Introduction

Gaius Plinius Secundus (23/24–79 CE), known today as Pliny the Elder, was born in Novum Comum (modern Como, Italy). An unfailingly proud member of Rome's upper-class equestrian order, Pliny spent his life serving the empire and his own insatiable curiosity; he evidently never married. As a military officer in the German provinces during the reign of Claudius (41–54), Pliny wrote works of military history and biography. The perilous reign of Nero (54–68) saw him mostly avoid imperial posts as he concentrated on further research and writing. After Nero's suicide in 68, and the subsequent civil war of 69–70, Pliny resumed his career, serving as an imperial administrator and advisor to the victorious claimant Vespasian and his son Titus. In 79, as commander of the fleet at Misenum, just across the bay from Pompeii and Herculaneum, Pliny witnessed the eruption of Vesuvius. Curious to experience the power of Nature and dedicated to saving the lives of the doomed, he sailed into the falling ash. He died on the seashore near Stabiae.[1]

According to his nephew (Pliny the Younger), Pliny was such a voracious reader and devoted scholar that he often fell asleep as he was working.[2] More than one hundred volumes by him went into circulation, including: one on throwing a javelin from horseback, two on the life of Pomponius Secundus (a friend and patron), twenty on Rome's German wars, three on the education of orators, eight on bad grammar, thirty-one on history and, finally, the thirty-seven Books of his *Natural History*, a massive collection of facts, "no less varied than Nature herself."[3] Along with these he bequeathed to his nephew 160 more volumes, filled with

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[1] For Pliny's biography, see *Prosopographia Imperii Romani*[2] P 373; Cornell (2014); for his life and work, Murphy (2004); Doody (2015).
[2] Pliny the Younger, *Letters* 3.5.8.
[3] Ibid. 3.5.3–6.

notes scribbled on both sides and in minuscule script.[4] This publication record reflected a work ethic that proved challenging to match. Because walking did not afford the opportunity to read, Pliny once reprimanded his nephew for walking rather than riding in a litter.[5] He even criticized a member of his reading group who had demanded the rereading of a mispronounced word. There was no justification to waste time with repetition, Pliny argued; the point was clear enough.[6] For him, the pursuit of knowledge did not necessarily rest upon the quality of the presentation, but rather on the quantity of the material. No truer statement could be made to describe his surviving magnum opus.

Pliny's World

The *Natural History* collates data on a vast range of topics including cosmology, astronomy, geography, ethnography, anthropology, zoology, botany, dendrology, pharmacology and geology. In total, Pliny claims to have recorded 20,000 facts in thirty-six Books (not including Book 1, the table of contents) from his reading of some 2,000 volumes by 100 authors.[7] His own extensive bibliography proves his maxim that no book was so bad that something useful could not be found in it.[8] Even though the Books of the *Natural History* – especially those focused on the universe and the geography of the world – are primarily a product of Pliny's reading rather than of his original research and experimentation, they do consolidate the collective knowledge about the natural world available in the first century CE. As a result, they reflect wonderfully the Roman worldview that Pliny shared with many of his contemporaries, as well as their enthusiasm for assembling and organizing knowledge of all kinds.[9] These Books are also invaluable for the summaries they provide of much that is otherwise lost.

After the table of contents the first five of Pliny's Books cover the size, form and character of: the known universe (Book 2), western and southern Europe, including Spain and Italy (Book 3), eastern and northern Europe as well as Britain (Book 4), north Africa, the Levant

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[4] Ibid. 3.5.17.
[5] Ibid. 3.5.15–16.
[6] Ibid. 3.5.12–13.
[7] *NH* Preface 17; Suetonius, *Life of Pliny*.
[8] Pliny the Younger, *Letters* 3.5.10.
[9] On contemporary worldviews, see Beagon (1992); on the tendency to assemble data, see König and Whitmarsh (2007) 3–39; Riggsby (2019).

and Asia Minor (Book 5), and the regions of the East beyond the Black Sea, including India and Sri Lanka, as well as what in antiquity was understood to be southern Africa (Book 6). Alongside Book 2, the 'geographical' Books have regularly been treated as a distinct group by scholars and editors alike.[10] Yet despite the good reason to do this, at the same time we should not fail to recognize that geography and ethnography continue to play a vital part in the subsequent Books of the *Natural History* – hence our inclusion of some passages from these.

