letters. As one who cannot write thinks it is an easy work. Oh, how hard it is to write: the eyes are weary and the kidneys feel pressure, and all the body parts are tired. Three fingers write, the whole body works. For as a sailor wants to reach the nearest port, so does the writer – to reach the last verse. Pray for Martirius, an unworthy priest and scribe...

At the same time, the scribe Warembert wrote in Corvey very similarly:

Amice qui legis, retro digitis teneas, ne subito litteras deleas, quia ille homo qui nescit scribere, nullum se putat habere laborem, quia sicut navigantibus dulcis est portus, ita scriptori novissimus versus. Calamus tribus digitis continetur, totum corpus laborat. Deo gratias. Ego in dei nomine Vuarembertus scripsi.

My friend who reads it, keep your fingers away so that you don't rub the letters quickly, as a man who can't write thinks it's an easy work, and as for the sailors the port is nice, so for the writer is the last verse. The pen fits in three fingers, the whole body works. Praise the Lord. I, Warembert, wrote in God's name.

With similar records are filled many pages of Wattenbach's monography, and it would be difficult to consider that they are merely customary formulas, not having any coverage in the sensually experienced reality. We can also add a colophone from the manuscript *Silos Beatus* (12th century):

If you do not know what writing is, you may think it is not especially difficult... Let me tell you that it is an arduous task: it destroys your eyesight, bends your spine, squeezes your stomach and your sides, pinches your lower back, and makes your whole body ache... Like the sailor arriving at the port, so the writer rejoices on arriving at the last line. Deo gratias semper.²⁰⁹

Moreover, there are independent testimonies with identical content in the medieval Greek colophones, which can be seen as further evidence of the intertwining of “formality” and “authenticity” (and indeed the pointlessness of distinguishing them). Here is one of many examples (partially reconstructed):

me katagelate tes graphes [...]
 tou ka[τ]agelontos to skelo[s] [...]
 [hos hede]os anepausa tous tre[is daktylos]
 [don't mock the writing...
 the leg of a mocker...
 how nice to give three fingers a rest]

So let us repeat once again: the question “formula or expression” can be answered in this case by “formula and expression.” Just as in oral culture the style of the form with its repetitive phrases was used in each performance of a song to express or produce an individual and unique expression of experience, so in medieval manuscript culture based on a rather narrow (from our point of view) collection of texts and ways of verbal expression of reality, formulas and expressions had to reflect in some way the content of real experience. The dispute over their existential (non)authenticity is therefore rather barren.

The medieval motive of the bodily hardship of writing returns today, in the poststructural inquiries about the essence of the text and reading, and more specifically – in those moments when the relationship between the body and the text is mentioned. So here is Michał Paweł Markowski writing in one of the essays that make up the volume of *Występek* [*Excess*] and consist mainly of quotations and cryptic quotations; this is how he writes with someone else's writing:

209 I quote this translation without the original version according to a popular study: Georges Jean, *Writing. The story of alphabets and scripts*, tr. Jenny Oates, H.N. Abrams, New York 1992, p. 83.

One of the scribes monks at Saint-Aignan Abbey writes a warning to the manuscript reader: "Watch your fingers! Keep them away from my writing! You don't know what it means to write. It's a miserable fate: it bends your neck, eclipses your eyes, squeezes your belly and ribs. So pray, my brother, for poor Raoul, the servant of God who rewrote the whole book with his hand in the abbey of Saint-Aignan." Another one still warns the reader so: "My friend reader, take your fingers away, don't you dare touch the writing on these pages; a man who is not skilled in calligraphy does not even suspect the evil we do to ourselves. Just as the haven is nice to the sailor's heart, so the last line is sweet to the writer. Although three fingers hold the stilus, the whole body suffers and works."²¹⁰

True to his initial assumption, Markowski does not reveal the provenance of the tissues of his text: we do not find out where these quotations come from. However, they are very similar to those quoted by Wattenbach.²¹¹ But even if Markowski rewrote them from some French apocryphist, a medieval Quignard, they still echo the complaints of exhausted scribes many centuries ago. The motif "tres digiti scribunt" is therefore extremely durable.

210 Michał Paweł Markowski, *Występek. Eseje o pisaniu i czytaniu* [Excess. *Essays on Writing and Reading*], Warszawa 2001, pp. 46–47.

211 One of these records can also be found in Léo Moulin's popular book *Vie quotidienne des religieux au Moyen âge (Xe–XVe siècle)* [*The Everyday Life of Monks in the Middle Ages (5th–15th Century)*], Hachette, Paris 1978. It sounds: "Watch out for your fingers! Do not touch my writing with them! You don't even know what it means to write! It is a terrible struggle: it bends your back, dims your eyesight, causes pain in your stomach and ribs... Pray for poor Raul..." (p. 196). The French author does not mention the source either. Instead, he draws attention to the "fastidium" or tiring boredom of the copyist's work and cites another entry (unfortunately, also without reference, only with the remark that it comes from the times of Charlemagne): "Since I have no consolation in such an arduous work of a copyist, I address to You, Lord, the following prayer: may my hand, which shapes the letters, may my eyes, which look into the shape of the words, not prevent my heart from penetrating the mysteries of dogmas; may my heart be diligently vigilant inside, and outside, may the work of my hand never cease" (p. 197). This quotation is an excellent example of the separation that took place in the consciousness of the scribe between the physical work of the writer and the symbolic content of what is inscribed. This distinction will play an important role in the subsequent discussion here.

The main question that can be asked now is: where did this effort come from? Why does a medieval European scribe complain so often about the torment of writing?

Let us start with an issue on the background of which the question itself seems perhaps to be more relevant. At a time when monasteries in Europe were full of tired scribes, in China and Japan calligraphers wrote treatises on the art of drawing ideograms. In their recommendations and theoretical reflections on the art of calligraphy, statements about the pleasure that this art is for its adepts are repeated time and again. We have seen how scribes complain about the inconveniences and pains associated with their writing activities. Some of the descriptions are almost clinically accurate in terms of physical sensations – you count the sore back, stiff neck, numb fingers, cramped guts. It is hard not to be surprised when comparing these testimonies with the testimonies of the sensual pleasure that the art of Chinese and Japanese calligraphy was associated with. In Makoto Ueda's twentieth-century essay on the art of calligraphy,²¹² we find that Yūshō, an excellent Japanese calligrapher from the seventeenth century, compares the written character to a harmoniously constructed, ideal human silhouette, and, on the other side of the spectrum, juxtaposes pathetic calligraphy with a dead human body or dismembered corpse. According to him, characters can be animated, dead, or sick – it depends on the ability of the calligrapher who creates them, and every calligraphy student should strive to create living characters.

The seventeenth-century theoretician, quoted by Ueda, formulated a set of principles that should guide calligraphy. The following principles are intended for beginners:

1. Keep your body upright and your soul righteous as you take up the brush.
2. Write with a calm mind carefully studying the forms of characters.
3. Be gentle in the use of the brush.
4. Put flesh to the characters.

