Humanism, l’Esprit Philosophique, and the Encyclopédie

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Along with the King of France, the pope, salon- and theater-goers, duelists, alchemists, and disgraced finance ministers, the Republic of Letters comes in for bitingly satirical treatment in Montesquieu’s Persian Letters (1721). We are introduced, for instance, to a scholar whose boasts on behalf of his erudition serve only to damn him: among other useless accomplishments, he has written an essay proving “by means of learned conjectures drawn from the most venerated Greek authors, that Cambyses was wounded in the left leg, not the right.” Such a knowledgeable savant can accordingly congratulate himself that he is not “a useless member of the republic of letters.” Other members of the republic of letters are not let off the hook, either. A translator of Latin poets claims he has “give[n] new life to th[e] illustrious dead,” only to be informed that “you do indeed give them a body, but life you do not give them; a spirit to animate I would like to thank Keith Baker, Dena Goodman, Anthony Grafton, Robert Harrison, Peter N. Miller, Robert Morrissey, Larry Norman, Elena Russo, Jacob Soll, and Daniel Stolzenberg for their valuable comments on this paper. None of the research presented here would have been possible without the wonderful tools (and precious assistance) provided by the ARTFL project at the University of Chicago: thanks in particular to Mark Olsen, Glenn Roe, and Robert Voyer. 1 This scholar also lists among his works “a treatise in which I prove that the crown which was used, in the past, in triumphal ceremonial was made of oak, not laurel,” and an essay “where I prove that, for the Romans, a narrow forehead was a beautiful and desirable feature,” Lettres persanes (Paris: Gallimard, 2003); letter 142; 311–12; for the translation, see Persian Letters, trans. Margaret Mauldon (Oxford: Oxford University Press, 2008), 195. The quip about Cambyses’s leg is very similar in spirit to the satirical attacks on vain erudition made by Johann Burkhard Mencke in De charlataneria eruditorum declamationes duae (Leipzig: J. F. Gleditsch, 1715; a French translation appeared in 1721); “Only too often do men of this sort give their time to such trifles and trash,” such as “How many rowers did Ulysses have?” The Charlataney of the Learned, ed. H. L. Mencken, trans. Francis Litz (New York: Knopf, 1935), 111. My thanks to Kasper Eskildsen for suggesting this connection.

themselves is always lacking” (letter 128; 171). Rica, one of Montesquieu’s Persians, inveighs against *compilateurs*—“of all authors, I despise none more”—who “go off in all directions looking for bits and pieces of other writers’ works, which they then stick into their own, like pieces of turf into a lawn.” And his friend Usbek receives a letter from another pedant, an astronomer this time, who brags about his correspondence with “a man in Stockholm, another in Leipzig, and another in London, whom I have never seen, and no doubt shall never see.”

There is an element of irony in this satire, particularly in the last instance, as it occurs in a novel mimicking the very trans-continental, epistolary exchanges it mocks. Nevertheless, the acerbic commentary of Montesquieu’s Persians may be read as signaling both a Dämmerung of humanist idols and the dawn of the Enlightenment *philosophes*, incarnated here by the “very galant philosopher,” commonly identified with Fontenelle (letter 38). Pedants and *érudits* would indeed become fodder for worldly witticisms in the eighteenth century. The *philosophe* described by Dumarsais in his famous 1743 treatise—"he is a civil man [un honnête homme] who aims to please and be useful"—clearly owed more to Louis-Quatorzian conceptions of *politesse* than to the seventeenth-century scholar. And yet the persistence of certain early-modern scholarly habits, such as, most obviously, correspondence between the learned, entitles us to ask whether educated Europeans really went to bed one night reading like Kircher and woke up reading like Voltaire (to paraphrase Paul Hazard’s famous *mot*). Were humanist traditions so quickly and utterly dispersed by the esprit philosophique?

I argue in this paper that the spirit of Enlightenment blew off only the topsoil of erudite culture, and that humanist practices of learning were often perpetuated despite the occasional anti-humanist declarations. The principal focus of my study will be Diderot and d’Alembert’s *Encyclopédie*, but it could be extended to a range of other eighteenth-century texts, practices, or authors (as John Pocock has already shown for Gibbon and Voltaire). Montesquieu himself was not as critical of the Republic of Letters in his personal correspondence: when his duties as président à
mortier at the Parlement of Bordeaux kept him away from the capital, he begged a Parisian acquaintance to inform him “if anything is happening in the republic of letters,” and if so, “please let me know; write me long and thoughtful letters.”8 In certain other respects, he was a savant malgré lui: he kept, for instance, a strange journal called the Spicilège, which he inherited from an anonymous gentleman, who had transcribed therein passages from newspapers and classical authors. Montesquieu continued this practice, copying mostly news items, anecdotes, and conversations, but also passages from Suetonius, Tacitus, Cicero, Varro, and others (he also brags here that he is a distant relative of Joseph Scaliger).9 Although it was not destined for publication, the Spicilège’s authors thus perpetrated that great sin of “compilation,” and what’s worse, did so in a markedly humanist vein: the Spicilège resembles nothing more than the “commonplace books” into which early-modern scholars entered notable quotations, using headings for easy reference.10

This practice, which constituted a bridge of sorts between Renaissance and Enlightenment learning, also lay at the heart of the Encyclopédie.11 Published over the course of twenty-one eventful years (1751–1772), this text, which began as a translation project of Ephraim Chambers’s Cyclopaedia, developed into the signature work of the French Enlightenment. Weighing in at 18,000 pages of double-columned text, however, its gargantuan size has proved to be an obstacle for researchers, who generally turn to its better-known articles (e.g. “Autorité politique,” “Gens de lettres,” “Philosophe”) to form their judgment of the whole. While these articles are often the same ones that contemporaries read and debated most heatedly, they nonetheless produce a very partial picture of this sprawling work. If such passages confirm common assumptions about the Enlightenment as a time of philosophical engagement, with Le Procope sitting in for Les Deux Magots, they overshadow the more obvious fact that that the work in which these pièces de résistance are found does not look forward to Les Temps Modernes, but rather back to an earlier age of humanist erudition. Indeed, as Richard Yeo and Alain Rey, among others, have emphasized, encyclopedism was after all a defining feature of early-modern philological pursuits. As I suggest in this article, through a quantitative study of citation practices, the team of contributors that Diderot and d’Alembert as-