Pliny's presentation of geography fits within a long tradition of Greek and Roman geographical and ethnographic writing.[11] During the past twenty years or so, English translations have appeared of much of this work. They have contributed to a surge in studies on ancient geography, travel and worldview. A fresh translation of Pliny's geographical Books boosts this surge, and also benefits medieval and Renaissance studies, given the persistent enthusiasm shown for the *Natural History* during those periods.

For readers' convenience Pliny summarized his sources for each Book and the total number of facts recorded in it, and modern editors usually place all this information in Book 1.[12] In our translation, however, we have placed these records for Books 2–6 at the end of each. In them Pliny consistently differentiates between Roman and foreign authors; none of the records is to be regarded as all-inclusive. For whatever reason, authors drawn upon for a Book may be omitted; equally, others listed are not specifically cited in the Book itself.

Beyond his reading, Pliny relied on other types of evidence, including what he had seen and experienced himself. Reports from traders and envoys are cited in Book 6 especially. In Pliny's time trade could occur under conditions which might encourage exploration. He praises quests for the Nile's sources (5.51, 6.181), and he admires the "unarmed men" who earlier were able to calculate the earth's dimensions (6.208). On the other hand, he is also aware that peace might not be invariably beneficial to the acquisition and spread of knowledge: "Nowadays, however, in such blissful peace and with a *princeps* so delighted by productivity in sciences and the arts, nothing more is being learned through new research, and really there is not even a full grasp of the ancients' discoveries" (2.117). Indeed, for Pliny and the Romans, war served as a means to acquire

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[10] Note Doody's (2015) section dedicated to bibliography on Pliny's geography.
[11] For surveys, see Dueck (2012); Roller (2015); Irby (2016).
[12] *NH* Preface 33.

knowledge. Rome's armies repeatedly penetrated unknown parts and peoples of the world. During war with the Oeensians in Africa a shortcut to the territory of the Garamantes emerged (5.38); expeditions in northern Europe revealed some twenty-three islands off the Cimbrian cape, Glaesaria being the most prominent and a major source for amber (4.97). Preparations for war could also be productive. Soldiers on an intelligence-gathering mission reported upon Aethiopia's wilderness (6.181). Isidorus wrote a description of the world on instructions from Augustus "to make a complete record when his elder son [Gaius Caesar] was going to Armenia to deal with the Parthians and Arabians" (6.141). Not every report was reliable of course, as Pliny sharply points out when describing labeling errors found on "drawings of the landscape" around the Caucasian Gates in Hiberia sent back by Domitius Corbulo's men (6.40).

Furthermore, Pliny recognizes monuments as sources of geographical knowledge. He regularly refers to Marcus Vipsanius Agrippa's work, and specifically mentions Agrippa's presentation of "the world for the world to see" in the Porticus Vipsania at Rome (3.17). This does not survive, and so its appearance remains controversial. Elsewhere, Pliny knows the trophy erected by Augustus – which survives, albeit damaged, above modern Monaco – commemorating the emperor's pacification of Italy's northern neighbors. He reproduces its list of "all the peoples of the Alps extending from Upper [Hadriatic] sea to Lower [Tyrrenan]" (3.136).

The Text

The choice of which editor's Latin text to translate presents difficulties. The manuscript tradition and editorial disagreements have prevented any one edition from becoming the universally recognized standard. The *Natural History* was repeatedly copied, abridged and paraphrased during the Late Roman Empire, throughout the Middle Ages and on into the Renaissance.[13] Altogether, the mass of what survives is remarkable, including well over one hundred manuscripts of the complete work, an astonishing total given its length and density. If further testimony to continuing interest in the *Natural History* were needed, there are in addition two hundred or so excerpts, some copied earlier than

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[13] For the post-classical reception of Pliny note, for example, Lozovsky (2000); Doody (2010); McHam (2013); Hiatt (2020).

