

[1] Professor Janik, Ladies and Gentlemen—

[2] On October 19, 2018, Lion Air Flight 610 took off from the main airport in Jakarta, Indonesia, carrying 189 passengers and crew. The airplane was a new version of the storied Boeing 737—the so-called 737 Max—and was only three months old. Within two minutes, the co-pilot reported a flight-control problem; shortly thereafter the plane went into a violent 700-foot dive, leveled out again, and began to climb uncertainly. It reached 5000 feet and maintained that altitude, shakily, for another six minutes. At this point, the co-pilot contacted air traffic control and requested permission to return to the airport. Permission was granted, but the plane failed to reverse course, and the crew's transmissions made it clear that they were unable to judge their altitude, and unable to keep the plane's nose up. At twelve minutes into the flight, Lion Air 610 disappeared from radar. Approximately four months later, on March 10, 2019, Ethiopian Airlines Flight 302—another brand new Boeing 737 Max—went down on departure from Addis Ababa, taking an additional 157 lives with it. The 737 Max was then grounded worldwide.

The immediate cause of the crashes in Jakarta and Addis Ababa was quickly identified as a problem with the airplane's MCAS—Maneuvering Characteristics Augmentation System—or better put, with the pilots' ability to understand and control the MCAS, which drove their planes into a series of automated nosedives to which they were unable to respond effectively. Subsequent reporting painted a far more complex picture. The Boeing 737 was an old but very successful design, dating to the mid-1960s: by 2005, more than 25% of all commercial aircraft in service worldwide were 737s. In 2011, American Airlines announced plans to buy 460 new jets—not 737s, however, but a roughly equivalent, although far more powerful and fuel-efficient plane manufactured by Airbus, Boeing's European competitor. Boeing realized that it needed a new narrow-body, short- to mid-haul product. But the cost of developing one from scratch was so substantial, that it opted instead to modify the 737 by adding larger engines. The new engines could no longer fit in their traditional spot beneath the wings; they were therefore mounted further forward; this shifted the plane's center of gravity, and thus its aerodynamics, pulling the tail down and pushing the nose up, creating a risk of stalling; and the automated MCAS system was added as a consequence. Unfortunately, the MCAS was poorly designed, and pilots in smaller, poorer markets received inadequate training in how to deal with possible deployment problems.

These aircraft design complications coincided with cultural changes within the Boeing corporation itself, beginning with a merger with McDonnell Douglas in 1997, which gradually replaced the dominance of engineers in the business with that of financial executives. In 2005, Boeing hired its first CEO without aircraft engineering experience, and the corporation's focus came to be financialization—increasing profits for shareholders—in part through outsourcing design and component manufacturing. Post-crash investigation of the flight-approval process of the 737 Max also revealed that Boeing had captured much of the nominal governmental oversight of production of its aircraft: understanding the details of how the plane and its software systems functioned was so complicated, that federal regulators in the United States effectively ceded Boeing the right to supervise itself; and because the United States approved the plane, less-well-funded and sophisticated regulators elsewhere followed its lead. The 737 Max was grounded for 20 months after the Addis Ababa crash; it is today supposedly safe to fly.

My topic today is not the airline business but Greek lexicography, and I am not attempting to offer a detailed, authoritative analysis of what went wrong with the 737 Max. Indeed, outside of aeronautic and business circles, the story of the plane has mostly been received as metaphor, as a telling example of how complex, nominally regulated processes of manufacturing and technical governance go wrong in the 21<sup>st</sup> century world. The crashes in Jakarta and Addis Ababa were in part the result of individual negligence, beginning with a shortsighted, financially motivated conviction on the part of Boeing's senior executives that complicated objects could be built rapidly, with limited attention to engineering requirements, and that crucial parts of the manufacturing process could be turned over to third parties of uncertain competence and motivations. But they were also the result of systemic failures, including a collapse of independent regulatory authority of the sort average consumers normally assume is in place to protect them. The implications of this metaphor—and metaphor is all it is—for my topic will become clear in what follows.

**[3] Section I: Liddell–Scott–Jones and its problems.** The history of what is today generally referred to simply as LSJ<sup>9</sup>—the ninth edition of Oxford University Press' *Greek-English Lexicon*, begins in the mid-1830s, when two recent Oxford graduates, the eponymous Henry George Liddell and Robert Scott, were commissioned by the press to produce what was originally in large part a translation of Franz Passow's 1830 Greek-German *Handwörterbuch der griechischen Sprache*. The idea was not a new one: the Press had previously extended similar invitations to other young Oxford men, but with no substantial results. Liddell and Scott, by contrast, rapidly produced, beginning in 1843, a long series of editions of what remains, almost two centuries later, an essential tool for serious work on the ancient Greek language. The coverage of Greek literature in Passow's lexicon—itsself based on an earlier work by Johann Schneider—was quite restricted, and his plan to expand it was interrupted by his death in 1833. Liddell and Scott for their part gradually added more material of their own to what they got from Passow, finally venturing to remove mention of his name from the title page of their fourth edition in 1855. New or corrected words and references were contributed by scholars from around the world, and the process of revision was constant and seemingly unsystematic, with commercial considerations always in play: it was vital that new editions of the *Lexicon* be printed and sold, but also that the appearance of the latest edition be timed in a way that ensured that copies of the now-outdated previous one did not remain in OUP's warehouses. As a consequence, the *Lexicon* gradually became a complex, sometimes self-contradictory, multi-layered text, repeatedly improved and expanded in its particulars, but never fundamentally reconceived or reworked. Publication of the work proved extraordinarily advantageous for the Press. It also brought great rewards to Liddell and Scott, who over the years earned the modern equivalent of hundreds of thousands of pounds in royalties, honoraria and the like.