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8 Letter to Dodart, March 19, 1725, in Correspondance de Montesquieu, ed. F. Gebelin and A. Morize (Paris: Champion, 1914), 1:70. Near the end of his life, he told another correspondent that “you would greatly assist the republic of letters if you used your great talents to translate the good works that have been written in Danish, in particular those concerning history”; letter to La Beaumelle, March 29, 1751, in Correspondance de Montesquieu, 2:355.


sembled did not break with this tradition of encyclopedic collecting, but turned predominantly to the same sources for their material: Antiquity. So beholden, in fact, were these philosophes to the humanist ways of the past that one is tempted to reach a most unorthodox conclusion: namely, that the Encyclopédie was the greatest book the seventeenth century ever produced.12

ERUDITION AND THE ENCYCLOPÉDIE

The occasional disparaging remarks against érudits that pepper the Encyclopédie are often read as a sign that the philosophes had abandoned the learned practices of their predecessors. If there was one thing the esprit philosophique could not tolerate, it was (in d’Alembert’s words) “a vain display of erudition.”13 The vanity of humanist scholars, in fact, led them to develop a form of knowledge that was “often ridiculous, and sometimes barbaric.” Such criticism, however, must be weighed against both the surprising amount of praise showered on érudits throughout the work and the erudite practices of the encyclopédistes themselves (to which I will return later). As the guardians of memory, erudite scholars occupied a central place in the Baconian epistemology enshrined in the Encyclopédie: “neither philosophers nor poets realize how much they are indebted to memory,” d’Alembert asserted, whereas in fact “the studies of the scholar [l’érudit] have often provided the Philosopher and Poet with their own objects of attention.”14 In fact, so “indebted” did d’Alembert feel toward humanists that he bestowed the title of “premier siècle de lumière” (i.e. first century of Enlightenment) to the Renaissance, in the history of Western culture retraced at the end of his “Discours préliminaire” (1:xxiii). This history is echoed in the article “Critique,” by Marmontel, who perceived in the savant correcting ancient texts the forerunner to the philosophe unraveling moral and historical problems.15 Voltaire also acknowledged this genealogy in his article “Gens de Lettres,” where he describes the contemporary esprit philosophique as the successor and development of an earlier form of “critique.”16

The elegy of erudition did not stop at general statements: d’Alembert heaped praise on individual French savants in his article “Erudition,” bragging about “how brightly our nation has shined in this type of study [textual criticism]; it has immortalized the names of Pithou, Sainte-Marthe, Ducange, Valois, Mabillon, etc.”17 It was not only dead humanists who were deserving of praise: it was extended elsewhere to contemporaries as well. If the comte de Caylus did not always curry favor among the philosophes, he is nonetheless cited repeatedly as an authoritative

12 I owe this felicitous expression to Keith Baker. My thanks also to Daniel Stolzenberg for pressing me on the points developed in this paragraph.
13 “Hence that crowd of scholars [Érudits], versed in ancient languages to the point of dismissing their own, scholars who, as a famous author wrote, were familiar with everything about the Ancients except their elegance and subtlety [grâce et finesse], and which a vain display of erudition made so proud...”; in “Discours préliminaire,” in Encyclopédie, 1:xx. The following quote is from the same source.
14 “Discours préliminaire,” in Encyclopédie, 1:xviii.
15 Encyclopédie, s.v. “Critique,” esp. 4:490–94. D’Alembert had already traced the origins of critique back to erudition, in his article under that heading: “From the knowledge of history, languages, and books stems that important part of erudition, known as critique,” Encyclopédie, s.v. “Erudition,” 5:914.
16 “Previously, in the sixteenth century, and well before [in] the seventeenth, literary scholars spent a lot of their time on grammatical criticism of Greek and Latin authors; and it is to their labors that we owe the dictionaries, the accurate editions, the commentaries on the masterpieces of antiquity. Today this criticism is less necessary, and the philosophical spirit has succeeded it. It is this philosophical spirit that seems to constitute the character of men of letters; and when it is combined with good taste, it forms an accomplished literary scholar,” Encyclopédie, s.v. “Gens de Lettres,” 7:599. This translation, by Dena Goodman, is from the University of Michigan collaborative translation project of the Encyclopédie.
source in the *Encyclopédie* (97 times, to be precise). The academician Nicolas Fréret played an even more important role: he is referenced about an equal number of times as Caylus, but was distinguished in the article “Chronologie” (again written by d’Alembert) as an exemplar of learning and knowledge: “we cannot let pass this opportunity to celebrate the memory of such a scholar, who combined immense erudition with a philosophical spirit, and who brandished this double torch deep into his studies of Antiquity.”18 As Pocock noted, in a text that is oddly deaf to the numerous tributes to erudition in the “Discours préliminaire,”19 d’Alembert also seems to have borrowed his famous opposition between the *esprit philosophique* and the *esprit de système* from Fréret’s *Réflexion générale sur l’étude des anciennes histories* (in which Fréret claimed that “The *esprit philosophique* is most different than the *esprit de système*: just as the former is necessary, the latter is dangerous,” etc.).20

Finally, and perhaps most stunningly, d’Alembert grants that erudition can even rival scientific enquiry for its intellectual demands: “The type of wisdom [sagacité] required by certain branches of erudition, such as criticism, is no less than that needed to study the sciences; indeed, sometimes greater subtlety [finesse] is demanded.” In fact, not only humanist knowledge required an *esprit de finesse*, but the latter could even benefit contemporary scientific research: “scientific studies should be enlightened by reading the Ancients.” These are not the words of an anti-humanist philistine. Like Bacon before him, d’Alembert ended up admiring the wisdom of the ancients, which modern scholars, he concludes, may in fact only be re-discovering: “in many regards modern philosophy has been returning to what was thought during the first age of Philosophy.”21