Charlemagne's reign around 800.[14] From the mid-fifteenth century, printed editions appeared in rapid succession, and these in turn raise problems.[15] The editions to be considered today owe much to indefatigable efforts by talented nineteenth-century German scholars. Ludwig von Jan and Karl Julius Sillig led the way by producing the first complete scholarly edition between 1831 and 1836 (published by Teubner). The two later parted company: Sillig published his second edition between 1851 and 1858 for Perthes, and Jan his between 1854 and 1860 for Teubner. Next, between 1866 and 1873, Detlef Detlefsen offered a rival edition published by Weidmann. Karl Mayhoff then emerged as a further rival, with his (Teubner) edition starting to appear in 1875 and continuing (with various revisions meantime) to completion in 1906. Mayhoff's edition (readily accessible online) could still serve as the basis for our translation, but that would be to ignore all subsequent efforts over the past century and more, in particular those by French scholars who have contributed to an edition for Budé (with detailed commentary) which now lacks only parts of Books 5 and 6.[16] Otherwise in this edition the geographical books appeared between 1950 and 2015, and it is their texts that we translate.[17] For the parts missing, we translate the text of the edition produced (in the 1990s) by Roderich König and others for Sammlung Tusculum.[18]

The Translation: Background

"English is less well served than other languages when it comes to translations," regrets Aude Doody in her authoritative 2015 overview of scholarship on Pliny. Relatively recent, reliable and scholarly translations of the *Natural History* are available in French, German, Italian and Spanish.[19] By contrast, English translations – with the exception of Mary Beagon's of Book 7 (2005) – are old, outdated, or drastically abridged. An early one by Philemon Holland published in 1601 – perhaps used by

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[14] For the manuscript tradition, see Reeve (2007); Healy (1999) 380–392.
[15] Healy (1999) 388–389.
[16] Budé's format is for Latin text on the left page of a doublespread to be matched by French translation of it on the right page.
[17] See Appendix 3. Inevitably, the editors for Budé vary in the attention they give to the manuscript tradition: see Reeve (2007) 115–116.
[18] The format matches Budé's, with concise commentary, a list of variants in the Latin text, and detailed indices.
[19] A Russian translation – the first ever – has now started to appear: see Ilyushechkina et al. (2021).

Shakespeare[20] – was only supplanted by that of John Bostock and Henry Thomas Riley in 1855, with the translators' apologies to Holland in their Preface because his work was deemed "unsuited to the requirements of the nineteenth century." The same might have been said about their translation in the twentieth century by the Cambridge classicist Harris Rackham, who began an English translation for the Loeb Classical Library in the 1930s.[21] Strikingly, however, in a *Prefatory Note* Rackham warns that "[t]his translation is designed to afford assistance to the student of the Latin text; it is not primarily intended to supply the English reader with a substitute for the Latin."[22] The sole translator into English since Rackham – John Healy for Penguin in 1991 – was certainly intent upon being more helpful to those without Latin, but he offers merely a drastic abridgement. For example, he translates less than 40 of Book 5's 151 Paragraphs, with several of these abridged and even parts of some sentences omitted.

While we too are tackling only a portion of Pliny's *Natural History*, there can be no doubt about the potential value of a replacement for Rackham's translation in order to provide a coherent, self-standing addition to the expanding range of translated ancient texts about geography. Moreover, we append to Books 2 to 6 translations of a substantial range of varied passages from Books 7 through 37. Although the choices made are inevitably subjective, all in one way or another relate closely to geography and illustrate its importance to Pliny's understanding of the natural world.[23] We mean our audience to include classical scholars, but our translation is intended mainly for readers who will not consult a Latin text (which we do not include) and are not specialists in any area of ancient studies. In view of the commentary to be provided by Duane W. Roller, only the bare minimum of explanation accompanies our translation.