The seventh edition of the *Lexicon* in 1882 (revised by Liddell alone) was conceived as the final one. There was nonetheless an eighth in print by the time Liddell died in 1898, and the continuing emergence of e.g. new material from papyri made it clear that the process of revision, correction and expansion ought not to stop. In 1903, OUP accordingly considered launching the Greek equivalent of the *Thesaurus Linguae Latinae* project, but shied away from the enormous cost and commitment involved. Instead, Arthur Sidgwick was appointed to create a new lexicon roughly equivalent in size to the eighth edition of Liddell–Scott. When he failed to

do so, he was replaced by Henry Stuart-Jones, who produced the ninth—in a basic sense, now standard—edition in 1925–1940 and lent the J to LSJ. The obscure Roderick McKenzie was given responsibility for the etymological material, such as it is, in the ninth; these notes were produced before Mycenaean Greek and Hittite were known, and before the development of laryngeal theory, and thus seem deeply inadequate today. The 1968 *Supplement* by E. A. Barber, incorporating *inter alia* Linear B evidence, was put through the Press in M. L. West after Barber's death; an unfortunate but understandable unwillingness on OUP's part to reset the text in order to incorporate this material meant that the *Supplement* was left stranded at the end of volume. The 1996 *Revised Supplement* by Peter Glare and Anne Thompson eventually replaced it there, where it too is commonly ignored, despite the addition of marginal signs in the main text intended to direct readers to it. There currently appears to be no thought of a tenth edition.

[4] As noted a moment ago, LSJ<sup>9</sup> is a fundamental research tool, and one of generally high quality. There are nonetheless reasons why one might want to see it updated or replaced. The individual entries, first of all, are presented in an unsystematic fashion reflecting the work's complex history of composition and recomposition: definitions are not set out in a standard order; in the case of verbs in particular, an initial catalogue of forms routinely swamps the gloss or definition; and etymologies are haphazard and out of date. In addition, numerous words are omitted by accident, or because they were not known at the time of the ninth edition. Many other terms—especially rareties from the lexicographers, or from fragmentary material—were mishandled by the original team and ought to be corrected. In other cases, the meaning of the English gloss, while appropriate in Liddell's time, has shifted and requires modification. Some of these issues were handled in the *Supplements*; many others were not, and as noted a moment ago, the use-relationship of the *Supplements* to the *Lexicon* is problematic in any case. So too virtually every fragment number in the *Lexicon* is outdated, and in many other cases standard editions of texts have changed, so that the reading glossed or recorded in LSJ is no longer regarded as authoritative. Finally—an issue of much broader scope and complexity—one might reasonably ask whether the *Lexicon*'s philological heart is still in the right place, in the so-called “archaic and classical periods”, or whether the coverage ought to be extended later in time, taking more systematical account of Byzantine vocabulary and usage, or backward, treating Mycenaean. And because LSJ<sup>9</sup> is specifically a Greek-*English* lexicon, it is also worth considering whether new lexica are needed for other target languages, so that students and scholars working in Italian, for example, or Polish, are not forced to access Greek through English, a process that inevitably produces confusions and difficulties. In order to consider these points, which serve to set up my main topic today, which I will get to only in Section IV, I need to pause briefly to discuss lexica in general, what we use them for and what we ought to expect from them.

[5] **Section II: On the use and construction of lexica.** First and foremost: lexica are basic research tools, in some ways the most basic research tools in our field. That status brings with it significant expectations, in particular for extremely high standards of scholarly rigor. Because other work in the field depends so fundamentally on the information contained in lexica, carelessness in their construction has outsized negative down-stream effects. Academic publications of all sorts contain errors and misunderstandings, great and small. But the effects

of these are generally quite limited, and subsequent publications on the topic can be counted on to correct many of them. Lexica are different, and must be held to different standards. To put this another way, I ask you to consider how many errors you would find it acceptable to discover on any individual page of LSJ. Even if you are reluctant to offer an exact number, I imagine that your basic answer would be: “Very few” or even “Very very few”, and that you would also expect such errors to be mostly confined to rare or otherwise difficult words, at the very edges of philological science, as it were. This is mostly the case: anyone who works closely with the *Lexicon* knows its peculiarities and its limits. But it is in general a very fine piece of scholarship, and a fundamentally innovative one. This is to my second point.