212 Makoto Ueda, "Aesthetic Elements of the Line," in his: *Literary and Art Theories in Japan*, Cleveland 1967, pp. 173–185 (all quotations from this edition).

5. Let the characters observe the prescribed form.
6. Pay close attention to the soul of the brush and of the characters.
7. Consider the weight of each character.
8. Pay attention to the rhythm of the brush.
9. Thoroughly understand how to handle the brush.
10. Give heed to the way of connecting one character with another. (p. 174–175)

Of the ten rules for advanced, let us quote three:

1. Write with force, while retaining gentleness in the brushwork.
2. Consider the length of the proposed phrase in proportion to the size of your paper.
3. Create a harmony among the ink, the brush, and the paper. (p. 175)

Already from these random examples there emerges a completely different approach to the writing process from the European one. The shape of the ideogram should resemble a human silhouette in the eyes of a calligrapher. In Europe, the human figure was also inscribed in letter patterns. The point is that this has only been done since the fifteenth century, i.e. since the print appeared.²¹³ At the same time, however, it is vain to search medieval literature for recommendations for scribes, which would at least in part correspond to Japanese rules – i.e. they would contain guidelines as to the position of the body to be occupied when starting to write (let us remember that throughout the Middle Ages in Europe scribes wrote in such positions where a European of the typographic and even less so electrographic era would not be able to write a single sentence), or as to the symbolic proportions of drawn letters or the spirituality contained in them. It is clear that the writing process in both cultural circles was governed by completely different factors and based on different configurations or cultural patterns. Why were such recommendations not adopted in the European Middle Ages? Why was there no treaty on the art of drawing letters?

It is worth noting at this point that on the European continent “calligraphy” – the kind that roughly corresponds to Chinese and

213 I mean regular writing of the proportions of the human silhouette into the proportion of a letter. Deformed or caricatured human figures woven into initials are often seen in medieval manuscripts, but these are not representations whose creators would be guided by the principles of regularity of the “human shape – letter” ratio.

Japanese – also appears only after printing. It is only after mechanical massification of process of producing the texts that handwriters can focus more on the activity of drawing the letters and their shape. The blossoming of Renaissance and Baroque calligraphy resembles the emergence of impressionist painting, which only developed after photography when painters were freed from the obligation of *mimesis*. Scripture freed human memory. Printing freed the hand of a scribe. But what had it been tied up with before?

Ueda in his essay informs us that:

Calligraphy and painting, both having the elements of space art, share the same principle of visual balance and harmony. [...] The beauty of balance is after all the beauty of nature. A character drawn by a calligrapher should in its abstract way have the balance and harmony of nature. [...] Another element of balance is the harmony of written characters with the paper: the size of characters and the length of lines should match well the given space. Furthermore, there should be harmony among the ink, the brush, and the paper: a certain kind of paper requires a certain kind of ink, of brush, and so forth. [...] All these are the cases of visual harmony common to all pictorial arts, and the calligrapher must observe them, too. (pp. 179–180)

Already in these few sentences the basis for cultural differences between Eastern calligraphy and Western writing is outlined. Calligraphy practiced in ideographic writing is a kind of synthesis of arts, which is due to the nature of this writing. In alphabetical writing, the pictographic features were obliterated at the very beginning of its evolution, while Chinese and Japanese ideograms never lost their connection with the images of objects they originally symbolized, and calligraphers was well aware of this. The word “synthesis” is, moreover, misleading in this case, as it suggests a prior separation of arts, in this case of writing and painting, while on the ground of eastern calligraphy such a separation never occurred. This calligraphy is halfway between literature and painting,²¹⁴ and its practice remains an

214 See, for example: S. N. Sokolov-Remizov, *Literatura-kalligrafija-živopis'*. *K probleme sinteza iskusstv v chudožestvennoj kulture Dal'nevo Vostoka* [*Literature-calligraphy-painting. Towards the Problem of Synthese of the Arts in the artistic Culture of Far East*], Moskva 1985. Calligraphy as an independent field of creativity concerns only single ideograms or short texts, especially poetic ones. Writing long continuous texts (yearbooks, encyclopedias,

aesthetic and ethical activity. In medieval Europe this type of synthesis did not occur. This is the first reason for the torments of the copyists.

Reading medieval subscriptions, one can also draw the conclusion that, for the Europeans of that time, the activity of writing was often subordinate to what was written. Scribes complain about their efforts, but they also write down these remarks:

Finito libro scriptor saltat pede leto.

[When the scribe has finished the book, he can get some fun.]

Finis adest vere, pretium vult scriptor habere.

[At long last that's end, the scribe wants to be paid.]

Scriptoris dona sit bos et pulchra puella.

[The scribe should be given an ox and a pretty girl.]

Scribere cum penna docuit me pulchra puella.

[A pretty girl taught me to write with a pen.]

O pulchra puella, si essem in tua cella.

[Oh, pretty girl, if I were in your cell.]

Hic nihil deficit nisi ea et pulchra puella.

[There's nothing missing here but a pretty girl.]

Scriptor scripsisset melius si potuisset.

[The scribe would write better if he could.]

Scriptori pro poena detur pulchra puella.

[Scribe is to be given a pretty girl for his efforts.]

Detur pro penna scriptori pulchra puella.

[In exchange for a scribe's feather, he'll get a pretty girl.]

Finis adest vere, scriptor vult potum habere.

[At long last that's end, the scribe wants a drink.]

Explicit, expliciat, ludere scriptor eat.

[Finished at once, the scribe goes to have fun.]

Heu! male finivi, quia non bene scribere scivi.

[Eh, I ended up badly, because I didn't learn how to write gladly.]

Istum scriptorem, bone deus, fac meliorem.

[That scribe, good God, make better one.]

O bone, non ride; vis melius scribere? Scribe.

[Don't laugh, buddy. Can you do better? Write, but not muddy.]

Lauda scriptorem donec vides meliorem.

[Praise the scribe until you can't better write.]

historiographical, philosophical, and medical works) did not fall into the category of calligraphy. But even with this reservation, the basic cultural difference between the work of a calligrapher and a scribe remains valid.

Tho moy rim, kuffel a piwo w nym.
 [That's my rhyme, a beer and wine.]
 Dum bibo pywo stat michi kolano krzywo.
 [Till I drink beer, I write queer.]

Such entries never appeared in early medieval manuscripts. It is enough to think how different they are from the atmosphere of the Vivarium of Cassiodorus, Monte Cassino monastery shortly after the formulation of the Benedict Rule, or the Iro-Scottish scriptories. But more than five hundred years have passed since then – and the ethos of the scribe has apparently undergone far-reaching changes. Why has it happened?