The Translation: Character

'Coherent' may not be the appropriate description of Pliny's notoriously challenging Latin.[24] Compressed constructions often stitch together breathless, rambling sentences. Tedious, though important, lists – "the

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[20] Gillespie (2001) 421–425.
[21] The Loeb translation, like the Budé, faces a Latin text, but there is next-to-no commentary.
[22] Rackham (1942) vii, an approach curiously out of step with Loeb's avowed mission. This note no longer appears in reprints of the volume after 1969.
[23] Again we follow the Budé Latin text in each instance.
[24] Healy (1987); Pinkster (2005); Travillian (2015).

bare names of places," in Pliny's own phrase[25] – are interspersed with rhetorical descriptions and frank personal outbursts. Thus to strike a balance between readable English and a faithful representation of Pliny's sentence structure is no easy task. Accordingly, a brief explanation of the principles that we have developed and normally followed for our translation is called for in order to prepare readers.[26]

It has been our aim throughout to remain as consistent and accurate as possible in rendering Pliny's Latin and in capturing his tone, which switches repeatedly. Put another way, we always seek to reflect Pliny's style, and we emphatically reject the temptation to 'improve' his prose. This is often liable to resemble a terse, opaque tweet, with few or no verbs, drafted in haste more to himself rather than for any audience. Nonetheless, for our readers' sake we do split some interminable sentences into two or more, and we make liberal use of the colon and semi-colon. Also, our use of the comma is very deliberate, again to aid the reader. As one means of conveying the clipped, staccato character of Pliny's 'memo to self' style without impairing its comprehensibility, we mostly omit the definite article (which does not exist in Latin) before a name or term in contexts where really it is superfluous, even though expected in standard English. We believe that, after an initial jolt, readers are unlikely to be concerned by its absence.

An especially unsatisfactory feature of Rackham's translation is his inconsistent and unexplained handling of placenames. Our approach is to keep these names for the most part in the form used by Pliny (as does Rackham sometimes), with only limited conversion to English equivalents. Rackham by contrast is prone to substitute the current (1930s) placename for Pliny's, one liable to reflect the now long outdated (and often offensive) preference of European colonialists. So in 5.9 Pliny's *Rutubis* Rackham translates Mazagan, and Pliny's *promunturium Solis* he translates Capo Blanco. Alternatively and unpredictably, Rackham may opt to substitute a literal English translation of an ancient name's meaning: hence Hiera Sycaminos becomes Holy Mulberry (6.184), and Zeugma becomes Bridgetown (5.67). His muddled handling of *Autoteles* ("Free State") sows serious confusion. In 5.5 he retains Pliny's name. Later, in 5.17, he translates it "Free State"; but then, further into the same sentence when he needs to refer to this people by name (to clarify the pronoun used here by Pliny), he switches to "Autoteles", without

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[25] *NH* 3.2.
[26] See further Talbert (2020).

explaining that these are in fact the "Free State" just mentioned rather than a different people, as readers of the translation alone would reasonably infer. We on the contrary reject the temptation to substitute modern names for Pliny's, or to use literal translations. A modern equivalent for an ancient name (where there is one) should be easy to establish by consulting pleiades.stoa.org. In addition, all places and features mentioned in our translation that can be located may be viewed on the accompanying digital map.[27]

Again, however, we do not go to extremes. We do use a few very common equivalent English placenames, such as Athens, Egypt, or Rome, but we still retain, for example, Danuvius, Germania, Graecia, Italia, and (because it is *not* the equivalent of modern Ethiopia) Aethiopia. We anglicize the names of well-known ancient individuals and peoples: so Pompey not *Pompeius,* Greeks not *Graeci,* Scythians not *Scythae.* On the other hand, for the less well-known we retain Pliny's form of their name. We do anglicize many adjectival forms, such as Atlantic sea for *Atlanticum mare* and Persian gulf for *Persicus sinus.* These last examples as presented here also illustrate our rendering of feature names (sea, gulf) uncapitalized, an attempt to soften the visual impact of a translation that teems with upper-case letters.