The brand of erudition favored by the *encyclopédistes* is certainly not the same as the one that flourished at Leiden University or the Collegio Romano a century earlier: Nicolas Fréret, who sparred with Newton and read Bayle, was no Scaliger or Kircher.22 As Chantal Grell has noted, by the turn of the eighteenth century even humanists had begun to shy away from “vain displays of erudition.”23 One compelling reason for this shift may be found in the “Quarrel of the Ancients and Moderns,” a debate that preoccupied French (as well as European) gens de lettres between the 1680’s and 1710’s.24 The name of this quarrel is somewhat misleading since, as Lev-

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18 *Encyclopédie*, s.v. “Chronologie,” 3:392. The entries for “Dieu” and “Etymologie” similarly contain glowing praise for the academician (see 4:981 and 6:111, respectively).

19 Enlightenments of Edward Gibbon, 158. I return to Pocock’s interpretation of d’Alembert’s “Discours” below.

20 *Réflexion générale sur l’étude des anciennes histories* (Paris, 1724), 79; originally published in the *Mémoires de littérature tirés des registres de l’Académie royale des Inscriptions et Belles-Lettres* (The Hague, 1719–24). Compare with d’Alembert’s statements in the “Discours préliminaire” about “the true systematic spirit [le véritable esprit systématique] which one should not mistake for the spirit of systems [l’esprit de système], which is often found separately,” *Encyclopédie*, 1:vi. D’Alembert also evokes the *esprit philosophique* on three occasions in this text.

21 All quotes from the article on “Erudition,” 5:916–18. D’Alembert adds that “the philosophical spirit found in the exact sciences, which have certainly contributed to its dissemination among us, is often praised; yet does anyone believe that this philosophical spirit is not commonly needed in matters of erudition? How it is needed in criticism, to distinguish between truth and falsehood!” 5:917.


ent Yilmaz argues, it was not so much “a debate or conflict between Ancients and Moderns, but a public polemic between two Modern factions.”25 The so-called “Ancients,” in other words, did not seek to downplay Modern achievements in medicine, astronomy, or philosophy, but rather insisted that in literary matters, Ancient authors were not so easily (if ever) surpassed. In this regard, Larry Norman suggests in a forthcoming study, the party-line of the Ancients, far more than that of the Moderns, foreshadows the outlook of the philosophes.26 Voltaire, for instance, had little but scorn for Claude Perrault, author of the Modern manifesto Le siècle de Louis le Grand (1687), whereas he greatly admired Jean-Baptiste Dubos’s Réflexions critiques sur la poésie et la peinture (1719), which laid out a measured case for Modern achievements, all the while underscoring the lasting importance of studying and reading the Ancients.27 Faced with a frontal challenge from Modern apologists, admirers of Antiquity were obliged to desist from overt anticlassicism—part of the “défaite de l’érudition” which Blandine Barret-Kriegel has described—yet in so doing also provided the philosophes with more accessible classical models to emulate (Diderot’s Essai sur Sénèque being a paradigmatic example).28 The anti-humanist moment to which Montesquieu’s Persian Letters bore witness, when certain men and women of letters championed a goût moderne opposed to “pedantry,” had passed by the time of the Encyclopédie: now philosophes attacked “the mania of bel esprit” (d’Alembert’s words), privileging a more austeré goût classique or grand goût, as Elena Russo detailed in a fascinating new study.29

The high esteem in which the philosophes often placed erudition certainly suggests that there is more to an older historiography of the Enlightenment that did not think twice of extending the intellectual genealogy of the philosophes back to the Renaissance.30 While this earlier scholarship is certainly itself in need of revision, it is nonetheless surprising how swiftly and completely the tie between humanist and Enlightenment practices has been severed by more recent historians.31 Moreover, to the extent that there was a break, it may have had more to do with

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Hartog, Anciens, modernes, sauvages (Paris: Galaade, 2005). I greatly benefited from Larry F. Norman’s forthcoming study, The Shock of the Ancient, and am most grateful to the author for letting me consult his manuscript.

21 Yilmaz, Le temps moderne, 29.
26 Norman, Shock of the Ancient, part II.
27 See the various comments on Perrault and Dubos in Voltaire’s Siècle de Louis XIV. I discuss the place of Dubos and his Réflexions critiques in the genealogy of the Enlightenment in a forthcoming study.
31 For a typical contemporary attitude, see for instance Louis Dupré’s claim that “no direct causal succession links the humanism of the fifteenth century with the Enlightenment,” The Enlightenment and the Intellectual Foundations of
personal animus than philosophical differences. Caylus was clearly not on good terms with Diderot, Marmontel, and the other *encyclopédistes* (in the 1760’s, at least); Jean Seznec even relates how visitors to Paris were often obliged to choose between their dueling salons. And yet too much weight has probably been accorded to the account by one famous visitor who did spend time in both: Edward Gibbon. Gibbon’s reaction to d’Alembert’s “Discours préliminaire” (recorded in his *Essai sur l’étude de la littérature*, which sought to “liberate an honorable science [erudition] from the current disdain it receives”), and subsequent encounters with both *encyclopédistes* and *érudits* in Paris have served to back up the claim, put forth recently by Pocock, that the *philosophes* “claimed not to need” the latter. In fact, however, d’Alembert never made such a claim, and repeatedly acknowledged (in the “Discours préliminaire” and other articles) the dependence that philosophers had on erudite scholarship. If Marmontel penned an unflattering portrait of Caylus in his *Mémoires*, such criticism must be balanced against the comments made by other members of the *coterie d’holbachique*, such as François-Jean de Chastellux, who penned a moving elegy of past great humanist scholars:

> the Scaligers, Estiennes, Saumaises, Rhodomans, Gronovius, Casaubons, are only ridiculed by so-called scholars [*prétendus lettrés*] who [...] claim to know Latin because they understand a few things in a few authors [...] I only enjoy studying the Ancients in their precious *Variorum* editions, which can still be found among enlightened amateurs [*curieux éclairés*]; and I cannot read them without admiring the astonishing wisdom with which these scholarly commentators [*savants scoliastes*] established and explained texts through their knowledge of morals [*mœurs*] and customs.