Of course, this is largely because in the late Middle Ages copying of texts ceased to be an activity reserved for clergy. Probably most of the entries quoted here come from lay people, craftsmen like woodcarvers or shoemakers, who no longer had any formal reason to tie their work to some higher purpose, as defined by the monastic rule, principles of faith or special historical circumstances. But even if they did, why did they not treat their work as “pure art”? Why was the activity of writing so culturally degraded that even its performers disregarded it? And why was the profession of a scribe strictly separated from the profession of a miniaturist or illuminator, or even a rubricator, who was concerned with what we would call a layout today? But why, in turn, was it that even in the days of the greatness of the scribes-monks there was no reflection on the issues that permeated the problem of writing in Asia so strongly? There are many comments about the discipline of monks in Benedict's rule, but contrary to popular opinion, there is not a single word in it about writing, and there are only two mentions about reading, from which we learn that a monk should borrow one book from monastic resources during Lent and read it from beginning to end. In another place, the patron saint of Europe mentions the writing tablets, but only in the context of the consideration of whether the monk can have anything to own – the conclusion is negative. There is not a single word there, let us repeat, about the activity of writing as such.

If we collect all these questions and threads, we find that the possible answer is in the alphabet.

The alphabetical writing has been separated from the image of things discussed in the languages written in it. Theorists of Western writing

stressed this independence as one of the main advantages of the alphabet over other writing systems. They also showed how much this decontextualization has influenced the thinking of Europeans and their culture. However, they did not point out that alphabetization also influenced the psychodynamics of the writing process. Writing the letters is a completely autotelic activity – it has no connection either with imitating external reality or symbolizing it. A man who writes letters does not feel any connection between his activity and the outside world. These relationships exist in relation to the content of what is written, but not in relation to the signs of writing themselves, and thus to the activity of their production. For this reason, the scribe was not an illuminator. This is also why he did not link the shape of the characters he drew with their content, and the actions of their drawing with the ideas contained in the text being drawn up. Finally, it is for this reason that the awareness of possible connections between the writer's actions and his physiological states has not developed in the culture of alphabetical writing. The suffering of the copyist was partly due to the fact that he wrote letters, not ideograms.

The degree of complication of the writing systems of China and Japan prevented their widespread proliferation in society and made writing an elite skill reserved for a narrow group of specialists, which resulted in the functioning of societies and states. This fact was indicated by the first media theorists as a flaw in comparison to alphabetical writing.²¹⁵ However, they

215 In the course of internal criticism of the orality/literacy theory, this thesis was considered a manifestation of eurocentrism. This type of criticism was promoted especially by Brian Street, whose views are referred to by Grzegorz Godlewski in his book *Słowo – pismo – sztuka słowa. Perspektywy antropologiczne* [Word – writing – art of word. *The anthropological perspectives*], Warszawa 2008. To the remarks placed there, one can add that the optics of “Eurocentric” researchers, who considered the alphabet to be a better tool than ideographic writing, were shaped primarily by premises based on thinking in sociological categories. Hence, they were unable to see other than social ways of functioning of writing systems. However, it should be stressed that, in his more recent publications, Jack Goody, one of the founders of the theory of writing, revoked some of his early strong “alphabetocentric” theses.

overlooked another fact – that Chinese and Japanese writings remained halfway between word and image, so that they could combine what in Europe is called literature with what in Europe is called painting. Summing up his reflections on the individualism of calligraphy in the process of drawing lines, Makoto Ueda writes, “in calligraphy and painting, the works of Prince Son’en and Sesshū are bony, while those of Shōkadō and Kanō Tan’yū are fleshy. One cannot say which is better” (pp. 182–183). Here is another difference. In Japanese calligraphy, there are no two masters who would write in the same way. In Europe, all scribes have been using the same type of script for centuries, be it the uncial, Visigothic, or insular script. The scribes’ lack of individualism was explained by the influence of religion, but this was mainly because they explained it in such a way to themselves. It is possible that this lack was also related to the overwhelming annoyance of the writing process – both of which resulted from the separation of the word from the image and the writing process from the sensual experience of reality, a separation whose final effect will be subscriptions with compensatory fantasies about pretty girls.

There is no doubt that “palaeography of calligraphy” is a contradiction, at least if it were practiced according to the European rules. The point is that palaeography hinges on the assumption that there are certain unchanging rules for the evolution of handwriting – and with regard to the European Middle Ages this assumption is entirely correct, since tired scribes obediently replicate the inherited type of writing. But in Japan:

The calligrapher, then, is required to show his expert skill and delicate sensitivity in every movement of his brush. [...] The artist must have complete control over his instruments. Those are, however, the most basic principles of the art of calligraphy. A master calligrapher would go beyond them by pouring his emotion into his work. Calligraphy is not only representative but also an expressive art [...]. “It is commendable for a beginner to be observant of the rules,” Yūshō says. “It is bad, however, for an advanced student to be enslaved by them.” A calligrapher blindly clinging to the rules may be compared to a scholar tied to obsolete words [...]. He must, Yūshō says, “follow the rules and yet depart from them.” [...] A spontaneous expression of emotion, then, is to be recommended for a calligrapher. (Ueda, pp. 183–184)

A European can express him- or herself in what he or she writes (although this statement does not apply much to pre-modern Europeans). A Japanese can express him- or herself in what he or she writes and in how he or

she writes.²¹⁶ This difference is also due to differences between alphabetical and ideographic writing. There is a serious somatic-mental difference between these writings, or more precisely, between the processes of their creation, which I try to reflect in these inquiries. Maybe calligraphy is a synthesis of “world” and “speech”? Maybe it is both a word about the world and an image of the world? An analysis of experience, its particular textualization – and experience itself? In this arrangement, the handwriting of medieval Europeans would be on only one side of these alternatives.

Without going into such a general argument, one can point out that, for Japanese calligraphy theorists, writing was a correlate of the writer's internal balance. Summing up his deliberations, Ueda states:

Only those who are pure at heart can produce a good work of calligraphy. [...] Calligraphic disciplines are ultimately spiritual and moral. The art of calligraphy becomes a “Way,” that is, a way to ethical and religious perfection. (pp. 184–185)

So writing is for a calligrapher almost what the experience of Ideas for Plato is. Let us repeat: there are no testimonies in Europe that would indicate the possibility of achieving this kind of experience by writing. Through the written record – yes. But not by writing. For a European, writing is a work, not a creation and definitely not a means of inner spiritual improvement. Creativity is what is written. An instruction of perfection is the finished text, not the practice of writing it. And it is difficult to avoid the conclusion that the cause of this state of affairs is also the opposition of alphabetical and ideographic writing.

