

## Scholarship, Hellenistic

FRANCESCA SCHIRONI

During the Hellenistic period scholarship on Greek literary and non-literary authors developed greatly. For the first time in Greek history a systematic effort to study, edit, and write exegeses (ranging from commentaries to lexicography) on the most representative Greek authors was carried out. This editorial and exegetical work (financed by several dynasties, especially the Ptolemies) is evidence that the Greek-speaking intelligentsia felt that the golden age of Greece had come to an end and a great heritage had been created, which needed to be rescued and protected. The work of Hellenistic scholars had a fundamental impact on the future preservation of Greek literature. Furthermore, Hellenistic scholars, who were in many respects the intellectual heirs of the Peripatetic School, pioneered or further developed linguistic and metrical analysis, chronology, and lexicography, becoming the founders of disciplines such as philology and literary criticism.

With the establishment of the Hellenistic kingdoms, royal policies of cultural promotion and patronage were developed. The best example is the cultural patronage of the Ptolemies, who established the famous Library and Museum of Alexandria and attracted intellectuals from all around the Mediterranean. The historical sources for these institutions are either very meager (the Museum) or difficult to reconcile with each other (the Library), yet it is fairly certain that Ptolemy I Soter (306–282 BCE) founded both of them, while Ptolemy II Philadelphos (282–246 BCE) further developed them. Ptolemy I enrolled Demetrios of Phaleron, a Peripatetic and pupil of Theophrastus, in this cultural project. Though Demetrios' real contribution to the Library and the Museum is difficult to assess (*The Letter of Aristaeas* § 9 says that he was in charge of the Royal Library, but this is most likely false), the learned work produced by the Alexandrian scholars was definitely influenced by a

Peripatetic approach. Later sources mention two libraries, one in the royal palace and one outside of it (Tzetzes, *Prooem. II*, 8–9 Koster). The latter was in the Serapeum and was perhaps established by Ptolemy III Euergetes (246–222 BCE).

In order to promote scholarship the Ptolemies pursued an aggressive policy of book acquisition: apparently Ptolemy III had even issued an order that all the books in the ships arriving at Alexandria had to be taken and copied; the originals would be kept and the copies returned to the owners (Galen, *Comm. Hipp. Epidem. iii*, 17a 605–8). Indeed, the Alexandrian book collection was extensive, even if the figures given by Tzetzes (*Prooem. II*, 9–11 Koster) – 42,800 books in the library in the Serapeum and 490,000 books in the Royal Library – are probably too large. Most likely the Library also had books from cultures other than Greek; for example, the Septuagint, Manetho, and perhaps Berosos were collected there. If indeed Hermippus, a pupil of Callimachus, wrote a commentary on Zoroaster (Plin. *HN* 30.4), then even Persian texts might have been available at the Library. The scholars working at Alexandria were most likely also attached to the Museum.

The Royal Library was led by a head librarian, appointed by the king to act also as a royal tutor in addition to his other duties. We know the names of the head librarians mostly through entries in the *Suda* as well as from *P.Oxy.* 1241 (second century CE); the two sets of sources do not agree on the relative order of the librarians and the dating of their tenure. Many solutions have been proposed, and the most widely accepted is the one offered by Fraser (1972: I 330–3): Zenodotos of Ephesos (ca. 285–270 BCE), Apollonius Rhodius (ca. 270–245 BCE), Eratosthenes of Cyrene (ca. 245–204/201 BCE), Aristophanes of Byzantium (ca. 204/201–189/186 BCE), Apollonios Eidographos (ca. 189/186–175 BCE), Aristarchos of Samothrace (ca. 175–145 BCE). Eichgrün's alternate ordering – Apollonios Eidographos, Aristophanes of Byzantium, and Aristarchos – deserves serious attention (1961: 15–35). Besides the head

librarians, many other grammarians and philologists were active there, among whom were the poet-philologists LYCOPHRON, Alexander Aetolus, and Callimachus.

The main achievement of the Alexandrian scholars of this period was the reorganization of the past Greek literary tradition and the production of standard editions (*ekdoseis*) of Greek authors, which formed the basis of the medieval tradition that we still use. They also wrote commentaries (*hypomnemata*) on ancient authors, lexica (*lexeis*) collecting literary as well as dialectal or rare words, and monographs discussing particular literary topics (*syggrammata*).