We should be wary of reading too much, then, into the social rivalries of Enlightenment Paris: they do not necessarily translate into neat epistemological divisions. As we will see in the following sections, the contributors to the *Encyclopédie* seem by and large to have been of Chastellux’s opinion when it came to reading and admiring the Ancients. They let their humanist predecessors lead the way.

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35 Pocock argued that the *défaite de l’érudition* “consisted in the appearance and self-organisation of a class of *philosophes* who claimed not to need them [*les érudits*],” *Enlightenments of Edward Gibbon*, 147.

36 *De la félicité publique* (1772; Paris: A.-A. Renouard, 1822), 2:80. On Chastellux, see Alan Charles Kors, *D’Holbach’s Coterie: An Enlightenment in Paris* (Princeton, NJ: Princeton University Press, 1976). Let us not forget that even Gibbon found Caylus odd: “He rises early, runs through the artists’ painting rooms all day long, comes home again at six o’clock in the evening, puts on his dressing-gown, and shuts himself up in his closet. Is this the way to see one’s friends?” Conversely, Gibbon seems to have mostly enjoyed the company of d’Holbach: “The Baron possesses genius and learning, and, above all, he very often gives capital dinners [...] In these symposia the pleasures of the table were improved by lively and liberal conversation,” *Autobiography*, in *Miscellaneous Works of Edward Gibbon*, 152 and 151.
A CITATION INDEX OF THE ENCYCLOPÉDIE

To establish the existence of a credible genealogy between Renaissance and Enlightenment epistemologies and intellectual practices, we must determine the extent to which the philosophes’ praise of erudition went beyond academic politeness and informed the actual structure and content of their knowledge. Even for the Encyclopédie, this is a daunting task, given the size and variety of this text; using some of the technologies that have transformed our own world of letters, we can at least offer some educated guesses.

Thanks to the ARTFL project at the University of Chicago, which has digitized the entire Encyclopédie and made it available online, we may get a sense of the intellectual horizon of the Enlightenment by examining which authors the encyclopédistes considered to be most authoritative on any given subject. Authority was certainly one of their central concerns: Diderot even devoted an article to textual authority (autorité dans le discours), which he defined as “the right that one has to be believed; hence, the greater the right to be believed, the greater the authority.” While he criticized those “who in their studies are guided only by authorities,” comparing them to “the blind being led by others,” he nonetheless recognized that by necessity we must grant a varying “degree of knowledge and good faith” to different authors. Diderot suggested that the authority of others might not be needed in science and philosophy (as opposed to religion and history), yet as a whole the Encyclopédie relies on authoritative accounts throughout. Nearly all articles list the names of the authors or works on which the contributor based his text, in accordance with d’Alembert’s guidelines. In fact, many articles contain (and in some instances, consist of little more than) lengthy strings of names, making it possible to create a “citation index” for the Encyclopédie (appendix 1). The numbers for each citation simply reflect the number of times an author is cited in the Encyclopédie, a rather crude measure to be sure, which does not account for negative citations (although of course, neither do modern citation indexes). Authors who were cited less than 10 times have been placed on a separate list (appendix 2). Simple as it may sound, this index nonetheless has the following problems:

• First, it is not always clear who qualifies as an authority, and some decisions will probably be challenged. I have chosen, for instance, to include Homer and Moses, since they are often referenced as sources of information on, respectively, ancient Greek geography or civilization, and Jewish law. Both, after all, were authors (the Pentateuch of the Old Testament being traditionally attributed to Moses). Conversely, even though his Gallic Wars are on occasion referenced, I excluded Julius Caesar from the list, since he mostly figures in a political and historical capacity. For the most part, literary authors and artists have been left out for similar reasons.

37 I owe a special thanks to Keith Baker for helping me conceptualize authority in the Encyclopédie.
39 See in particular the “Avertissement des éditeurs” to the third volume: “We have usually cited primary sources in the [...] Encyclopédie; we have sought to replace excessive citations with general references [avis généraux et suffisants]” (3:viii). I return to d’Alembert’s discussion of citation protocols below.
40 See for instance (among a plethora of possibilities) the articles “Anatomie,” “Jurisconsulte,” “Médecins anciens,” or “Philologue.”
41 The rationale for creating two lists will become apparent below, in the discussion of specialization and chronological fields for each author. For many of the lesser-known authors, it simply proved too difficult to find sufficient biographical information for them. Some of this data was accumulated with the help of my research assistant, Natalie Dawn Knutsen.
A second difficulty lies with the intricacies of early-modern spelling: names do not always appear in the Encyclopédie under the same guise. The name of the Persian scholar Razi, for example, receives no fewer than four spellings (Rasis, Rases, Rhasis, Rhazis). Ancient writers could be cited in either their modernized or Latinized form (Dicéarque is also Dicearchus); and the French encyclopédistes were not always very clear about Dutch or English patronyms (Ruysch often becomes Ruisch). While I have tried my best not to miss any names due to spelling variations, it is highly likely that some slipped through.

A third problem concerns names derived from geographical places or common nouns. There are 3263 mentions of “Racine” in the Encyclopédie, but most of them designate mathematical or vegetative roots, not the French playwright and historiographer; the name Sainte-Marthe is shared by a Brazilian province and a philologist. When the number of hits was sufficiently low, I sought to sort through the different references to reach accurate numbers; when the volume was too great, I resorted to estimates (usually based on the number of correct citations for the first 100 hits).