In the history of Europe, there are only a few cases in which the activity of writing itself gains a high symbolic rank, but even then it is a matter of strict ethics rather than existential aesthetics. Members and clients of

216 It should be noted, by the way, that the European field called graphology does not apply to eastern calligraphy, despite its individual diversity. Like palaeography, graphology has been shaped in the world of alphabetical writing, so for the same reasons it is inadequate for the world of ideograms. The lines drawn by a calligrapher are not intended to reflect his innate psychic characteristics, but are intended to provide a picture of his internal development, which is an intentionally designed process. Moreover, the graphologist would also be helpless toward the calligraphy of a modern European, because the very essence of graphology lies in the conviction that writing reflects the personality of the writer in a way that is beyond his control.

the Nicomachii family, who rewrote Livy at the end of the existence of the Empire, did not, as far as we know, complain about the hardships of writing, let alone write frivolous jokes in their copies. Their subscriptions, retained in copies rewritten later, which they subscribed the ancient history of their dying world rewritten by themselves, are marked with sad seriousness. It was these records that Otto Jahn examined at the beginning of scientific reflection on subscriptions. They may have attracted the scientist's attention precisely because they were marked by this mark of the individual situation of the writers, which was lacking both before and afterwards.

In its contrast to *vita activa* and *vita contemplativa*, Christianity also influenced the physiology of writing. The religious rules mentioned above leave no doubt – monks were supposed to write for God's glory, not for sensual pleasure and not to enrich their own mental interior. But, paradoxically enough, in the early stages of medieval literacy we find premises that are probably the closest to the principles of the East. Here is Cassiodorus announcing in *Institutiones*:

Still, I have to admit that of all the tasks that can be achieved among you by physical labour, what pleases me most (not perhaps unjustifiably) is the work of the scribes if they write correctly. By repeated reading through Scripture they instruct their minds and by writing they spread the beneficial teachings of the Lord far and wide. A blessed purpose, a praiseworthy zeal, to preach to men with the hand, to set tongues free with one's fingers and in silence to give mankind salvation and to fight with pen and ink against the unlawful snares of the devil. For Satan receives as many wounds as the scribe writes words of the Lord. (*Institutiones*, 1, 30, 1)²¹⁷

And St. Jerome in 412 AD recommends to the young monk Rustic:

Twist lines too for catching fish, and copy out manuscripts, so that your hand may earn you food and your soul be satisfied with reading. (*Epistulae*, 125, 11)²¹⁸

217 Cassiodorus, *Institutions of Divine and Secular Learning and On the Soul*, translated with notes by James W. Halporn and introduction by Mark Vessey, Liverpool University Press 2004, p. 163.

218 *Select Letters of St. Jerome* with an English translation by F. A. Wright, London, William Heinemann Ltd, New York, G. P. Putnam's Sons MCMXXXIII (Loeb Classical Library 262), p. 419.

In these directives, formulated by authors who have enjoyed great authority, writing activities are associated with the intellectual development of the people who carry them out. The very process of writing is supposed to become – by means of an ethical approach – an element of the process of improving the mind of the writers. However, it should be noted that the recommendations of Jerome and Cassiodorus were not popularized among medieval scribes, not necessarily because of the spiritual deficiencies of the latter, but perhaps precisely because the alphabetical writing medium was not conducive to cultivating these aspects of the writing process.²¹⁹

When dealing with the psychodynamics of medieval writing, one has to consider the fact that sometimes scribes wrote not on the basis of a copy as they saw it with their eyes, but they wrote “by ear” – the text was dictated to them. This is the reason for the huge discrepancies in the graphic representation of names found in the Middle Ages and for some mistakes in the transmission of texts, apparently caused by a wrong listening. This form

219 In the mature and late Middle Ages, there are several heralds of the modern process of “individuation through writing” – but this process will not become stronger until the sixteenth century, to become one of the main elements in the construction of the identity of modern man over the next four centuries. Writers, diarists, thinkers – all these people in modern Europe will explain themselves and the world to themselves and the world by means of written records. And then, in the age of print, when handwriting is no longer a duty to transmit culture, but becomes an activity of creating culture – complaints about its inconvenience cease. It is possible that modern writing “self,” writing with “self,” as opposed to the medieval “rewriting of culture,” was not a boring activity for its performers precisely because of this change in its cultural role. Whether this thesis can be defended and whether it can be linked to psychodynamic processes are questions that should be put aside for another text. Perhaps, it can be put into simpler terms – writing a text is not tiring when the writer writes it as an independent creator aware of his authorship, making an intentional expression of his autonomous self. In any case, it can be assumed that the transition from handwriting to printing had no less significant consequences for Western culture in terms of creating and experiencing culture than the transition from speech to writing – something that media theorists, usually focused on only one of these transitions, do not see so far. The intuitions at these issues thrown by McLuhan in his texts were ignored by most of his successors.

of text copying was mainly used in the early Middle Ages – as a residuum of orality and at the same time as a practical way of overcoming the deficit of texts. It is not very relevant to the intercultural issues discussed here, but it undoubtedly changes the image of psychodynamics of writing within Western culture, because writing according to the “ear-hand” model is clearly different from “eye-hand” writing. However, it is an issue of psychophysiology rather than media theory and history, so I cannot deal with it more broadly here. Moreover, it seems that regardless of whether the scribes read or heard the texts being rewritten, they were just as tired upon them, as evidenced by another variation on a subject we already know: “Tres digiti scribunt, duo oculi vident, una lingua loquitur, totum corpus laborat.”²²⁰

It should also be noted that, unlike Eastern calligraphy, European scribes (especially early medieval ones) often did not understand the texts they were transcribing, especially works of antiquity, specialist treatises, for example in the field of medicine or natural sciences (more generally – from the area of *Fachliteratur* analyzed in this book). This is evidenced by certain types of errors, consisting in such a distortion of the text that some phrases or sentences lose their meaning and grammatical structure or even become series of meaningless letters or syllables. A situation in which the writer does not understand the meaning nor sense of the text he is writing is probably an extreme manifestation of the breaking of the link between writing and the written, between the very activity, the writing practice and the cultural and existential function of writing. Writing becomes a culturally alienated work.

The writing of medieval Europe is written by three fingers, not by the body. The whole body of the writer is involved in writing ideograms. The writing of Europeans is therefore non-somatic, while Eastern calligraphy is not only a synthesis of arts (from the European point of view) but also a synthesis of sensual experiences. Neither the alphabet, which detaches

220 More on this subject: Paul Saenger, *Space Between Words. The Origins of Silent Reading*, Stanford 1997, pp. 48–51, with subscription cited.

concepts from objects, nor the resulting Aristotelian metaphysics, which detaches the mind from sensual experience, work here. Alphabetical writing in various ways separates the writer from the experience of the surrounding reality in the process of its textualization. This separation takes place not only on the level of philosophy and science written in this writing, which was noticed a long time ago. It occurs – if the reasoning presented here is correct – also at the level of the act of writing itself, the writing practice. Once again, it turns out how strongly the so-called spirituality is intertwined with physiology in human condition.

