

THESAURUS MATTERS? FRAMES FOR THE STUDY OF LATIN LEXICOGRAPHY*

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This is a study of Latin dictionaries – six of them (Figure 1) – culminating in the *Thesaurus Linguae Latinae*, the monumental effort, begun in the nineteenth century and still in progress today, to write the history of each word in the Latin language from a near-complete evidence base.¹ It is an attempt to follow the intertwining of change and continuity in the lexicographical enterprise by investigating how successive dictionaries were presented and received, and occasionally by assaying the treatment of two test lemmata, *concidere* and *arena* – the former a verb meaning to ‘fall’ or ‘collapse’, the latter a noun with a range of meanings from ‘sand’ to ‘shore’ to ‘place of contest’. To provide checkpoints along the way, it attempts to distil particular ‘lexicographic archetypes’ – distinct constellations of characteristics, assurances, aims that have informed lexicographic behaviour at given points in the last five centuries. These are not intended to be exhaustive characterizations, but working models that will help us efficiently consider how the value and authority of the Latin dictionary, and the figure of the lexicographer, have been constructed from era to era.

What emerges is, roughly speaking, an account of how lexicography’s principal theoretical aim developed from *compilation* of templates for composition to *creation* of individual word-histories. As we will see, however, theory and practice rarely aligned, and the lexicographer-as-compiler and lexicographer-as-creator maintained fundamental similarities. But in the end this is not intended to be a story of Latin lexicography, or even lexicography *per se*; it is, rather, an attempt to make the boundaries of the dictionaries

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¹ I am by no means the first to handle this material. Prior treatments of the history of lexicography, to which I am indebted, are: F. Heerdegen, ‘Lateinische Lexikographie’, in *Lateinische Grammatik*, *Handbuch der klassischen Altertumswissenschaft* II.2, ed. F. Stolz and J. H. Schmalz, 4th edn (Munich 1910) 689-718; and two pieces by D. Krömer, ‘Lateinische Lexikographie’, in *Wörterbücher: ein internationales Handbuch zur Lexikographie*, ed. F. J. Hausmann, O. Reichmann, H. E. Wiegand, and L. Zgusta, vol. 2 (Berlin 1990) 1713-22, and ‘Die zweisprachige lateinische Lexikographie seit ca. 1700’, in *Wörterbücher*, ed. Hausmann, *et al.* vol. 3 (Berlin 1991) 3030-34.

Figure 1: Principal Lexica Cited in this Study

Author/ Ed.	Pub. Year	Title	Translation
R. Stephanus	1531	<i>Dictionarium, seu Latinae linguae Thesaurus, Non singulas modo dictiones continens, sed integras quoque Latine & loquendi, & scribendi formulas ex optimis quibusque authoribus accuratissime collectas. Cum Gallica fere interpretatione.</i>	Dictionary, or treasury of the Latin language, containing not only single words, but also whole phrases for speaking and writing in Latin, most accurately collected from whatever authors were best. Generally with French translation.
	1536	<i>Dictionarium, seu Latinae linguae Thesaurus, non singulas modo dictiones continens, sed integras quoque Latine & loquendi, & scribendi formulas Catone Varrone Caesare Cicerone Livio Columella Plinio avunculo Plinio secundo Plauto Terentio Virgilio Martiale.² Cum Latina tum grammaticorum, tum varii generis scriptorum interpretatione.</i>	Dictionary, or treasury of the Latin language, containing not only single words, but also whole phrases for speaking and writing in Latin from Cato, Varro, Caesar, Cicero, Livy, Columella, Pliny the Elder, Pliny the Younger, Plautus, Terence, Virgil, Martial. With Latin interpretation both from the grammarians and from writers of various kind[s].
	1543	<i>Dictionarium, seu Latinae linguae Thesaurus, non singulas modo dictiones cofn]tinens, sed integras quoque Latine & loquendi, & scribendi formulas ex optimis quibusque authoribus, ea quidem nunc accessione, ut nihil propemodum observatu dignum sit apud Oratores, Historicos, Poetas, omnis denique generis scriptores, quod hic non promptum paratumque habeat. Editio secunda.</i>	Dictionary, or treasury of the Latin language, containing not only single words, but also whole phrases for speaking and writing in Latin from whatever authors are best, indeed now increased so that there may be just about nothing worthy of observation among orators, historians, poets, and in fact writers of every kind, which it does not make here ready and available. Second edition. ³
J. M. Gesner	1749	<i>Novus linguae et eruditionis, Romanae Thesaurus post Ro. Stephani et aliorum nuper etiam in Anglia eruditissimorum hominum curas digestus, locupletatus, emendatus.</i>	New treasury of Roman language and erudition, arranged, enriched, and emended after the ministrations of Robert Stephanus and also, recently, of other most learned men in England.