HOMER was the most studied author at Alexandria. At least three head librarians produced an edition: Zenodotos, Aristophanes, and Aristarchos. The poet Rhianos of Crete, active at Alexandria in the second half of the third century, also prepared editions of Homer, but it is unknown whether he was connected with the Alexandrian court. From the fragments we have, Zenodotos' text was somewhat idiosyncratic and seems to have been founded on an Ionian rhapsode's text (West 2001: 33–45). Aristarchos' Homeric edition is particularly important since it fixed a standard Homeric text in terms of number of lines, eliminating lines that were poorly attested. The Homeric papyri confirm this: earlier Hellenistic papyri present a Homeric text different from ours, with many additional lines, while those from 150 BCE onward offer the standard Homeric text we still use, proving that by that time Aristarchos' "selected" Homeric text had had an impact on the book market. We also owe to the Alexandrians the division of both poems into twenty-four books.

Editions of other poets were also prepared at Alexandria. Under Ptolemy II, Alexander Aetolus edited tragedies and satyr plays and Lycophron of Chalkis edited comedies. Hesiod and Pindar may have been first edited by Zenodotos and then by Aristophanes (who considered the *Shield* spurious). In particular, Aristophanes' edition of the lyric poets (which included not only Pindar, but also Alkman,

ALKAIOS, Anakreon, and possibly all the nine canonical lyric poets) was epochal. His arrangement of PINDAR'S victory-odes in four books according to the games at which the victory was achieved, as well as his work on lyric colometry with the division of poems according to lines and the triadic system (strophe, antistrophe, and epode), are still used today. Aristophanes of Byzantium also prepared an edition of the Aristophanic comedies and perhaps also of MENANDER and the tragic poets. He was probably also the first to use accents in his editions to clarify the pronunciation and prosody of debated words.

Euphronios (end of third century BCE), the teacher of Aristophanes of Byzantium, is the first Alexandrian scholar we know of to have written a commentary (*hypomnema*), specifically one on ARISTOPHANES' *Plutus* (perhaps on the basis of Lycophron's edition). Commentaries on different authors were among the most important results of Aristarchos' scholarship; he authored *hypomnemata* on HESIOD, ARCHILOCHOS, Alkman, Pindar, AESCHYLUS, SOPHOCLES, Aristophanes, and perhaps BACCHYLIDES and EURIPIDES. Prose authors were most probably studied and commented upon even if the evidence is scarce; however, a papyrus (*P.Amherst 2.12*) preserves the title of Aristarchos' *hypomnema* on HERODOTUS; Aristarchos might have also worked on PLATO (Schironi 2005).

Even though the commentaries and editions of the Alexandrians are not preserved by direct tradition, many fragments of their work have been preserved by later sources such as scholia, lexica, and other exegetical texts, as well as by papyri. This evidence has allowed scholars to reconstruct at least in part the editorial and exegetical principles followed at Alexandria. The Alexandrians invented and used the so-called critical signs (*semeia*), which were written in the margin of their editions and commentaries and had a specific meaning for the reader of those texts. The critical signs used for Homer are those we know best. The *obelos*, a small horizontal line, was placed on the left of the line which was considered spurious (an operation called *athetesis*). The *asteriskos* (※)

indicated a line repeated elsewhere; the *sigma* (C) and the *antisigma* (O), which were used together, marked two consecutive lines of identical content. To these signs, used by Zenodotos (*obelos*) and Aristophanes (*obelos*, *asteriskos*, *sigma*, and *antisigma*), Aristarchos added the *diple* (>), used to highlight lines which were considered noteworthy for various reasons (e.g., language, content, myth, style) and which were then discussed in the commentaries. Aristarchos also introduced the *diple peristigmene* (>:) to highlight lines where he argued against Zenodotos (and perhaps also against Krates of Mallos). The combination of *asteriskos* with *obelos* (※ —) was used for repeated lines that he wanted to athetize. A few other critical signs are known, the meaning of which is debated. We also have evidence of critical signs used by the Alexandrians for Hesiod, the lyric poets (especially in the metrical handbook of Hephaestion) and for Plato (Diog. Laert. 3.65 and PSI 1488).