As commonly in English usage, we opt for J rather than I when a choice is called for (so Juba, not Iuba), and likewise U when needing to decide between U and V (so Ubii, not Vbii; but Andecavi, not Andecaui). More awkward is the issue of how to present names that Pliny (or his manuscripts at least) spells more than one way, such as Epiros (4.1) and Epirus (6.215). Normally the variants reflect Pliny's use of both Greek and Latin sources, and their retention may confuse readers. In such cases therefore, we adhere consistently to one spelling only. Our choice is the form that Pliny uses more often or, failing that, the form used in the *Barrington Atlas.*

There is a case for maintaining that the translation should take care to reflect at least some of Pliny's vocabulary choices. Consider, for example, his unexpected reference to the leading city of Caesarea in Mauretania as an *oppidum* (5.20). We determined therefore to translate certain Latin terms as consistently as possible. So the Latin *oppidum* is normally rendered as town, *urbs* city, *gens* people, *populus* community, *civitas* state, *litus* shore, *ora* coast, *portus* harbor, *sinus* bay; *Persicus sinus,* however, we

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[27] See also in print or as App for i-pad Talbert's *Barrington Atlas of the Greek and Roman World* (2000, 2013).
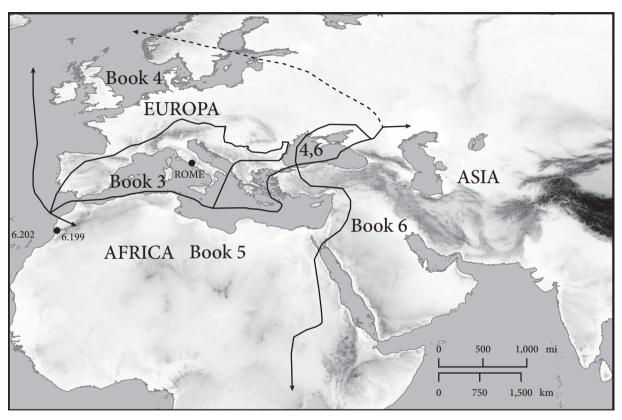
translate by the very familiar Persian gulf. In a few cases we do not differentiate Latin terms because suitable distinct English terms are lacking: consequently we render *flumen, fluvius* and *amnis* river, both *regio* and *tractus* region.

For various directional terms, too (such as *adversus*, *ante*, *contra*, *intra*, *sub*, *super*), we translate Pliny's prepositions literally. In a context where *sub*, for example, could be taken to signify 'to the south', we just retain 'below'. We do, however, translate *septentrio* (and cognates) as north, *meridies* south, *oriens* east, *occasus* west. Some Roman technical terms, like *conventus* or *princeps*, we leave in Latin but present in italics; such terms are explained in Appendix 1.

We treat numerals with similar restraint. Mostly, Pliny (or his manuscripts) state them in figures, although some are written out in full, and there are even occasional formulations like 'two short of 80' for 78 (3.62). The highest number our translation normally writes out in full is ten; above that, we use figures. In rendering units of length or distance (cubit, mile, *schoenus*, stade, etc.), we retain whatever Pliny states; Appendix 2 offers some possible conversions. Where Pliny gives a number in the thousands – with no unit stated, though presumably paces – we divide by 1,000 (the number of paces in a Roman mile). So, $\overline{XV}$, literally 15,000, we translate '15', miles being understood. However, where Pliny writes $\overline{XV}$ p., we translate '15 miles'.

[Square brackets] denote an addition by the translators, a cross-reference, translation (where Pliny uses a Greek word, for example), or short editorial explanation. Cross-references marked with an asterisk signify a passage in Pliny's text *not* included in our translation [e.g. 18.156*].

<Angled brackets> indicate a passage where some words have evidently gone missing from the Latin and cannot be recovered, or a passage which makes sense only if it is corrected.

Pliny's World: overview