Could such statements be made in relation to other writing systems? How and what could a Sumerian scribe feel when pressing cuneiforms? Or an Egyptian, painting holy signs? Or a Maya, drawing what we call *Codex Dresdensis*? We will never answer these questions. And with the progressive disappearance of the practice of handwriting as we see today, in the age of keyboards, perhaps writing by Europeans will soon join the museum of dead cultural activities.

Bibliography of cited works

- Aelian, *Historical Miscellany*, edited and translated by N. G. Wilson, Harvard University Press, Cambridge (Massachusetts), London 1997 (Loeb Classical Library 486).
- Alexandros [Aphrodisiensis], *In Aristotelis Analyticorum priorum libri I commentarium*, edidit Maximilianus Wallies, Berolini 1883 (*Commentaria in Aristotelem Graeca*, voluminis II pars I).
- Ammonius, *In Aristotelis de interpretatione commentarius*, edidit Adolfus Busse, Berolini 1887 (*Commentaria in Aristotelem Graeca*, voluminis IV pars V).
- Anthony David W., *The Horse, the Wheel and Language. How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World*, Princeton Univ. Press 2007.
- Archimedes, *The Sandreckoner*, translated and commented by Ilan Vardi <https://www.lix.polytechnique.fr/Labo/Ilan.Vardi/archimedes.html>.
- Archimedis Opera omnia cum commentariis Eutocii*. E codice Florentino recensuit, latine vertit notisque illustravit Johann Ludvig Heiberg, vols 1–3, Lipsiae in aedibus Teubneri 1880–1881.
- Aristotle, *The Metaphysics, Books I–IX*, with an English translation by Hugh Tredennick, London, William Heinemann Ltd, New York, G. P. Putnam's Sons MCMXXXIII (Loeb Classical Library 271).
- Aristotle's Metaphysics. A Revised Text with Introduction and Commentary* by William David Ross, vols 1–2, Oxford 1924.
- Arnaud Claude, *Chamfort. A Biography*, translated by D. Dusinberre, Chicago-London 1992.
- Arystoteles, *Ta meta ta physika – Metaphysica – Metafizyka*, vol. 1, the Polish text was prepared by M. A. Krąpiec and A. Maryniarczyk on the basis of Tadeusz Żeleźnik's translation, Lublin 1996 [Greek-Latin-Polish trilingual edition].
- Athenaeus, *The Deipnosophists*, with an English translation by Charles Burton Gulick, in seven volumes, vol. IV, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press MCXXX (Loeb Classical Library 235).

- Athenaeus, *The Deipnosophists*, with an English translation by Charles Burton Gulick, in seven volumes, vol. V, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press MCXXXIII (Loeb Classical Library 274).
- Athenaeus, *The Deipnosophists*, with an English translation by Charles Burton Gulick, in seven volumes, vol. VI, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press MCML (Loeb Classical Library 327).
- Athenaeus, *The Learned Banqueters, Books III.106e-V*, edited and translated by S. Douglas Olson, Harvard University Press, Cambridge (Massachusetts), London 2006 (Loeb Classical Library 208).
- Audubon John James, *Ornithological biography, or An account of the habits of the birds of the United States of America; accompanied by descriptions of the objects represented in the work entitled "The Birds of America", and interspersed with delineations of American scenery and manners*, vols I–V, Edinburgh 1831–1849.
- Axer Jerzy, "Tribunal-Stage-Arena: Modelling of the Communication Situation in M. Tullius Cicero's Judicial Speeches," in: *Rhetorica. A Journal of the History of Rhetoric*, vol. VII, no. 4, 1989, pp. 299–311.
- Bagordo Antonio, *Die antiken Traktate über das Drama*, Teubner, Leipzig 1998.
- Baltussen Han, *Theophrastus against the Presocratics and Plato. Peripatetic Dialectic in 'De sensibus'*, Brill, New York-Boston-Köln 2000.
- Barnes Jonathan (ed.), *The Cambridge Companion to Aristotle*, Cambridge 1995.
- Berschin Walter, *Greek Letters and the Latin Middle Ages. From Jerome to Nicholas of Cusa*, tr. J. C. Frakes, Catholic University Press, Washington 1988.
- Bing Peter, "The Unruly Tongue. Philitas of Cos as Scholar and Poet," in his: *The Scroll and the Marble. Studies in Reading and Reception in Hellenistic Poetry*, Ann Arbor 2009, pp. 11–32.
- Bodnár István M., *Oenopides of Chius: A survey of the modern literature with a collection of the ancient testimonia*, Max Planck Institute for the History of Science, Preprint 327, 2007 [online publication].

- Boethius Anicius Manlius Severinus, *Commentarii in librum Aristotelis Peri hermeneias*, recensuit Carolus Meiser, pars I–II, Lipsiae in aedibus Teubneri 1877–1880.
- Borges Jorge Luis, “The Analytical Language of John Wilkins,” in his: *Other Inquisitions 1937–1952*, translated by Ruth L. C. Simms, Univ. of Texas Press, Austin and London 1965.
- Callimachus and Lycophron with an English translation by A. W. Mair, London, William Heinemann, New York, G. P. Putnam’s Sons MCMXXI (Loeb Classical Library 129).
- Cameron Alan, “Thin Gentlemen,” in his: *Callimachus and His Critics*, Princeton 1995, pp. 488–493.
- Cassiodorus, *Institutions of Divine and Secular Learning and On the Soul*, translated with notes by James W. Halporn and Introduction by Mark Vessey, Liverpool University Press 2004.
- Cherniss Harold F., *Aristotle’s Criticism of Plato and the Academy*, Baltimore 1944.
- Chwistek Leon, “Tragedia werbalnej metafizyki” [The Tragedy of Verbal Metaphysics], *Kwartalnik Filozoficzny*, no. 10 (1/1932), pp. 46–76; reprint in his: *Wybór pism estetycznych [Selected Aesthetical Writings]*, Wyd. Universitas, Kraków 2004.
- Cicero in twenty-eight volumes, vol. III, *De Oratore in two volumes*, pt. I, *Books I, II*, with an English translation by E. W. Sutton, completed, with an Introduction, by H. Rackham, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press (Loeb Classical Library 348) MCMLXVII.
- Cicero in twenty-eight volumes, vol. XIX, *De Natura Deorum, Academica*, with an English translation by H. Rackham, M.A., Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd (Loeb Classical Library 268), MCMLXVII.
- Cicero, *De finibus bonorum et malorum*, with an English translation by H. Rackham, London, William Heinemann, New York, The MacMillan Co. (Loeb Classical Library 40) MCMXIV.
- Cicero, *De inventione, De optimo genere oratorum, Topica*, with an English translation by H. M. Hubbell, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd (Loeb Classical Library 386), MCMXLIX.