It is still debated precisely how “editions” and “commentaries” were organized. Papyrus fragments seem to suggest that they were two separate texts; the edition (*ekdosis*) contained the text together with critical signs (perhaps with variants in the margins) and the *hypomnema* was a running commentary organized in the form of lemmata (the lines commented upon) followed by explanations. The critical signs were repeated in the commentaries next to the lemmata and worked as a link between the edition and the commentary (Pfeiffer 1968: 218–19; Schironi 2012). Different readings offered by different manuscripts gathered in the Library were often discussed with the help of rather advanced linguistic analysis; sometimes the scholar himself suggested a proper emendation for a corrupted passage. Commentaries also discussed the reasons for an athetesis (i.e., the rejection of a line considered spurious) and questions of style, characterization, mythographical topics, history, and geography. In his Homeric exegesis in particular, Aristarchos tried to isolate what was typically Homeric in terms of style, language, and mythical background, and used his

findings to correct problematic passages within the poems, either emending the text or athetizing lines which in his view had not been written by Homer. Although this approach to Homeric poetry was somewhat circular, it also was surprisingly scientific and rigorous, at least for that time (Schironi, forthcoming).

Other scholarly genres were developed at Alexandria. Monographs on specific topics were popular among the Alexandrians from the very beginning. Zenodotos wrote a monograph on the number of days covered in the *Iliad* and a *Life of Homer*. Apollonius of Rhodes wrote an *Against Zenodotos* and monographs on Hesiod and Archilochos; Callimachus authored an *Against Praxiphanes* (a Peripatetic scholar), in which he discussed questions of literary criticism. Aristarchos’ monographs concerned his Homeric studies (*On the Iliad and on the Odyssey*, *On the Camp*), sometimes with a polemical intent (*Against Philitas*, *Against Komanos*, *Against the Paradox of Zenon*). Monographs *On Comedy* were written by Lycophron and most famously by Eratosthenes.

Lexicography was of great interest to Alexandrian scholars. The poet and grammarian Philitas of Kos, invited by the Ptolemies in Alexandria as tutor to the son of Ptolemy I (the future Ptolemy II), composed a list of *Ataktoi Glossai* (lit. glosses without an order), probably collecting rare dialectal and poetic words. After Philitas, his pupil Zenodotos authored a poetic glossary in alphabetical order, while Aristophanes prepared a great collection of *Lexeis*, with poetic and prose glosses as well as words pertaining to certain semantic fields.

Callimachus’ *Pinakes* (“tablets”) were a catalogue of Greek literary works, ordered according to the author and genre: each author was given a short biography, a list of works accompanied by their *incipit*, the total number of lines, and probably some discussion of date and authenticity. In his *Against the Pinakes of Callimachus* Aristophanes corrected some of Callimachus’ data. Aristophanes’ dramatic *hypotheses* were connected to this interest in collecting and organizing the historical data about literary texts:

they consisted of introductions to each drama (both tragedy and comedy), with a summary of the plot, notes about the staging (chorus, actors, scene), the date of the first performance and the result of the dramatic competition (he used Peripatetic sources); these *hypotheseis* have been preserved both in papyri and medieval manuscripts containing Greek drama.

Paradoxography, the interest in marvels, also flourished among Hellenistic scholars. Callimachus composed a treatise on *Non-Greek Customs*, a *Collection of Wonders of the Earth According to their Locations* and *Ethnical Denominations* (perhaps with sub-chapters entitled *On the Rivers of the Inhabited Earth*, *On Winds*, *On Birds*, etc.). The sources of these collections were most likely the historical, geographical, and erudite texts collected in the Library. Aristophanes' *On Animals*, an epitome of similar works of ARISTOTLE, Theophrastus, and other sources, belongs to this genre (and is among the few works of Alexandrian scholarship which have survived). Connected to erudition and the study of literature was an interest in biographies. Lives of poets and philosophers were written by SATYROS OF KALLATIS and Hermippus of Smyrna. Another of Callimachus' pupils, Istros, worked on local histories connected with myth. Chronology was the topic of Eratosthenes' *Chronological Tables*, possibly covering the destruction of Troy (dated to 1184 BCE) to the death of Alexander (323 BCE). This work was the basis of the *Chronika* of Apollodoros of Athens (a pupil of Aristarchos), which then became the standard chronological handbook during the Roman Empire.