Lexica, like other standard scholarly works, tend to be treated as objective, universal authorities, and we accordingly often cite them as an argumentative bottom line: “for this sense of the word, see LSJ s.v.”. These are nonetheless all highly subjective enterprises, based on arbitrary if generally well-motivated judgments, the implications and significance of which remain mostly invisible to the casual user. One example is range of coverage. LSJ<sup>9</sup> is entitled “A Greek-English Lexicon”, but it is in fact largely restricted to archaic, classical and Hellenistic Greek, and within those periods its citations center on Homer and to a lesser extent Hesiod; tragedy and comedy; Herodotus, Thucydides and Xenophon; and Plato, Lysias, Demosthenes and the other Attic orators. Hippocrates, for example, is cited much less often than the date and size of the corpus would seem to require. All this reflects the fact that LSJ<sup>9</sup> has an implicit, unstated sense of what its audience is reading, and thus of what its audience wants in terms of exemplary instances of usage, and that sense reflects the traditional classical canon read at Oxford and its feeder schools in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

Other characteristics of the construction of a lexicon are even more intractably subjective. Except in a few exceptional cases—Pindaric vocabulary, for example—it is impossible to catalogue every use of every individual lexical item in a Greek-English dictionary, and there would be little utility in doing so. But if forms of the verb *lambanô*, for example, are preserved 10,000 times (let us say) in the ancient texts we have: how many of those instances must the creator of a lexicon include, in order to establish the range of meanings of the word without overwhelming the reader with detail? And how—even assuming one is working within a perceived canon, as Liddell and Scott were—should those instances be chosen, assuming that part of the goal of a definition is implicitly to establish a word’s stylistic and temporal range, and to show who uses it and who does not? And above all else, how precisely does one “translate” a word from one language to another, and organize its meanings in a coherent, organized, hierarchical manner that takes account of the peculiarities of both languages, particularly when they are widely separated in time and historical origin, and spoken in different cultural, political and technological circumstances? An individual Greek word, after all, can have a variety of specific senses, often deriving from one or more similarly diverse roots, and reflecting communicative needs in separate historical, social and geographic settings. And those meanings inevitably map problematically onto the resources available to express them in a second language, which is itself similarly complex. *Inter alia*, such considerations expose the folly of attempting to translate a bilingual dictionary directly from one target language to another. But the fundamental point is that definition structures of the sort found e.g. in LSJ represent creative acts of intellectual architecture, and are not natural products of the translated vocabulary. This becomes immediately apparent if one compares individual entries

in the *Lexicon* with the corresponding entries in the gradually emerging—although now seemingly stalled— *Diccionario Griego-Español* (or *DGE*), which also began with LSJ<sup>9</sup>. The *DGE* takes consistent account of LSJ, and sometimes accepts its organization of individual entries and a portion of its references. But its entries are simultaneously different on every level, in part because it is attempting to move Greek vocabulary into Spanish rather than into English, but in part because the authors have put great effort into rethinking the original terms, and how their senses can be defined and organized. This is much of why we honor serious translators and lexicographers: because they carry out extraordinary acts of imagination, allowing us to move—always roughly and with a residue of difficulty and clumsiness—from one linguistic world to another. This is what the job entails, and also why most of us do not venture to attempt it.

**[6] Section III: A new LSJ and why we are unlikely to get one.** As noted in Section I, there are good reasons to desire a replacement for LSJ, and it is accordingly worth thinking about what such a project might entail and how it could be accomplished. On a superficial level, one would expect incorporation of the material in the LSJ Supplements, along with the corrections and additions to individual lemmata found in e.g. Robert Renehan's various publications. One would also assume that new inscriptional and papyrological material would be swept up, adding not just new words, but new meanings for them. Up-to-date etymologies would be welcome, along with at least some consistent reference to Mycenaean. In addition, one might (or might not) choose to rethink the parameters of LSJ's implicit definition of the Greek language and its unofficial canon within a canon: should more Christian sources be cited, for example? or more medical language? or more vocabulary from epichoric inscriptions, to make it clear that Athens was the linguistic center of the ancient world? Most important, a 21<sup>st</sup>-century replacement for LSJ would need to rethink the individual entries themselves, by re-collecting and re-sorting the ancient attestations for individual words, and thinking afresh about how they might be squeezed (always somewhat imperfectly) into contemporary English (or another language). This would mean not just checking and reconsidering the *Lexicon's* primary references, even if one starts with them, but casting a broad net in the sources—to see if LSJ's definitions are correct, or at least adequate, and to refigure and rebalance them, a task made possible now by the existence of the electronic *TLG*. And—to make this point once more, because it is fundamental—a new lexicon would need to be accurate, at least as accurate as LSJ<sup>9</sup>, since it had the advantage of beginning with and attempting to improve upon it.

The project I have just described would be enormous, requiring teams of specialist subject editors (to deal with philosophical, mathematical and botanical vocabulary, for example), and a central office to check, consolidate and coordinate, and to ensure that words were handled in standard ways and presented in a standard format. The philology would be difficult and complicated; I assume it would require several decades of concerted work and a large number of readers and fact-checkers. Comparison with the history of the *Cambridge Greek Lexicon* is useful here. That project began as an attempt to update and rework the so-called Middle-Liddell dictionary for public school and undergraduate use, an undertaking far less ambitious than producing a new LSJ. The editors rapidly realized that the inherited material was so problematic that their only choice was instead to begin work from the ground up. This took approximately twenty years and a substantial amount of research time and money. The result was a student-level dictionary with a restricted focus in terms of authors and periods—

useful and important in its own way, but nothing like a new LSJ. To put this more another way, production of a serious, comprehensive new Greek-English lexicon would likely require backing from an institution such as the Berlin Academy, which has been producing the *TLL* for the last 125 years or so and expects to need another thirty to complete the work. In the current funding climate for the humanities, this seems inconceivable. But there is another way to produce a large new Greek lexicon — what one might call the “Boeing way”.