- Cicero[-Pseudo], *Ad C. Herennium De Ratione Dicendi (Rhetorica Ad Herennium)* with an English translation by Harry Caplan, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press (Loeb Classical Library 403) MCMLXIV.
- Clanchy M. T., *From Memory to Written Record. England 1066–1307*, 2nd ed., Blackwell 1993.
- Connerton Paul, *How Societies Remember*, Cambridge 1989.
- Cornford Francis M., *The Unwritten Philosophy and Other Essays*, Cambridge 1950.
- Dąmbska Izydora, *Wprowadzenie do starożytnej semiotyki greckiej: studia i teksty [Introduction to ancient Greek semiotics: Studies and Texts]*, Wrocław 1984.
- Demetrius of Phalerum, *Text, Translation and Discussion*, ed. by William W. Fortenbaugh, Eckart Schütrumpf, Transactions Publishers, New Brunswick and London 2000 (Rutgers Univ. Studies in Classical Humanities, vol. IX).
- Derveni Papyrus*, edited with introduction and commentary by Theokritos Kouremenos, George M. Parássoglou, Kyriakos Tsantsanoglou, Leo S. Olschki Editore, Firenze 2006 [Studi e testi per il corpus dei papiri filosofici greci e latini 13].
- Dettori Emanuele, *Filigrana grammatica: Testimonianze e frammenti: introduzione, edizione e commento*, Roma 2000.
- Diels Hermann, *Antike Technik. Sieben Vorträge*, Teubner, Leipzig-Berlin 1920.
- Diels Hermann, *Elementum. Eine Vorarbeit zum griechischen und lateinischen Thesaurus*, Teubner, Leipzig 1899.
- Diels Hermann, Kranz Walter, *Die Fragmente der Vorsokratiker*, vols 1–3, Rowohlt, Hamburg 1958.
- Diogenes Laertius, *Lives of Eminent Philosophers*, with an English translation by R. D. Hicks, in two volumes, vol. I, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd, MCMLIX (Loeb Classical Library 184).
- Düring Ingemar, *Aristotle in the Ancient Biographical Tradition*, Göteborg 1957.

- Eco Umberto "An Author and His Interpreters," in: R. Capozzi (ed.), *Reading Eco: An Anthology*, Indiana University Press 1997.
- Eijk Philip J. van der, *Towards a Rhetoric of Ancient Scientific Discourse: Some Formal Characteristics of Greek Medical and Philosophical Texts*, in: Egbert J. Bakker (ed.), *Grammar as Interpretation. Greek Literature in its Linguistic Contexts*, Brill, New York-Boston-Köln 1997, pp. 77–130.
- Emerson Ralph Waldo, *Essays. First Series*, Boston and New York 1904.
- Euripides, *Children of Heracles, Hippolytus, Andromache, Hecuba*, edited and translated by David Kovacs, Harvard University Press, Cambridge (Massachusetts), London 1995 (Loeb Classical Library 484).
- Fink Bruce, *The Lacanian Subject. Between Language and Jouissance*, Princeton Univ. Press 1997.
- Fögen Thorstein (ed.), *Antike Fachtexte – Ancient Technical Texts*, Walter de Gruyter 2005.
- Gaiser Konrad, *Platons ungeschriebene Lehre, Studien zur systematischen und geschichtlichen Begründung der Wissenschaften in der Platonischen Schule*, Klett, Stuttgart 1968.
- Głombiowski Krzysztof, *Ksenofont. Żołnierz i pisarz [Xenophon. The Soldier and the Author]*, Ossolineum, Wrocław 1993.
- Godlewski Grzegorz, *Słowo – pismo – sztuka słowa. Perspektywy antropologiczne [Word – writing – art of word. The anthropological perspectives]*, Warszawa 2008.
- Goodman Alan H., Leatherman Thomas L. (eds.), *Building A New Biocultural Synthesis*, University of Michigan Press 1998.
- Goody Jack, *The Logic of Writing and the Organization of Society*, Cambridge-New York 1986.
- Haeckel Ernest, *Kunstformen der Natur*, Leipzig 1899–1904.
- Hajdu Helga, *Das mnemotechnische Schrifttum des Mittelalters*, Budapest 1936.
- Harris Roy, *Rationality and Literate Mind*, Routledge 2009.
- Havelock Eric A., *Preface to Plato*, Harvard University Press, Cambridge 1963.

- Havelock Eric A., *The Muse Learns to Write. Reflections on Orality and Literacy from Antiquity to the Present*, Yale University Press, New Haven 1986.
- Heath Sir Thomas Little, *A History of Greek Mathematics*, vol. I, *From Thales to Euclid*; vol. II, *From Aristarchus to Diophantus*, Oxford 1921.
- Heath Sir Thomas Little, *The Works of Archimedes* edited in modern notation with introductory chapters by..., Cambridge 1897 (2010).
- Heiberg Johann Ludvig, *Quaestiones Archimedaeae*, Hauniae [Copenhagen] 1879.
- Hippocrate, *Oeuvres complètes*, traduction nouvelle avec le text grec en regard, collationné sur les manuscrits et toutes les éditions; accompagnée d'une introduction, de commentaries médicaux, de variants et de notes philologiques; suivie d'une table générale des matières par Émile Littrè, vols 1–10, Paris 1839–1861.
- Hippocrates with an English translation by W. H. S. Jones, vol. I, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press, MCMLVII (Loeb Classical Library 147).
- Horster M., Reitz Ch. (eds.), *Antike Fachschriftsteller. Literarischer Diskurs und sozialer Kontext*, Stuttgart 2003.
- Ibrah Georges, *The Universal History of Numbers*, translated by D. Bello, Wiley 2000.
- Imhausen A., Pommerening T. (eds.), *Writings of Early Scholars in the Ancient Near East, Egypt, Rome, and Greece. Translating Ancient Scientific Texts*, Walter de Gruyter 2010.
- Isidore of Seville, *Etymologies*, edited and translated by Stephen A. Barney, W. J. Lewis, J. A. Beach, Oliver Berghof, Cambridge University Press 2006.
- Isidorus Hispalensis, *Etymologiarum sive Originum libri XX*, recognovit W. M. Lindsay, tomus 1–2, Oxford 1911.
- Jaeger Werner, *Studien zur Entstehungsgeschichte der Metaphysik des Aristoteles*, Berlin 1912.
- Jahn Otto, *Die Subscriptionen in den Handschriften römischen Classiker*, Berichte über die Verhandlungen der K. Sächsischen Gesellschaft der Wissenschaft zu Leipzig; Philol.-Hist. Klasse 3, Leipzig 1851.