Alexandrian scholars of the third and second centuries BCE used to define themselves as *grammatikoi*, and they are often labeled as Alexandrian "grammarians" even now. However, this survey has shown that the term does not mean "scholars of grammar" in the modern sense of the word, but rather has a wider meaning. A *grammatikos* was a philologist and a literary critic, as clarified by the definition of grammar given by Dionysios Thrax (a pupil of Aristarchos) in his *Techne Grammatike*

(1.1–6). Yet these scholars did not limit themselves to literary authors, as a flourishing scholarship on HIPPOCRATES developed at Alexandria and beyond (von Staden 1992). Bacchios of Tanagra (third century BCE), a student of HEROPHILOS, collected the first Hippocratic lexicon, epitomized by various physician-lexicographers; all these lexica are lost except Erotian's (first century CE). Similarly, a tradition of commentaries on Hippocrates and other medical texts started at Alexandria. The commentary on the Hippocratic treatise *On Joints* by APOLLONIOS OF KITION (70 BCE) is noteworthy because it is one of the only two Hellenistic *hypomnemata* that have reached us by direct tradition (the other being that by the astronomer HIPPARCHOS on the *Phaenomena* of ARATOS OF SOLOI).

Eratosthenes was the most versatile of the Alexandrian scholars: he was a grammarian but also a poet, a mathematician, and a geographer. In his *Geography* he offered his own mapping of the earth and also discussed questions of Homeric geography; in particular, he claimed that since the aim of poetry is not instruction but entertainment, the Homeric poems should not be considered textbooks of geography, and therefore mapping poetic voyages such as that of Odysseus was useless. In his learned and scientific approach to scholarship, Eratosthenes, together with Aristophanes and Aristarchos, is the best example of the spirit of Alexandrian scholarship at its height, which went beyond the simple editions and exegesis of texts and developed a rigorous method for the study of literary texts.

The great development of scholarship at Alexandria came to a halt after the intellectual "diaspora" of 145 BCE, when Ptolemy "Physikon" killed PTOLEMY VII NEOS PHILOPATOR and became king as PTOLEMY VIII EUERGETES II, exiling many intellectuals connected with Ptolemy VI (Athen. 4.184b–c). Among them was probably Aristarchos, who left Alexandria and settled in Cyprus, where he died the following year (144 BCE). Even though the Library lasted throughout the end of the Hellenistic period and into the Roman Empire (despite the famous fire during the Alexandrian War in 48 BCE) and

scholars kept working there, the heyday of Alexandrian scholarship was over after Aristarchos left. Apollodoros is his most famous pupil; aside from the *Chronika*, he wrote a monograph *On the Gods*, in which he explained the meaning of the epithets of the Homeric gods, and one on the *Catalogue of the Ships* in *Iliad* 2. While following Aristarchean scholarly principles, Apollodoros' interests were more focused on etymology, history, and geography, and he produced some original research. However, the following generations of Alexandrian scholars seem to have been mostly concerned with systematizing or responding to the work of previous scholars: for example, Ammonios and Didymos wrote monographs discussing Aristarchos' editions of Homer. Didymos in particular was one of the most prolific scholars at Alexandria in the first century BCE; still, most of his work consisted in summarizing and excerpting the original research of his predecessors. This dramatic change in Alexandrian scholarship is probably at least partly due to the changing political situation, with the decline of Ptolemaic patronage and the subsequent Roman conquest.