[7] **Section IV: An alternative approach.** When the Boeing Corporation was faced with the need to replace the 737, its executive officers looked at the financial numbers and made a fateful decision to avoid the difficult, expensive engineering work that producing a 21<sup>st</sup>-century product would have required. Instead, they took an old plane, whose deficiencies were already apparent; made a number of clumsy, superficial updates to it, pushing important technical aspects of the work onto outside contractors; and marketed it again as the 737 Max, with results discussed at the beginning of this paper. *Mutatis mutandis*, similar decisions seem to lie behind the origins of Franco Montanari’s *Vocabulario Greco-Italiano*, the third edition of which appeared in 2013 and provided the basis for the 2015 *Brill Dictionary of Ancient Greek*, produced by Gregory Nagy and the Center for Hellenic Studies. As I argued a moment ago, an updated equivalent of LSJ<sup>9</sup> would be welcome, but creating one would require years of substantial research supported by rigorous fact-checking. I spent much of 2020 studying 1000s of lemmata in the *Brill Dictionary*, including all those collected under the letters *gamma*, *zeta*, *lambda*, *nu*, *rho* and *psi*. The examples I will share with you in the next few minutes are typical of my results; I have hundreds of pages of similar material, some of it published in recent articles in *Glotta*, *Mnemosyne* and *Museum Helveticum*, and more forthcoming. I begin with a detailed comparison of the LSJ<sup>9</sup>, *DGE* and *Brill Dictionary* entries for two words beginning in *alpha*. Both words are moderately complex in terms of meaning, are used by a variety of authors, and occupy approximately half a column in the *Dictionary*, but were otherwise chosen at random. As you will see, unlike in the *DGE*, there is no systematic lexicographic rethinking on display in the *Dictionary*’s entries; what it offers are instead weakly adapted, often confused versions of the LSJ<sup>9</sup> equivalents. I follow this up with material of a different sort, a catalogue of basic philological failures, including serious mishandling of the Greek, in lemmata beginning with *lambda* in the English-language *Dictionary*, many of them recapitulating problems in the *Vocabulario*. I will close in Section V with some brief reflections on what has gone wrong here, and about how—or if—the situation can be corrected.

To begin, then, two examples of the relationship between LSJ and the new Montanari/Nagy dictionaries. [8] The first word (Items 1a and 1b on your handout) is ἄγριος. The root sense of the term is “associated with the ἄγρός”, as opposed to the places where men live, and thus “wild, untamed, undomesticated”. The third term in LSJ<sup>9</sup>’s initial gloss “*living in the fields, wild, savage*” is accordingly an extended sense, and is to be kept separate from the other two. LSJ s.v. I “*wild*” begins “of animals, opposed to τῆσδε, ἡμερος”, and refers in order to (1) animals, flies—apparently intended to be understood as a subset of animals, “men, living in a wild state”; (2) trees and vines, although with a seemingly extraneous reference at the end to honey gathered from wild sources (sc. rather than from bees one keeps in a hive); and (3) countries (“*wild, uncultivated*”). S.v. II begins “mostly of men, beasts, etc.”, and includes (1) a “moral sense” of the word, i.e. an openly condemnatory one, meaning “*savage, fierce*”; (2) a



use “of temper” (once again patently condemnatory, and not easily distinguished from II.1), meaning “wild, fierce”, “cruel”, “savage”, “harsh”; and (3) a hostile but morally neutral use (“cruel, harsh”, “wild, stormy”, “violent”) in reference to objects and circumstances. The last passage in s.v. II.2 (Pl. *Cra.* 394e) is glossed with the odd “savageness”, for which 21<sup>st</sup>-century English would normally use “savagery”. S.v. III offers a small set of examples of the adverb ἀγρίως.

The *Brill Dictionary* begins by echoing LSJ’s three initial definitions (“of the fields, wild, savage”), but then confounds them as the lead gloss in its s.v. A, misleadingly implying that these are equivalent terms that all apply to the section that follows, as approximately equivalent to LSJ s.v. I. It then repeats LSJ’s “of animals, opp. τιθασός, ἥμερος”, followed by “of men in a wild state” (again more or less direct from LSJ); “of trees and fruits” (with the same extraneous reference at the end to honey); “of lands”; and “of a hairstyle” (citing Ach.Tat. 3.12.1, where the word actually refers to hair, κόμη, and the sense is “unkempt”). Of the 13 passages cited, 8 already appear in LSJ s.v. I, all in the same order, the most significance addition, besides the passage from Achilles Tatius, being three references in Hippocrates to wild gourds and the like. S.v. B “fig. savage, violent, cruel”, the *Dictionary* offers three sub-categories, “of persons”, “of temper”, and “of things”. 13 of the 16 passages cited here are drawn from LSJ s.v. II, all but one of them in the same order. “Savageness” is repeated as a gloss of the word at Pl. *Cra.* 394e. S.v. C offers three examples of the adverb; the first is already in LSJ s.v. III. In fact, the word appears before this in a papyrus fragment of Epicharmus, which was not known in LSJ’s time but easily be located through a simple TLG search today.