Fourthly, many names are not unique identifiers: there was a Church historian named Socrates, and at least three different Arnalds. To work around this difficulty, I either counted names separately or estimated a ballpark number (sometimes filtering the search by relevant classification). When siblings or family members had the same occupation and lived during the same period, I counted them as a single authority.

Finally, and most importantly, in the absence of an exhaustive index, there is no sure way of drawing up a complete list of authors cited in the Encyclopédie. The present index, though containing over 1200 names, is no doubt far from complete. While recurring patterns (and statistics) of citation have not varied significantly with the addition of new names, it is nonetheless hard to determine how representative the accumulated data is, let alone to estimate its margin of error. A single author who slipped through the loops could theoretically throw the percentages significantly.

Bearing these caveats in mind, the picture that emerges from this index is nonetheless so striking that it seems safe to assume that it provides a rough image of what might be described as the “imaginary library” of the encyclopédistes. The biggest surprise is that this library is not all that different from what one would expect from a much earlier library. If we omit the dictionaries (Chambers and Trévoux), there are only five “moderns” among the top 30 authors cited: Tournefort, Newton, Descartes, Boerhaave, and Ducange. (Tournefort is something of an anomaly, as he was the favorite botanist of the Chevalier de Jaucourt, the virtuoso author of no less than one quarter of all the articles in the Encyclopédie.) Moreover, the score for the lowest-ranking of these, Ducange (341), is more than eight times lower than that for the highest ranking figure, Pliny (2893). It is fairly unsurprising that Pliny, whose Natural History was itself encyclopedic in scope, should top this index, but his prominence is part of a much larger pattern: everywhere the Ancients surpass the Moderns. Even in areas where the Moderns had made indisputable progress, they remained in the shadow of Antiquity: in medicine, for instance, Hippocrates (1016) outscores Boerhaave (487), Réaumur (246) and Robert Boyle (196) combined; whereas in astronomy, Galileo (188) is cited nearly ten times less often than Ptolemy (1664). The Swedish eighteenth-century astronomer Celsius, whose name graces temperature degrees in most metric countries, is cited ten times less often than his near-homonym Celsus (or Celse, in French), who penned a polemic against Christianity in the second century A.D. (21 vs.
213). Apparently, the *encyclopédistes* largely followed Voltaire’s advice in the *Lettres philosophiques*: “Consulte l’Antiquité.”

How do these numbers add up? If we rank the authors by period or century, the distribution appears as in Figure 1 below. Taken as a whole, references to the Ancients thus make up nearly half the citations in the *Encyclopédie*; the *encyclopédistes* weren’t merely paying lip service to humanist learning; they were reading and referencing like humanists, as well. As with all statistics, these numbers are open to different interpretations. It would certainly be a mistake to assume that, just because the *encyclopédistes* regularly consulted the Ancients, they always agreed with them: in the article “Néréides,” for instance, Jaucourt cites Pliny’s observation that a Nereid was spotted on a beach in the time of Tiberius, only to conclude that it must really have been a fish. Nonetheless, the overwhelming number of references to the Ancients strongly suggests that they were perceived as authorities on a vast number of topics. This impression is confirmed by examining a sample of 100 Pliny citations, a vast majority of which are positive (83%), as opposed to a fraction of critical ones (10%; an additional 7% are slightly qualified). While over 50% of the articles in which these citations occur are classified under the heading “ancient geography,” the prevalence of this category is in itself telling. Many of its entries simply record a place name that was “mentioned” by Pliny or another ancient writer, whose exact location has since been lost. Such ghost towns, which gave rise to much speculation, make many ancient

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43 References to medieval or pre-sixteenth-century authorities have been omitted from this figure, as they constitute a negligible percentage (~1%).
44 “Pline, LIX.c.s, raconte que du temps [sic] de Tibere on vit sur le rivage de la mer une néréide, & qu’un ambassadeur des Gaules avoit dit à Auguste qu’on avait aussi trouvé dans son pays sur les bords de la mer plusieurs Néréides mortes; mais dans les Néréides de Pline & de l’ambassadeur de Gaules à Rome, nos Naturalistes n’auront vu que des poissons,” *Encyclopédie*, s.v. “Néréides,” 11:100.
45 This sample data is gathered from hits 1–25 (from vol. 1), 1001–24 (vol. 11), 2001–24 (vol. 14), and 2856–80 (vol. 17), of a full-text search for “Pline.”
46 There are indeed more than 3300 articles classified under this heading in the *Encyclopédie*; by contrast, there are 5026 for “modern geography.”
47 See for instance the entry on “Scythicus sinus,” which is simply defined as a “golf on the Capssian sea, which Pliny, *lib. VI. c. xiiij.* & Pomponius Mela, *lib. III. c. v.* mention,” 14:849.
geography articles read like the description of a lost, fabled continent. But this kind of entry also makes it difficult to argue that the *encyclopédistes* had a more utilitarian approach to knowledge than humanist scholars.

The *Encyclopédie* thus seems to be infused with a classical imagination, also evident in the many articles on ancient history (1054, compared to 1346 for modern history). This numerical importance, moreover, only tells part of the story. Where the *encyclopédistes* generally remained faithful to their stated intention not to produce a historical dictionary, they could not keep, for instance, from rehearsing the history of Rome across nine columns (whereas France was not even granted seven paragraphs). This reverence for the Ancients could even morph into a full-blown nostalgia for Antiquity, as when Jaucourt railed against the modern “spirit of commerce,” which had “broken the links of individual charity [*bienfaisance*].” While recognizing that the spirit of commerce “had done great good and great ill,” this disciple of Montesquieu nonetheless regretted how “this love [of interest] has replaced the secret movements of nature, which once bound men with tender and loving knots.”

Mostly penned by Jaucourt, such articles nonetheless fit into the general historical consciousness (or what François Hartog has termed *régime d’historicité*) inscribed in the *Encyclopédie*.