- Jean Georges, *Writing. The story of alphabets and scripts*, translated by Jenny Oates, H.N. Abrams, New York 1992.
- Kaczmarek Olga, *Inaczej niż pisać. Lévinas i antropologia postmodernistyczna*, [Otherwise than Writing. Lévinas and the postmodern Anthropology], Warszawa 2016.
- Kelley David H., Milone Eugene F., *Exploring Ancient Skies. A Survey of Ancient and Cultural Astronomy*, 2 ed., Springer 2011.
- Keyser Paul T. and Georgia L. Irby-Massie (eds.), *The Encyclopedia of Ancient Natural Scientists. The Greek tradition and its many heirs*, Routledge 2008.
- Kott Jan, "The Memory of the Body," in his: *The Memory of the Body. Essays on Theatre and Death*, Evanston 1992.
- Lausberg Heinrich, *Handbook of Literary Rhetoric. A Foundation for Literary Study*, tr. D. E. Orton, Brill 1988.
- Lem Stanisław, "Golem's Inaugural Lecture," in his: *Imaginary Magnitude*, translated by M. Heine, New York 1984.
- Liber Suda, Suidae Lexicon*, pars 1–4, edidit Ada Adler, Lipsiae in aedibus Teubneri 1971=2001 (*Lexicographi Graeci*, vol. I).
- Liddell Henry G., Scott Robert, *A Greek-English Lexicon*, revised and augmented throughout by Henry Stuart Jones, with the assistance of Roderick McKenzie and with the cooperation of many scholars, Oxford University Press 1996.
- Lindsay William M., "The Editing of Isidore Etymologiae," *Classical Quarterly*, vol. 5, no. 1 (Jan., 1911), pp. 42–53.
- Livy with an English translation in thirteen volumes, vol. VI, *Books XXIII–XXV*, translated by Frank Gardner Moore, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press MCMXL (Loeb Classical Library 355).
- Lloyd G. E. R., *Early Greek Science. Thales to Aristotle*, New York 1970.
- Lloyd G. E. R., *Greek Science after Aristotle*, New York 1973.
- Lord Albert B., *The Singer of Tales*, Harvard Univ. Press, Cambridge 1960.
- Luria Alexander, *The Mind of a Mnemonist. A Little Book About A Vast Memory*, Harvard 1968.

- Majewski Paweł, *Pismo, tekst, literatura. Praktyki piśmienne starożytnych Greków i matryca pamięci kulturowej Europejczyków* [Writing, text, literature. The writing practices of ancient Greeks and the matrix of European cultural memory], Warszawa 2013.
- Markowski Michał Paweł, *Występek. Eseje o pisaniu i czytaniu* [Excess. Essays on Writing and Reading], Warszawa 2001.
- McDiarmid John B., "Theophrastus on the Presocratic Causes," *Harvard Studies in Classical Philology*, vol. 61 (1953), pp. 85–156.
- McLuhan Marshall, *Understanding media. The Extensions of Man*, Routledge 2002.
- Meissner B., *Die technologische Fachliteratur der Antike*, Berlin 1999.
- Mejor Mieczysław, *Antyczne tradycje średniowiecznej praktyki pisarskiej. Subskrypcje późnoantycznych kodeksów* [Antic Traditions of Medieval Writing Practice. Subscriptions to Late Ancient Codexes], Warszawa 2000.
- Moulin Léo, *Vie quotidienne des religieux au Moyen âge (Xe–XVe siècle)* [The Everyday Life of Monks in the Middle Ages (5th–15th Century)], Hachette, Paris 1978.
- Müller C. W. et al. (eds.), *Ärzte und Ihre Interpreten. Medizinische Fachtexte der Antike als Forschungsgegenstand der klassischen Philologie*, Saur 2006.
- Neugebauer Otto, *The Exact Sciences in Antiquity*, Dover Publications 1969.
- Notopoulos James A., "Mnemosyne in Oral Literature," *Transactions and Proceedings of the American Philological Association*, vol. LXIX, 1938, pp. 465–493.
- Nyland Ann, *The Kikkuli Method of Horse Training*, Armidale, Kikkuli Research Publications 1993, rev. ed. Sydney 2009.
- Parkes Malcolm Beckwith, *Pause and Effect. An Introduction to the History of Punctuation in the West*, Univ. of California Press, Berkeley 1993.
- Parry Milman, *The Making of Homeric Verse. Collected Papers of...*, edited by Adam Parry, Oxford Univ. Press, New York 1987.
- Pelagonius, *Artis veterinariae quae exstant*, recensuit Maximilianus Ihm, Lipsiae in aedibus Teubneri 1892.

- Pfeiffer Richard, *History of the Classical Scholarship. From the Beginning to the End of the Hellenistic Age*, Oxford 1968.
- Philetai Coi Reliquiae*, edidit Wilhelm Kuchenmüller, Typis Roberti Noske, Borna [Bern] 1928.
- Philodemos, *Volumina rhetorica*, vols 1–2, edidit Siegfried Sudhaus, Lipsiae in aedibus Teubneri 1892–1896.
- Philons Belopoiika (Viertes Buch der Mechanik)* griechisch und deutsch von H. Diels und E. Schramm, Berlin 1919.
- Plato, *The Republic*, with an English translation by Paul Shorey, in two volumes, vol. I, Books I–V, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd, MCMXXXVII (Loeb Classical Library 237).
- Platonis opera*, vols I–IV, recognovit brevisque adnotatione critica instruxit Ioannes Burnet, Oxford 1972–1975.
- Pliny, *Natural History with an English translation in ten volumes, Vol. II, libri III–VII*, translated by H. Rackham, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd (Loeb Classical Library 352) MCMLXI.
- Plutarch's Lives* with an English translation by Bernadotte Perrin in eleven volumes, vol. V, Cambridge (Massachusetts), Harvard University Press, London, William Heinemann Ltd (Loeb Classical Library 87) MCMLXI.
- Poetae Epici Graeci. Testimonia et fragmenta*, pars II, fasc. 1–3, *Orphicorum et Orphicis similis testimonia et fragmenta*, ed. Alberto Bernabè Pajeros, Monachii et Lipsiae in aedibus K. G. Saur (Bibl. Teubneriana) 2004–2007.
- Pollux, *Onomasticon*, e codicibus ab ipso collatis denuo edidit at adnotavit Ericus Bethe, vols 1–3, Lipsiae in aedibus Teubneri 1900–1937 (Lexicographi Graeci, vol. IX, pars I–III).
- Procli Diadochi et Olympiodori *In Platonis Alcibiadem commentarii*, edidit Fridericus Creuzer, pars I–III, Francofurti ad Moenum 1820–1822.
- Quintiliani Marci Fabi Institutionis oratoriae libri XII*, pars 1–2, edidit Ludwig Radermacher, Lipsiae in aedibus Teubneri 1965–1968.