² The names of these twelve authors are formatted into four columns of three. They are transcribed here column by column (Catone Varrone Caesare constitute the first of four).

³ This designation is odd: In the front matter to the 1543 edition (sig. [*ii]^v) Stephanus refers to the work alternately as ‘this third edition’ (*hac tertia editione*) and then (sig. [*iii]^v) as ‘this second edition’ (*hac secunda editione*). It is possible that Stephanus, who by 1543 was offering a line of bi-lingual Latin-French and French-Latin dictionaries, considered his 1531 work (with its French glosses) more of a piece with those efforts than with the monolingual (Latin) 1543 edition.

A. Forcellini	1771	<i>Totius Latinitatis Lexicon consilio et cura Jacobi Facciolati, opera et studio Aegidii Forcellini, alumni seminarii patavini, lucubratum.</i>	Lexicon of all Latinity, done by the plan and administration of Jacob Facciolati, and by the work and zeal of Aegidio Forcellini, a pupil of the seminary at Padua.
I. J. G. Scheller	1783, 1788, 1804	<i>Imman. Joh. Gerhard Schellers ausführliches und möglichst vollständiges lateinisch-deutsches [und deutsch-lateinisches]⁴ Lexicon oder Wörterbuch zum Behufe der Erklärung der Alten und Übung in der lateinischen Sprache.</i>	Immanuel Johann Gerhard Scheller's detailed and as complete as possible Latin-German [and German-Latin] lexicon or dictionary for assistance in interpreting the ancients and for practice in the Latin language.
W. Freund	1834-45	<i>Wörterbuch der Lateinischen Sprache nach historisch-genetischen Principien, mit steter Berücksichtigung der Grammatik, Synonymik, und Alterthumskunde</i>	Dictionary of the Latin language, done according to historical-genetic principles with consistent attention to grammar, synonymy, and archaeology.
— — —	1900	<i>Thesaurus Linguae Latinae</i>	Treasury of the Latin language

themselves dissolve and to show the larger frames in which efforts to present reliable conclusions about Latin words might sit. Properly construed, I argue, Latin dictionaries suggest ways to connect problems of acquiring knowledge-about-words and problems of acquiring knowledge-about-things, contributing strands to the histories of concepts like error-reduction, observation, and objectivity, which are just as pivotal in the laboratory as on the lexicographer's desk.

I

1. The nineteenth-century founders of the *Thesaurus Linguae Latinae* traced their lineage several hundred years into the past, to the sixteenth-century scholar-printer Robert Estienne (Stephanus) (1503-59).⁵ The son of a French printer with some standing in the

⁴ Included, according to online catalogue records, in the title of the 1783 edition, which I have not been able to inspect. The 'Deutsch-lateinischer Theil' of the 1783 edition was issued separately under the same title in 1784 with a new preface. In 1788 and 1804 the 'und deutsch-lateinisches' portion was dropped from the title of the Latin-German lexicon, though those editions were also followed by German-Latin lexica (in 1789 and 1805) under the slightly modified heading *Imman. Joh. Gerhard Schellers ausführliches und möglichst vollständiges deutsch-lateinisches Lexicon oder Wörterbuch zur Übung in der lateinischen Sprache*.