Indeed, in d’Alembert’s philosophical history, Antiquity constituted a series of glorious “centuries of Enlightenment [*siècles de lumière*],” followed by the “dark and barbaric times” of the medieval period. “Enlightenment” only returned when Ancient learning flowed back into Western Europe after the fall of Constantinople. Where “Modern” accounts of intellectual history generally began with Bacon and Descartes, d’Alembert reveals his debt to the Ancient party by looking back to Athens and Rome.

To what extent did this respect for the Ancients, however, extend to the Renaissance scholars who had revived them? D’Alembert’s celebration of the humanist and philological work performed during the “Renaissance of letters” is reflected in our citation index. Based on the adjusted num-

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46 For a typical example, see the article “Lagnus - Sinus:” “golf in the Baltic sea, which according to Pliny neighbors the land of the Cimbri,” 9:174. On this topic more generally, see David N. Livingstone and Charles W. J. Withers, eds., *Geography and Enlightenment* (Chicago: University of Chicago Press, 1999).

47 See *Encyclopédie*, s.v. “République romaine,” 14:154–58; ironically, Jaucourt begins this article by recognizing that “everyone knows the history of this republic by heart.” For comparison, the article “Angleterre” only receives two paragraphs, but the entry for “République d’ Athènes” is four pages long. For the statement about the place of history in the *Encyclopédie*, see the “Discours préliminaire”: “it should be noted that the *History* articles of our Encyclopedia do not encompass the names of kings, scholars, and peoples, which are the subject of Moréri’s Dictionary,” 1:xli.


53 For the paradigmatic Modern history, see Perrault’s *Siècle de Louis le Grand*. While recognizing the unique and remarkable achievements of (what we would come to call) the Scientific Revolution, most Enlightenment accounts followed Voltaire (who in turn was following Du Bos) in recognizing at least two glorious ages in Antiquity, the centuries of Pericles and Augustus. I discuss these different historical accounts in a forthcoming study.
bers, there are over twice as many references to seventeenth-century authors as there are to eighteenth-century ones; and nearly as many references to Church or sixteenth-century authorities as there are to contemporaries. These general figures strongly suggest that the *encyclopédistes* did not seek merely to present new and cutting-edge ideas, but rather to gather vetted and time-honored knowledge in one place (an objective explicitly stated by the editors, as we will see). And what kinds of authoritative figures were they citing? In the case of the seventeenth century, humanists, jurisconsults, philologists, and theologians predominate by a small majority (around 52%) over astronomers, physicians, mathematicians, and naturalists (8821 vs. 7502 total hits: see Figure 2). Even among the former, we do not find the usual suspects: Jean Hardouin, for instance, is cited as many times as Spinoza (199), and Gerhard Johann Vossius, almost as many times as Galileo (181 vs. 188; some of the hits for Vossius may refer to his son Isaac).

These numbers hardly change when sixteenth-century authors are included (Figure 3). The great humanist Scaliger, for instance, is referenced more often (219 times) than either Leibniz (211) or Montesquieu (197), and Charles Loyseau, a political jurist born in 1566, comes in ahead of Rousseau (127 vs. 116 for the latter). Men of letters are again cited slightly more often than men of science (11495 vs. 10507 total hits).

When we turn to the eighteenth century, however, the proportion between letters and sciences is suddenly inversed: references to doctors, mathematicians, naturalists, and astronomers outnumber those to philosophers and humanists (3445 vs. 2899 hits). The high incidence of medical references (29% of total) correlates with the surge in medical discoveries made in this period: as Peter Gay noted, “Medicine was the most highly visible and the most heartening index of general improvement.” In fact, even in this field, early-modern medical authorities are cited nearly twice as often as their eighteenth-century successors (3524 vs. 1813 hits). It is ultimately with respect to humanistic and philosophical matters that this proportional reversal is most telling, as it suggests that the *encyclopédistes* did not seek to distance themselves all that greatly from their

![Figure 2](image)

**Figure 2** Fields of authority in the *Encyclopédie* (17th century)

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[^55]: I did not include eighteenth-century dictionaries in these calculations, given that they cannot be easily categorized in any single field (or even into a letters vs. sciences opposition).
sixteenth- and seventeenth-century predecessors. Despite grand claims about a new siècle de lumièret, the encyclopédistes remained largely enthralled with the grand siècle that preceded them (and had recently been celebrated by Voltaire). Of course, when the first volume of the Encyclopédie was published, the eighteenth century still had half its course to run, yet it remains curious that such an eminent figure as Buffon would be cited less often than the humanist Ducange.

How much can we infer from these statistics? They are, to repeat, somewhat crude: if Montesquieu comes in at a disappointing 197 citations, this number misses the numerous references to "the illustrious author of the Spirit of the Laws," and other such periphrases. I certainly do not wish to suggest that a quantitative study of the Encyclopédie will answer every question. Nonetheless, these numbers do tell a surprising story, one that is largely at odds with much of the scholarship on the Encyclopédie and the Enlightenment.

FROM CITATION TO QUOTATION: PLAGIARISM VS. EXTRACTION

What remains to be seen is how this kind “macro-analysis” (to borrow a concept in the digital humanities proposed by my colleague Matthew Jockers) translates at a textual level. Does citation determine the actual content of the Encyclopédie articles? In the “Discours préliminaire,” d’Alembert suggested that citation went hand-in-hand with another practice: quotation. “We sought […] to cite in the articles themselves the authors on whose testimony we have relied” (1:xxxvii). An intriguing question, therefore, is how do citation and quotation correlate? Is the knowledge contained in the Encyclopédie mostly a compilation of other works?