The point-by-point organization of this entry in the *Brill Dictionary* is thus drawn direct from LSJ<sup>9</sup>, and the overwhelming majority of the references to primary texts it contains have been serially excerpted from there. Specific language has also been borrowed from the LSJ<sup>9</sup> entry (e.g. “of animals, opp. τιθασός, ἥμερος” and “savageness”); some of its most obvious eccentricities have been retained (honey treated in a section devoted to plants); and LSJ<sup>9</sup>’s most significant point — that “living in the fields, wild” is not the same as “savage” in the sense “violent, cruel” — has been confused. That these similarities are not a necessary result of the lexicographic enterprise is apparent from comparison with the corresponding entry in the *DGE* (Item 1c). The basic structure here again reflects that of LSJ<sup>9</sup> s.v., but only five of the twenty-three references under the initial definition “que vive en los campos, en estado natural, salvaje”, for example, are found in the older *Lexicon*. This pattern — wholesale borrowing by the *Brill Dictionary* of LSJ<sup>9</sup>’s references to primary texts, with little or nothing added; a general dependence on LSJ<sup>9</sup>’s definitions and organizational structure, even when the material has been superficially rearranged; and a striking contrast with the *DGE* entries, making it clear that the similarities in question have nothing to do with the “natural structure” of the material — is typical of the *Dictionary* throughout.

[9] My second word is ἀλέξω, which is epic vocabulary and relatively rare outside of Homer. LSJ s.v. devotes its initial section to the various forms of the word, but lemmatizes aorist ἀλαλκεῖν separately. S.v. 1 “ward off, turn aside” is concerned primarily with the various cases and combinations of cases the verb takes, and is divided into separate sections for active and middle. S.v. 2 “recompense, requite” cites only one passage, X. *An.* 1.9.11.

The *Dictionary* combines ἀλέξω and ἀλαλκεῖν in a single lemma, but organizes the entry in the same way as LSJ s.v. ἀλέξω: 1. “ward off, repel, protect, defend”; 2.A. (mid.) “ward off or

*drive away from oneself, defend oneself from*”, B. “repay”. Of the 19 passages cited, 15 are already in LSJ, including X. *An.* 1.9.11 as the sole reference in s.v. 2.B. The entry is thus almost entirely derivative, and the Greek is mishandled at a number of points. Thus in s.v. 1, *Od.* 10.288 is translated “that keeps the evil day from your head”; the Greek means instead “which would keep ...”. At the end of the same subentry, *Il.* 1.590 is described — in this sense following LSJ s.v. 1, which has the passage in the same position in the note — as an absolute use of the verb and glossed “to defend”. But English does not use the word absolutely this way (contrast LSJ’s “lend aid”), and *σε* (referring to Hera) is to be supplied in any case. S.v. 2, S. *OT* 171 ὧ τις ἀλέξεται is translated with the garbled “(sword) with which male name might defend himself”; the antecedent of ὧ is in fact φροντίδος ἔγχος (metaphorical), and the words mean literally “a spear of thought with which a man will defend himself”. The strange “male name” — found out of place elsewhere in the *Dictionary* as well — appears to be a product of a careless universal change combined with negligent proof-reading.

[10] *DGE* (which also combines ἀλέξω and ἀλαλκεῖν) is likewise largely dependent on LSJ for its list of forms. But the organization of the note (divided into I.1 “*apartar, desviar, librar c. ac.*”, 2 “*c. ac. y dat. preservar, librar, proteger de*”; II “*apartar de sí, defenderse de, librarse de c. ac.*”) is independent. The same is true of *DGE*’s list of citations, despite some inevitable overlap due to the relative rarity of the lexical item in question. Here and elsewhere, by contrast, the *Brill Dictionary* consistently does little more than take over and abbreviate material already in LSJ<sup>9</sup>: in twelve words beginning with *alpha* for which I did detailed counts, 269 of the 321 references to primary texts (84%) were drawn from the older lexicon, and a number of the additions were eccentric and unhelpful, mishandled in one way or another, or unrevealing. The variety of texts or periods covered has not been significantly expanded in the *Brill Dictionary*, and the process of abbreviation — because this is most of what it does, rather than adding material — has often been carried out in a way that distorts the impression created by the range of material cited, by omitting initial attestations of words, narrowing the range of authors and genres cited, and the like. The contrast with *DGE*, which regularly adds fresh material, is striking. And to repeat my larger point, the *Dictionary*’s definitions of words, and the way it organizes them, are routinely dependent on LSJ<sup>9</sup>, and even when the *Dictionary* reorganizes the material, it does so on the basis of no clear principle or set of principles. Put another way, the *Dictionary* fails to enter into a coherent discussion of how ancient Greek should be mapped onto English and organized in a way helpful for users of the modern language. The contrast with *DGE*, which consistently structures its material in novel and often effective ways, is obvious, and points to very different editorial and research processes.