⁵ Many documents important to the founding of the *Thesaurus* are reproduced in the appendix to D. Krömer, ed., *Wie die Blätter am Baum, so wechseln die Wörter: 100 Jahre Thesaurus linguae Latinae* (Leipzig 1995), so when possible I give reprint pagination together with original citation. For Stephanus' place in the lineage, see, e.g., E. Wölfflin, 'Vorwort', *Archiv für lateinische Lexikographie* 1 (1884) 1: 'Denn der Begründer des lateinischen Thesaurus ist Robert Stephanus...'; M. Hertz and T. Mommsen, 'Gutachten über das Unternehmen eines lateinischen Wörterbuchs', *SPAW* 1891, vol. 2, 673 (repr. Krömer, ed., *Wie die Blätter* 129); 'Plan zur Begründung eines Thesaurus linguae latinae', *Archiv für lateinische Lexikographie* 8 (1893) 621 (repr. Krömer, ed., *Wie die Blätter* 187); Stephanus is also cited first in the list of forerunners in the 'Erster Thesaurus-Prospekt' circulated in 1900, around the time of the first *Thesaurus* fascicle (repr. Krömer, ed., *Wie die Blätter* 193).

University of Paris book market, the young Stephanus had already assumed a position of responsibility at the family press by 1522, and in 1527-28 produced an ambitious edition of the Vulgate Bible, making critical use of the manuscripts available.⁶ It would be said of him in later years that he hung up proofs in the door of his shop, offering rewards for those who could spot errors, and that he once kept the King of France himself waiting while he edited a page.⁷ He himself claimed, in the preface to a 1529 edition of Terence with the commentary of Donatus, to have corrected no fewer than six thousand errors on the basis of linguistic acumen and manuscript evidence.⁸ The emphasis on accuracy and critical fidelity suggested here would become, as we will see, one of the principal selling points of Stephanus' lexicographical efforts. At the very least, it was the stuff of which reputations were made. Those who felt a need for a new Latin dictionary in the 1520s knew where to turn.

The first requests came around 1528. Stephanus was asked to revise the best lexicon available, the so-called Calepinus, assembled by an Augustinian friar from Bergamo named Ambrogio Calepino (1440-1510/11) and already disseminated in several editions since its initial appearance in 1502.⁹ He found it lacking in many respects: the work, he wrote, was chaotic and confused, it had been mishandled by printers and correctors alike, it lacked words that were necessary, it included others that were not good Latin. In short, no revision would suffice – an entirely new dictionary was needed.¹⁰ After failing to entice any colleagues to hazard such a project, Stephanus finally resolved to do the job himself. His method was comprehensive and rooted in the primary texts: he read Terence

⁶ E. Armstrong, *Robert Estienne, royal printer: an historical study of the Elder Stephanus* (Cambridge 1954; rev. edn. [Appleford] 1986) 12, for Stephanus' role 'in being in charge' of the press; for what being 'in charge' probably meant, discussion of his father, Henri (I) Estienne, is at 3-10, 269-72; Robert's work on the Vulgate and subsequent editions of the Bible is at 72-78, 294-302.

⁷ Both stories are cited (and written off as apocryphal) in M. Pattison, 'The Stephenses', in *Essays by the late Mark Pattison*, ed. H. Nettleship 2 vols (Oxford 1889) I 85. There is no reason to discount such gestures out of hand. As regards public display, the 'immaculate Horace' of the Foulis brothers (Glasgow 1744) was similarly offered for public inspection, with a substantial reward; it was declared fault-free, but was subsequently found to contain several errors. In the following century, Oxford University Press offered rewards for the detection of errors in its Bibles.