This question is nearly impossible to answer in full, at least at our present stage of research, but it is also, in some respects, moot. Indeed, the editors of the Encyclopédie never claimed to be creating a wholly original document, and made it clear from the outset that compiling was a central part of what an encyclopedia should do: “[l’Encyclopédie] n’est & ne doit être absolument dans sa plus grande partie qu’un Ouvrage recueilli des meilleurs Auteurs,” d’Alembert asserted in the preface to the third volume, “Et plût à Dieu qu’elle fût en effet un recueil de tout ce que les autres livres renferment d’excellent, & qu’il n’y manquât que des guillemets!”57 It was this absence of quotation

57 “Avertissement des éditeurs,” in Encyclopédie, 3:vii; see Brot, “Ecrire sans écrire.”
marks that led the editors of the *Dictionnaire de Trévoux*, which itself made frequent appearances in the *Encyclopédie*, to charge Diderot and d’Alembert with plagiarism. But the editors never tired of emphasizing that “There is a big difference between taking certain pieces from an author, and stealing them.” While this distinction might not pass muster in today’s classrooms, it was at the time perceived as a necessary and even defining practice for any encyclopedic work. Indeed, the very goal of the *Encyclopédie*, Diderot asserted in his article under that heading, was none other than to “gather knowledge that has been scattered across the globe; reveal its general system to our fellow men; and transmit it to posterity, so that the work of past centuries was not in vain for the centuries to come.” These three steps were not in the least mechanical, as they depended on the scholar’s ability to “distinguish what is worth saving” (645).

The key concept for this kind of encyclopedic project was that of “extraction.” “Good extracts,” d’Alembert argued in the “Discours préliminaire,” are essential for instruction; like the érudits before them, the encyclopédistes had to “extract from the works of the Ancients everything that could be useful to us.” The chief model which d’Alembert invoked in his defense against the plagiarism charge was the humanist Charles Rollin (historian, antiquarian, rector of the University of Paris, and member of the Académie des inscriptions): “The late M. Rollin [...] found it fitting to insert into his writings in full the most beautiful passages from ancient and modern authors.” “Good extracts” would not only save us time (“How much useless reading will be spared?” asked d’Alembert), but also prevent us from becoming submerged beneath superfluous texts, both past and present. The *Encyclopédie* aimed first and foremost to resolve a common early-modern anxiety, namely how to navigate the exponentially expanding sea of books and knowledge. Rearranged alphabetically, the *Encyclopédie* was not that dissimilar to the early-modern commonplace book (as Richard Yeo has suggested, although mostly with regard to other eighteenth-century encyclopedias); like Montesquieu’s *Spicilège*, it was indeed largely a “compilation” of useful quotes.

59 “[Le] but d’une *Encyclopédie* est de rassembler les connoissances éparses sur la surface de la terre; d’en exposer le système général aux hommes avec qui nous vivons, & de le transmettre aux hommes qui viendront après nous; afin que les travaux des siecles passés n’aient pas été des travaux inutiles pour les siecles qui succéderont,” *Encyclopédie*, s.v. “Encyclopédie,” 5:635.
60 For the passage on the érudits, see the “Discours préliminaire,” in *Encyclopédie*, 1:xii. The full first quote reads: “On abrégéret encore davantage ces moyens [de s’instruire], en réduisant à quelques volumes tout ce que les hommes ont découvert jusqu’à nos jours dans les Sciences & dans les Arts. Ce projet [...] nous débarrasseroit enfin de tant de Livres, dont les Auteurs n’ont fait que se copier les uns le s autres [...] Combien de lectures inutiles dont nous serions dispensés par de bons extraits?” (1:xxxiv). On the humanist practice of extraction, see notably Soll, *Publishing The Prince.*
62 See also the article on “Abrégé:” “One must say in favor of summaries [abrégés] that they are helpful for those people who do have the time to consult original texts, nor the ability to procure them, nor the talent to develop them, nor to unravel what a skilled and precise editor [compilateur] offers them all predigested”; “They are useful [...] when they are produced in such a way that they provide a full understanding of an object, as a miniature version of a larger portrait,” *Encyclopédie*, 1:35. On this point, see Yeo, *Encyclopedic Visions*, 94.
63 A similar concern, and similar solution, was expressed by Voltaire: in a January 9, 1763, letter to Elie Bertrand, *Voltaire* wrote, “I believe we must henceforth put everything into dictionaries. Life is too short to read so many big books one after the other: a curse on long treatises! A dictionary gives you exactly what you need, when you need it. They are particularly useful for knowledgeable people, who seek to remember what they already knew,” quoted by Andrew Brown, introduction to Voltaire’s *Dictionnaire philosophique*, in *Œuvres complètes de Voltaire* (Oxford: Voltaire Foundation, 1968-), vol. 35; available online through the Voltaire électronique database. See also Ann Blair, “Reading Strategies for Coping with Information Overload, ca. 1550–1700,” *Journal of the History of Ideas* 64, no. 1 (2003): 11–28.
A CASE STUDY OF EXTRACTION: THE ARTICLE “ETAT DE NATURE”

But extracting was not just about copy/pasting: it was also about distilling the essence of a text, as Diderot commented in the article “Encyclopédie”: “One must in particular extract the systems, unusual ideas, observations, experiments, opinions, maxims, and facts from authors.” The complexity of this practice, and the skill required to perform it successfully, may best be evaluated with an example; an illustrative one can be found in the article on “État de nature.”Attributed to the chevalier de Jaucourt, the article is mostly borrowed (without any indication of its source) from Locke’s Second Treatise on Government, in David Mazel’s translation. A closer look at the specifics of the borrowing, however, reveals Jaucourt’s intimate familiarity with the original text and its internal structure (see appendix 3). He begins, after five introductory paragraphs which are not in Locke, with §4 of the Second Treatise, but then immediately skips over the discussion of Richard Hooker (with whom French readers would have been unfamiliar) found in §5. He considerably edits down §§6–7, then skips over §§8, 10, 13, and 15–18, before reproducing §19 almost in its entirety. At this point (paragraph 15 of the Encyclopédie article), however, Jaucourt jumps all the way to §§101–2, before vaulting forward again to §§124–28. The article can thus reasonably be said to live up to the editors’ claims of extracting and condensing long works down into clear summaries. The seamless jump from §§101–2, which discusses the historical reality of the state of nature, to §124, which lists the reasons why humans contracted into civil society, is a good indication that Jaucourt understood the internal organization of the Second Treatise very well, and was not lifting passages at random.