- Raulwing Peter, "The Kikkuli Text. Hittite Training Instructions for Chariot Horses in the Second Half of the 2nd Millenium BC and Their Interdisciplinary Context," 2009 [online publication].
- Reynolds Leighton D., Nigel G. Wilson, *Scribes and Scholars. A Guide to the Transmission of Greek and Latin Literature*, 4th ed., Oxford 2013.
- Riginos Alice Swift, *Platonica. The Anecdotes Concerning the Life and Writings of Plato*, Brill 1976.
- Rostafiński Józef, *Słownik polskich imion rodzajów oraz wyższych skupień roślin poprzedzonym historyczną rozprawą o źródłach* [*Dictionary of Polish Names of Genera and Higher Clusters of Plants, preceded by a historical dissertation on sources*], Kraków 1900.
- Saenger Paul, *Space Between Words. The Origins of Silent Reading*, Stanford 1997.
- Sarton George, *Introduction to the History of Science*, three volumes in five parts, Baltimore 1927–1948.
- Sbardella Livio, *Filila. Testimonianze e frammenti poetici: introduzione, edizione e commento*, Roma 2000.
- Segal Daniel A., Yanagisako Sylvia J. (eds.), *Unwrapping the Sacred Bundle: Reflections on the Disciplining of Anthropology*, Duke University Press 2005.
- Select Letters of St. Jerome* with an English translation by F. A. Wright, London, William Heinemann Ltd, New York, G. P. Putnam's Sons (Loeb Classical Library 262) MCMXXXIII.
- Sellars John, *The Aristotelian Commentators: A Bibliographical Guide*, in: Peter Adamson, Han Baltussen, Martin William Francis Stone (eds.), *Philosophy, science and exegesis in Greek, Arabic and Latin commentaries*, vol. 1, London 2004, pp. 239–68.
- Sinko Tadeusz, *Zarys historii literatury greckiej* [*An Outline of the History of ancient Greek Literature*], vols I–II, Warszawa 1959.
- Small Jocelyn Penny, *Wax Tablets of Mind. Cognitive Studies of Memory and Literacy in Classical Antiquity*, Routledge, New York-London 1997.
- Sokolov-Remizov S. N., *Literatura-kalligrafija-živopis'. K probleme sinteza iskusstv v chudožestvennoj kulture Dal'nevo Vostoka*

- [*Literature-calligraphy-painting. Towards the Problem of Synthese of the Arts in the artistic Culture of Far East*], Moskva 1985.
- Sokołowski Jan, *Ptaki Polski [The Birds of Poland]*, Warszawa 1965 and reprints.
- Sorabji Richard (ed.), *Aristotle Transformed. The Ancient Commentators and Their Influence*, Cornell Univ. Press 1990.
- Spanoudakis Konstantinos, *Philitas of Cos*, Brill, Leiden-Boston-Köln 2002.
- Stock Brian, *The implications of literacy. Written language and models of interpretation in the eleventh and twelfth centuries*, Princeton University Press 1983.
- Strauss Leo, *Xenophon's Socratic Discourse. An Interpretation of the "Oeconomicus"*, Cornell University Press, Ithaca 1970.
- Suda Online, <https://www.cs.uky.edu/~raphael/sol>
- Svenbro Jesper, *Phrasikleia. An Anthropology of Reading in Ancient Greece*, Cornell Univ. Press, Ithaca 1993.
- Synagoge lekseon chresimon*, Texts of the Original Version and of MS. B, edited by Ian C. Cunningham, Walter de Gruyter 2003 (Sammlung griechischer und lateinischen Grammatiker, Bd. 10).
- Theophrastus of Eresus. Sources for His Life, Writings, Thought and Influence*, edited and translated by William W. Fortenbaugh, Pamela M. Huby, Robert W. Sharples (Greek and Latin) and Dimitri Gutas (Arabic), E. J. Brill, Leiden-New York-Köln 1992–.
- Thompson D'Arcy Wentworth, *A Glossary of Greek Birds*, Oxford 1895.
- Thompson D'Arcy Wentworth, *A Glossary of Greek Fishes*, London 1947.
- Thorndike Lynn, "Copyist's final jingles in Mediaeval Manuscripts," *Speculum*, vol. 12, no. 2 (Apr., 1937), p. 268.
- Thorndike Lynn, "More Copyists' Final Jingles," *Speculum*, vol. 31, no. 2. (Apr., 1956), pp. 321–328.
- Tolkiehn Johannes, *Lexikographie*, an entry in: *Realenzyklopädie der klassischen Altertumswissenschaft*, hrsg. von Wilhelm Kroll, Bd. 12 (Kynেসιοι-Libanon), Halbbd. 24 (Legio-Libanon), Stuttgart 1925, cols. 2432–2482.

- Totelin L., *Hippocratic Recipes. Oral and Written Transmission of Pharmacological Knowledge in Fifth- and Fourth-Century Greece*, Brill 2009.
- Trzcionkowski Lech, *Bios-thanatos-bios. Semiofory orfickie z Olbii i kultura polis*, [*Olbia Semiofory and the Culture of Polis*] Wyd. Sub Lupa, Warszawa 2013.
- Turner Eric G., *Athenian Books in the Fifth and Fourth Centuries BC*, London 1951.
- Tuwim Julian, *Pegaz dęba czyli panopticum poetyckie [Pegasus Rears Up, or, The Poetical Panopticum]*, Warszawa 1950.
- Tzetzes Ioannes, *Historiarum variarum chiliades*, textum recognovit Theophilus Kiessling, Lipsiae 1826.
- Ueda Makoto, "Aesthetic Elements of the Line," in his: *Literary and Art Theories in Japan*, Cleveland 1967, pp. 173–185.
- Valerii Maximi *Factorum et Dictorum Memorabilium libri novem*, cum Iulii Paridis et Ianuarii Nepotiani epitomis iterum recensuit Carolus Kempf, Teubner, Stuttgart 1982.
- Valerius Maximus, *Memorable Doings and Sayings, Volume II, Books 6–9*, edited and translated by D. R. Shackleton Bailey, Harvard University Press, Cambridge (Massachusetts), London 2000 (Loeb Classical Library 493).
- Wattenbach Wilhelm, *Das Schriftwesen im Mittelalter*, dritte vermehrte Auflage, Leipzig 1896 (=1962).
- Wehrli Fritz, *Die Schule des Aristoteles. Texte und Kommentar*, Bd. 1–10, Supplbd. 1–2, Basel 1945–1978.
- Whitehead Alfred N., *An Introduction to Mathematics*, Williams & Norgate, London 1911.
- Xenophon, *Oeconomicus [The Economist]. A Treatise on the Science of the Household in the form of a Dialogue*, in: *The Works of Xenophon*, vol. III, pt. 1, trans. by H. G. Dakyns,, Macmillan and Co., London and New York 1897.
- Xenophon, *Scripta Minora*, with an English translation by E. C. Marchant, London, William Heinemann Ltd, Cambridge (Massachusetts), Harvard University Press (Loeb Classical Library 183) MCMXLVI.

Xenophontis scripta minora, vols 1–2, edidit Franz Ruehl, Lipsiae in aedibus Teubneri 1912.

Yates Frances A., *The Art of Memory*, Routledge, London 1966.

Zonarae Ioannis *Epitome Historiarum* cum Carolii Ducangii suisque annotationibus edidit Ludovicus Dindorfus, vol. II, Lipsiae 1869 (Bibliotheca Teubneriana).

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