I turn now to matters of an even more fundamental philological sort. As I do so, I want to repeat a point made earlier. Lexica are the products of human hands and human minds, and they can be expected to contain errors. Their fundamental character as academic reference works means that it is nonetheless unacceptable for them to contain large numbers of errors (however one defines “large numbers”), particularly errors that signal an inability to make sense of the primary material. I want to assure you that the points I will raise in the next few minutes are broadly representative of the philology of the *Dictionary*. These are not widely scattered, minor issues pulled together in an effort to suggest systematic difficulties where none exist; it this sort of thing is pervasive in the *Dictionary*. For example



[11] •S.v. **λαγχάνω**, *Od.* 5.311 κ' ἔλαχον κτερέων describes an unreal situation (hence the presence of the modal particle) and thus means not “I shall have obtained funeral honors”, as in the *Dictionary*, but “I would have obtained funeral honors”. *D.* 30.34 ἤδη τούτῳ ταυτηροῖ τῆς δίκης εἰληγμένης means not “once this man had already been brought to trial”, but “when the present suit” — i.e. the one being tried at the moment — “had already been accepted (sc. by the relevant magistrate) against this man”. At *D.* 23.76 τούτοις ἐνταῦθα λαγχάνεται, the reference is to suits brought before the Prytaneion court against inanimate objects responsible for a human being's death; the text thus means not “the charges are brought against these men”, but “he” — i.e. the person pursuing the matter — “institutes proceedings against these objects”.

[12] •S.v. **λαμβάνω**, *S. Ph.* 675 σε ξυμπαραστάτην λαβεῖν is translated “to take you as a savior”; it actually means “to take you as an ally”, and this is not appropriately described as an example of the verb used “with two accusatives”, since σε is in apposition to ξυμπαραστάτην. Expressions such as ὁρμὴν λαμβάνω, πείραν λαμβάνω, and ἀρχὴν λαμβάνω, meanwhile, are examples not of “abstract objects” (thus the *Dictionary*), but of internal accusatives. *A. Pers.* 366 κνέφας δὲ τέμενος αἰθέρος λάβη means not “(when) darkness had overtaken the sacred precinct of the ether”, but “(when) darkness overtakes the precinct”. *Ar. Nu.* 1123 λαμβάνων οὔτ' οἶνον οὔτ' ἄλλ' οὐδὲν ἐκ τοῦ χωρίου means not “not obtaining wine or any other product from the region”, but “not obtaining wine or any other product from his farm”. *Ar. Pax* 1253 λάβοιμ' ἂν αὐτ' ... ἑκατὸν τῆς δραχμῆς means not “I could have a hundred of them for a drachma”, but “I would buy them at a hundred per drachma”. *Th.* 4.69.2 αἱ οἰκίαι ... ἐπάλξεις λαμβάνουσαι (“the houses, which had battlements added to them”) is obscurely described as an example of “subject of thing”; this seems to mean that the subject of the verb in the sense “receive, have, accept, admit” need not always be a person, but this is an uncontroversial point and the note merely confuses matters. *X. Cyr.* 1.4.3 (ὅσοι νέοι ὄντες) μέγεθος ἔλαβον is obscurely glossed “(the kids) have grown”; the Greek means “those who were still young but reached adult stature physically”. The text at *E. Ba.* 1312 reads not δίκην ... ἀξίαν ἐλάμβανε but δίκην ... ἀξίαν ἐλάμβανες, and the sense is not “he was punished as he deserved” but “you extracted a just punishment (for any slight)”.

[13] •S.v. **λανθάνω**, *Th.* 4.32.1 λαθόντες τὴν ἀπόβασιν (described as “with acc. of relation” and translated “their landing having been unobserved”) and *E. IA* 516 λάθοιμι τοῦτ' ἂν (described as “with neuter pronoun” and translated “I might go unobserved in this”) are treated as different constructions. Both are simply accusatives of respect: “unobserved in regard to their disembarking” and “unobserved in regard to this”, respectively. *Hp. Aer.* 2 οὐκ ἂν αὐτὸν λανθάνοι means not “he will not be unaware”, but “he would not be unaware”. *Ar. Eq.* 465 οὔκουν μ' ... οἷα πράττεις λανθάνει means not “what you are doing does not escape me”, but “the sort of things you are doing does not escape me”.

•S.v. **λάσκω**, the *Dictionary* discriminates between (C) “of men, cry out, yell, shout”, including “with internal accusative”, as at *A. Ag.* 596 ὀλολυγμὸν ... / ἔλασκον; and (D) “with acc. say, announce, proclaim”, as at *A. Ag.* 1426 περίφρονα δ' ἔλακες, or “with double accusative”, as at *E. Andr.* 671 τοιαῦτα λάσκες τοὺς ἀναγκαίους φίλους;. But ὀλολυγμὸν, περίφρονα and τοιαῦτα are all internal accusatives, and the sense of the verb is more or less identical in all three cases.

[14] • **λαγωφόνος** is lemmatized as an adjective, but glossed as a noun (“hare-killer” rather than “hare-killing”), as are **λαθροδάκνος** (glossed “one who bites in secret” rather than “secretly biting”, as properly), **λαθροκακοῦργος** (glossed “hidden malefactor” rather than “one who does evil secretly”, as properly), and **λαθροφάγος** (glossed “one who eats or is gluttonous secretly” rather than “secretly gluttonous”, as properly). **λαθροφονευτής**, on the other hand, is rightly treated as a noun, but is glossed as an adjective (“secretly murderous”).