Although the work of Alexandrian scholars was especially outstanding, the output of the courts at PERGAMON and ANTIOCH IN SYRIA is also worthy of mention. In Pergamon EUMENES II (197–159 BCE) founded a library, which became the natural rival of the Royal Library of the Ptolemies. Indeed, some anecdotes, such as the attempt by Aristophanes of Byzantium to move to the service of Eumenes II (*Su.* α 3936), indicate that these two centers competed for scholarly hegemony. Perhaps because of this intellectual competition, Krates, the most famous Pergamene scholar and a contemporary of Aristarchos, defined himself as a *kritikos* in clear opposition to the *grammatikoi* of Alexandria (*Sext. Emp. Adv. Math.* 1.79). Such definition implies that Krates' interests went beyond mere textual work and included criticism, as shown in his theory of poetics preserved by Philodemos' *On Poems*. In his exegesis Krates sometimes employed allegorical methods to prove that Homer had hidden clues relating to

Stoic cosmology in his poems. Krates, however, was nonetheless very similar to an Alexandrian *grammatikos* in many other respects: he worked on Homer (*Diorthotika* and *Homerika*), Hesiod, lyric poets, and drama, and was very skilled in using all the philological tools of the Alexandrians (critical signs, linguistic analysis, etymology). He also dealt with the same problems as the Alexandrians (atheteseis, choice of variants, geography, myths); for example, he athetized the proems of Hesiod's *Work and Days* (as Aristarchos did) and of the *Theogony*.

Thus, even if scholars at Pergamon might have had some different approaches to literary authors, their work was by and large based on the same methods and goals. For example, the supposed linguistic conflict between the Alexandrian grammarians who followed "analogy" (strict and rational rules of declension) and the Pergamene critics who followed "anomaly" (spoken usage) has been conclusively shown to be based on a misunderstanding of VARRO by modern scholars (Fehling 1956–7; Blank 1994); rather, analogy and anomaly were linguistic principles used by both schools according to their needs and specific situations. The work carried out by other scholars in Pergamon shows all the similarities between the latter and Alexandria: among the pupils of Krates, Artemon worked on the mythical and historical questions in Pindar's poems and Herodikos focused on Homer and Attic comedy. Homer was also studied by Zenodotos of Mallos and Hermias (Broggiato 2014). Paradoxography was cultivated at Pergamon as well, as ANTIGONOS OF KARYSTOS (third century BCE) wrote a *Collection of Wonderful Stories* but also had antiquarian and biographical interests, writing *Philosophers' Lives* and perhaps also descriptions of artworks (if it is the same Antigonos). In the second century BCE Polemon of Ilion, an antiquarian periegete, wrote many treatises on several regions in the Mediterranean, in which he sometimes criticized Eratosthenes. Demetrios of Skepsis discussed the geography of the Trojan camp in the *Iliad* in the form of a running commentary (of thirty books!) on *Iliad* 2.816–77.

Poets and intellectuals moved among courts. The poet Aratos of Soloi first went to PELLA at the court of ANTIGONOS II GONATAS (277–239 BCE) where he composed the *Phaenomena*; later he went to Syria because ANTIOCHOS I SOTER (281–261 BCE) supposedly convinced him to make a recension of the *Iliad* “as it had been corrupted by many interpolators” (*Achill. Comm. Fr.*, p. 78.8–11 Maas). Aratos also prepared an edition of the *Odyssey*. Indeed, the Seleucid court seems to have favored scholarly activities. ANTIOCHOS III MEGAS (222–187 BCE) entrusted the management of the Library of Antioch to the epic poet Euphoriion of Chalkis (who might have had erudite interests but does not seem to have produced any scholarly work). Another library with a Museum attached to it was founded by ANTIOCHOS IX KYZIKENOS (115–95 BCE).

Hellenistic scholarship is thus characterized by a huge variety of products. Even if much of it is lost, the intellectual interests developed at that time are the basis of the discipline called humanities, because the Hellenistic period was the first time when intellectuals looked at past literature as something worth preserving and studying. In addition, the editorial work on archaic and classical literature carried out especially at Alexandria led to the formation of the “canon” (see Pfeiffer 1968: 207): scholars selected the most representative authors from each genre and their selection shaped our own classical tradition. Finally, Hellenistic scholarship was most often founded on royal patronage. Indeed, some scholars were also court-poets, such as Callimachus, Apollonius Rhodius, Lycophron (at Alexandria), Alexander Aetolus (at Alexandria and Pella), and Aratos (at Pella and Antioch), who used their scholarship even when they composed their learned poems,

rich with rare glosses and antiquarian details. Without royal patronage, which allowed these intellectuals to work and provided them with rich libraries that collected manuscripts from all over the Greek world, none of the achievements of Hellenistic scholarship (and poetry) would have been possible.

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