If we descend into even greater detail, it becomes clear that hardly any of the original text makes its way into the Encyclopédie without considerable emendation. Jaucourt is usually a hyperactive editor, incessantly changing a word or expression, dropping unnecessary clauses, and ruthlessly cutting entire paragraphs. Most of his editorial choices go in the direction of concision: he occasionally paraphrases complex passages, reducing their length (for instance at the end of paragraph 17). Along with editorial changes, Jaucourt has a keen eye for style and argumentative flow: many of his additions (notably in paragraphs 9 and 10) bring more coherent transitions to the text. Such incessant attention to detail and clarity is not the sign of a lazy plagiarist, but rather that of an attentive scholar.

Finally, it is worth noting that Jaucourt does not limit himself to merely editing Locke’s text; he also introduces subtle (and not-so-subtle) changes that considerably modify the original signification. At the end of paragraph 7, for instance, he drops a qualifying clause, in which Locke entertains the possibility (only to reject it subsequently) that God may have willed natural inequality—a possibility that would have resulted in “an undoubted right to dominion and sovereignty” (or “un droit irréfragable à la domination et à la souveraineté,” in the words of Mazel’s translation). Jaucourt inserts a new conclusion, claiming that “this state of equality is the foundation of human duties”; for good measure, he also tacks on a renvoi to the article on “Egalité.” These additions leave no room for the hypothetical existence of political domination rooted in nature, and reinforce the egalitarian and liberal dimensions of Locke’s social contract theory.

64 “Encyclopédie,” 5:645.
65 This translation, made available online by Jean-Marie Tremblay, was reproduced a number of times throughout the eighteenth century: on its publication history, see Margaret Jacob, Living the Enlightenment: Freemasonry and Politics in Eighteenth-Century Europe (New York: Oxford University Press, 1991), 110–12; see also S.-J. Savonius, “Locke in French: The Du Gouvernement Civil of 1691 and Its Readers,” The Historical Journal, 47, no. 1 (2004): 47–79. Jaucourt, who had studied in England, could no doubt have read Locke in English, but the high number of exact matches between his article and Mazel’s translation leave little doubt that he was working with the French. I will refer to the sections of the Second Treatise using the symbol §, and the paragraphs of the Encyclopédie article by number.
Some of Jaucourt’s other insertions are even more blatant. In a discussion of how the origins of legislative and executive power are to be found in the rights we once possessed in the state of nature, Jaucourt interjected “the limits [les bornes]” into the sentence, “the original right and rise of both the legislative and executive power” (“la source & les bornes du pouvoir législatif & du pouvoir exécutif,” paragraph 21). While this addition does not fundamentally violate the spirit of Locke’s thought, it does fundamentally alter the argument in this section, as it calls attention to the limitations, rather than the justifying source, of power.

**CONCLUSION: REINVENTING THE REPUBLIC OF THE LETTERS**

Much as the proponents of the “new philosophy” and “new science” in the seventeenth century continued to borrow liberally from humanist traditions, as Anthony Grafton has shown, the encyclopedic and philosophical projects of the Enlightenment owed a great deal to the erudite practices of past scholars. The *encyclopédistes* even perpetuated some of the tricks of the humanist trade, such as the manipulation of learned quotations: in his article on “Autorité politique,” for instance, Diderot revised the scriptural defense of divine-right authority, *omnis potestas a Deo* (from Romans 13:1), by adding *ordinata est*, thus effectively transforming the meaning to “all power that comes from God is regulated” (“Toute puissance qui vient de Dieu est une puissance réglée”).

This persistence of humanist practices does not signify, of course, that the *Encyclopédie* was simply old hat. A number of articles staked out positions that lived up to expectations from a “philosophical” work. Diderot’s assertion that it sought to “change the common way of thinking”; Turgot’s appeal to “overturn these sterile monuments,” a reference to traditional institutions; and the new discourse on civil society, which sought to make it “a divinity on earth”; these bold and novel claims, made in some of the best known articles, are no doubt what distinguished the *Encyclopédie* in the eyes of its contemporaries. But it would be misleading to think of Enlightenment and erudition as mutually exclusive terms; humanist practices could be put to many uses, and classical texts offered as much intellectual firepower as did the philosophical arsenal found, say, in Bayle’s *Dictionnaire historique et critique*.

Humanism, in this interpretation, no longer appears in opposition to the Enlightenment, but can be seen to lie at the heart of the philosophical project to diffuse knowledge and “change the common way of thinking.” The classification, extraction, and compilation of texts and ideas had indeed been elevated to an art form, if not a science, by early-modern scholars; their techniques could now serve the philosophical good of disseminating “general Enlightenment [lumières générales].” This important role, however, remained a fairly invisible one, given that a

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69 See Diderot, “Prospectus:” “On ne peut disconvenir que depuis le renouvellement des lettres parmi nous, on ne doive en partie aux dictionnaires les lumières générales qui se sont répandues dans la société, & ce germe de science qui dispose insensiblement les esprits à des connaissances plus profondes” (emphasis added). As I suggest in a future publication, it was the sense that a new “philosophical spirit” was spreading through educated society that had already
collège education had made humanist practices almost second nature for Enlightenment scholars. In fact, they often did not even seem aware of their debt to the past: in a revealing passage, Diderot remarks,

> It would not be wasteful to establish correspondences between the principle centers of the educated world, and doubt not that one could succeed. We would exchange information about our practices, customs, publications, works, machines, etc., so long as no-one is left out, and all are given the same degree of consideration that befits the disinterested man wishing to be useful.⁷⁰

While the purpose of this “correspondence society” is perhaps more practical than learned, it is nonetheless striking that Diderot is, in essence, suggesting here that it might be worthwhile to create a Republic of Letters. The philosophes did not simply perpetuate the humanism of prior scholars; apparently, they felt the need to reinvent it, too.

N. B. Appendices are only available with the online version of this article.

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