• S.v. **Λαιμοκύκλωψ**, the individual in question is not “the sender of the Letters of Alkiphron”, but the supposed author of epistle 3.15 only.

• S.v. **λαοξοϊκός**, Hsch. ο 1350 uses the word to mean not “of carved stone”, as the *Dictionary* would have it, but “having to do with stone-cutting”: ὄρυξ· λαοξοϊκὸν σκεῦος, “pick: a stone-cutting implement”.

• S.v. **λαός**, the Athenian public announcement formula ἀκούετε λεῶ is misunderstood as meaning “to the people: listen!”, as if λεῶ were a dative singular rather than a nominative plural of the Attic declension serving as a vocative (“People — listen!”).

• S.v. **Λαρισσοποιός**: This is a nonce-word in Aristotle’s *Politics*: in response to a logical puzzle having to do with how hereditary citizenship is created, since the first group of people to enjoy it *cannot* have inherited it, Gorgias half-seriously suggests that just as there are ὄλμοι (“mortars”) because there are ὀλμοποιοί (“mortar-makers”), so there can only be Λαρισαῖοι (“citizens of Larissa”) because there are Λαρισσοποιοί; the sense is not ““Larissa-makers”, as the *Dictionary* would have it, but “makers of citizens of Larissa”.

• S.v. **Λατογένεια** (“born of Leto”), from A. Th. 146 ὦ Λατογένεια κούρα (“O maiden born of Leto”, referring to Artemis), the word is lemmatized as a noun: Λατογένεια -ας, ἡ. It is actually an adjective of a type used for goddesses in place of a combined masculine/feminine form in -γενής -ες (e.g. ἀφρογένεια, ἡριγένεια, Τριτογένεια).

• S.v. **λατυπικός**, the *Dictionary* claims the word means “sharp, for cutting”. But it is < λᾶς + τύπτω and means “having to do with stone-cutting”, as at Aristoxen. fr. 51, where Socrates is said to have practiced πατρῶα τέχνη ... τῇ λατυπικῇ (“his paternal stone-cutting trade”), i.e. sculpture. At Hsch. ε 7191, the word is not used “of a knife”, as the *Dictionary* maintains, but of a σμίλη (“chisel”).

[15] • Finally, s.v. **λαχανισμός**, *Hippiatr.* 130.171 is from a section entitled περὶ λαχανισμοῦ that discusses how to get one’s horse to eat greens in the winter: one stews them, rolls them into a ball, and adds oil and salt and cumin, meaning that this is not a matter of “pasturing”. ἐὰν ... **λαχανίσαι** θέλης ζῶον accordingly means not “if you want an animal to pick vegetables”, as the *Dictionary* believes, but “if you want an animal to consume greens”. At Th. 3.111.1, **λαχανισμός** is an activity parallel to looking for firewood that can be used as an excuse for leaving a city and wandering about in the open country; the word thus means not “gathering, picking of vegetables” (as if work in a garden were in question), but “gathering greens” (i.e. in the countryside).

I could go in this way at length, but my point should be clear. These are not merely occasional errors of the sort that slip into reference works and critical editions of all sorts. The English translations in the *Brill Dictionary*—in one important sense, the very heart of the lexicon—are deeply and routinely flawed; among other issues, uses of the accusative are consistently confused, and tenses and moods of verbs are mishandled again and again. In

addition, many of the translations seem to have been produced without reference to the original texts from which the passages are taken, and thus not infrequently get the Greek nominally right but the sense wrong. All this suggests a combination of inadequate philological expertise on the team's part, with haste and a lack of careful, competent overall supervision. Some of these problems appear to be confined to the English-language version of the *Dictionary*, and some seem to reflect a lack of facility with Italian as well as with Greek. Others, however—the basic factual mistakes, for example, and the failure to distinguish between nouns and adjectives—must be traced to the Nagy *Dictionary's* source, the Montanari *Vocabulario*.

**[16] Section V: How have we got here, and what is to be done?** As I noted in the opening section of this paper, the Liddell–Scott *Greek Lexicon* was an enormous money-maker both for Oxford University Press and for the editors themselves. The 737 was also a good plane for its time, earning the Boeing Corporation hundreds of millions of dollars; and there is no reason why a properly designed 737 Max should not have made its manufacturer many more hundreds of millions of dollars, while flying ordinary people safely around the world. The problem is thus not precisely that economic interest is entwined in such matters, but that economic interest, uncoupled from other, intellectually more substantial and technically more complicated concerns—engineering integrity in the case of Boeing, philological integrity in the case of the lexica—can drive bad decisions, particularly when outside controls are absent. Building a 21<sup>st</sup>-century equivalent of LSJ would have been difficult and expensive, and perhaps impossible. The *Cambridge Greek Lexicon* project trimmed its sails in the face of this reality. The team in charge of the *Vocabulario*, by contrast, chose—and I think the word “chose” is important—to create a product that looked new, and that was as a consequence highly marketable, but that in fact was merely a crude and defective reworking of the older product. The print in LSJ<sup>9</sup> is too small; the entries are chaotically structured; the fragment numbers are wrong; and the *Supplements* are complicated and inefficient to use. But the old *Lexicon* works quite well for all of that, and there is no reason to put money in the pockets of Brill and whoever is being paid the authors' royalties for all of this by buying and using the new one. It is impossible to know what Montanari and his team thought they were doing by out-sourcing production of the English-language version of the *Dictionary* to Nagy and the CHS, other than claiming some of the prestige that attaches to the name of the latter. But the results speak for themselves. To return to the metaphor of high-level technical manufacturing, this looks like the sort of breakdown that tends to plague relationships of this sort, including the one involving the 737 Max: neither party wants or takes responsibility for quality-control, which is costly and difficult, and the assumption is that everything will be fine, as it sometimes is—although in both of these cases it was not.

In an ideal world, the English-language *Brill Dictionary* would have been stopped before it made its way through the press, and if it did somehow make its way into print, you — as working professionals in the field, or aspiring working professionals — would have been alerted long ago to the issues I have raised today, and would systematically use LSJ<sup>9</sup> instead. Classical Studies as a field has institutions and procedures in place to prevent such situations from occurring—but once again the comparison to parallel issues in civil aeronautics is intriguing. Much of the problem with reviewing and approving the construction specifics of a commercial jetliner is that the work is so complicated and technical that almost no one other than the

engineers who wrote the specifications and drew up the blueprints can understand it fully. Federal agencies in the United States, at least, accordingly tend to surrender approval authority to the manufacturer, on the theory that the manufacturer knows the project best and can thus be sure that it is carried out correctly. This approach to the process resembles but is not a virtuous circle, in that it assumes the good faith and competence of all parties involved—which is precisely what outside review is intended to assess.

Greek lexica are also extremely complicated, intimidating specialist products, and it is easy to understand why even heavily credentialed, senior academic authorities charged with reviewing them, sometimes fail to do so in a systematic, serious manner. Put another way, no one who sat down and read, checked and considered even a few pages of the *Brill Dictionary*—as I have done at length—could fail to notice most of the issues I have pointed out today. The only possible conclusion, I believe, is that no one else has done this, including the eminent Anglo-American Hellenist who lauds the project in a quotation printed on the back cover—and who is also the thesis advisor of one of the junior members of the CHS team, making this an instance of “regulatory capture” of another sort. So too with the junior Italian scholar who reviewed the volume in *Classical Quarterly* in 2018, in terms that make it clear that she too cannot possibly have read it. The entire system has failed—but in oddly predictable, even hauntingly familiar ways.

[17] I would like to close with two sets of final observations. The first have to do with what I am attempting to accomplish in this talk and my related publications, and what I expect the consequences will be. The views I have expressed will likely be unpopular with many powerful people in the field of classical studies in the United States and Italy, and I expect to be attacked if I continue to do and say this sort of thing. But the question matters enough to me, in intellectual and professional terms, that I am willing to accept this. And I will repeat: I have the evidence, and although I have shown you only a tiny portion of it, I have published much more, and even what I have offered you today should be enough for you to see that there are serious problems with the *Brill Dictionary* and its Italian predecessor. This is careless, defective philological work, and it ought not to be given a free pass simply because it is difficult for the average scholar to effectively review such material, or too dangerous, on a personal or professional level, to point these failings out in public.

Second: what is to be done with the *Brill Dictionary*, and can the situation be salvaged? I have worked my way through approximately 10% of the text, checking and correcting what looked to be obvious errors, and doing occasional deep philological dives on lemmata where it seemed likely that there were substantial larger problems. This took a bit less than a year, which is to say that correcting the entire *Dictionary* on this level only would require five to seven years of full-time work by a dedicated senior Hellenist. I would be willing to continue that work, which would take most of the rest of my career, but I doubt that Brill would pay for it. Instead, although the original teams, both Italian and American, have shown themselves unable to do the work, I suspect that what is most likely to happen, is that the press will ask Nagy to make superficial improvements to the text, including correcting errors and omissions that I have pointed out in print, and will then sell it to every library in the world again, in a second edition, and a third edition, and so on, generating more profits for the press and more royalties for someone. In that case, this will still be a profoundly flawed product, because no one is likely to reconsider the entries in 90% of the *Dictionary* in the way that they require.

The second edition of the *Brill Dictionary* will therefore be slightly better than the first, but no more than that. The real problem is that, on a more substantial level, the Nagy *Dictionary* cannot be fixed because it was constructed badly in the first place. This is because the Italian team led by Montanari that produced the *Vocabulario* failed to do the serious, sustained philological and lexicographic work that building a lexicon of this sort requires. Indeed, astonishingly, they did not even incorporate the material in the *LSJ Supplements* into their version of the text: “much too demanding work”, it seems, particularly if it could be taken for granted that no one would be watching closely, and that the nominal regulatory mechanisms in the field could easily be circumvented. At this point, the Boeing metaphor breaks down. You can fly a 737 Max today, if you wish, although I personally try to avoid them. With the *Brill English-Greek Dictionary*, and the underlying *Vocabulario* as well, my advice would be instead: walk away; make your students walk away; try to convince your university library to walk away, including from the expensive annual on-line subscription service marketed by Brill; and do not support translation of the work into other languages, if proposals of that sort are made — as they already have been for German. This is a bad product, and you would be wise to keep your distance.

[18] Thank you.