⁸ R. Stephanus, 'Robertus Stephanus Lectori Salutem', in *P. Terentii Comoediae Sex, tum ex Donati commentariis...* (Paris 1529) sig. *ii^v.

⁹ The timing is suggested in R. Stephanus, 'Robertus Stephanus studiosis lectoribus S.D.', in *Dictionarium, seu Latinae linguae Thesaurus* (Paris 1531) sig. *ii^r.

¹⁰ Stephanus, 'Robertus Stephanus studiosis lectoribus S.D.' (1531) sig. *ii^{r-v}. For more on Calepinus' *Dictionarium* and a long bibliography of its editions, see A. Labarre, *Bibliographie du dictionarium d'Ambrogio Calepino* (Baden 1975). Despite Stephanus' abuse of the Calepinus *Dictionarium* and its relative absence from the lineal reflections of nineteenth-century *Thesaurus* lexicographers, much that was present in the 1531 Stephanus seems simply an extension or clarification of practices already present in Calepinus. Thus Krömer, 'Lateinische Lexikographie' (n. 1, above) 1715 is able to note that with Calepinus, 'we have, if only in very rudimentary fashion, the model of the modern Latin dictionary before us'. The discontinuity between Stephanus and his Italian predecessor is sometimes exaggerated, most recently in J. Considine, *Dictionaries in early modern Europe: lexicography and the making of heritage* (Cambridge 2008) 25-27, 29-31, 38-55.

and Plautus thoroughly, making annotations that were then copied out and rearranged into alphabetical order to serve as the material for the new dictionary.¹¹ These were supplemented with gleanings from other writers. He spoke of great labour consulting ‘immense volumes of authors, so many commentaries, indexes, fragments and annotations’, collecting not just words and sayings, but their interpretations, conferring with scholars on difficult points, restoring passages that he found everywhere mangled and corrupt.¹²

When some early pages were well received, Stephanus pushed himself all the harder. The result of his work was to be the 1531 *Dictionarium, seu Latinae linguae Thesaurus*, which would be followed by two further, much-enlarged editions in 1536 and 1543.¹³ Production was gruelling: Stephanus’ prefaces are thick with the *topoi* of trial and exertion. He had neglected, he wrote, ‘not only domestic business but also the care of the body as a whole’. His labour was ‘almost Herculean’. He ‘sweated days and nights’ for two years, ‘with so great labour indeed, that [he] must either have died or succumbed to the burden unless [he] was sustained by divine help’. Of course, he ‘leave[s] out the fact that in the midst of all this [he] had to work always so that [he] might almost daily supply material for two presses’.¹⁴

All of this was related, Stephanus insisted, ‘not for the sake of complaint’, but so that readers might understand ‘how the really valuable differs from the worthless (*quid lupinis aera distent*): that is, how much this, our altogether fresh work, differs from Calepinus and from other dictionaries’.¹⁵ It was thus, quite bluntly, a value-added proposition, a projection of a purportedly upgraded model of lexicographic activity, providing real

¹¹ Stephanus, ‘Robertus Stephanus studiosis lectoribus S.D.’ (1531) sig. *ii^v.

¹² Stephanus, ‘Robertus Stephanus studiosis lectoribus S.D.’ (1531) sigs *ii^v–*iii^r: *Reputate enim prudentissimi Lectores, quantus fuerit labor in excutiendis, ac toties volvendis & revolvendis tot immensis authorum voluminibus, tot commentariis, indicibus, fragmentis, annotationibus: non modo ut dictiones & varias loquendi formulas, earumque interpretationes undique in unum veluti corpus congerem: verum etiam ut integra, quoad liceret, reponerem significationum testimonia, passim apud ipsos depravata & mutilata linguae Latinae interpretes. Quoties toto mihi oppido cursitandum fuit, ut ex doctissimis viris modo hunc, modo illum de dubiis subinde consulerem?*

¹³ See Figure 1 for the full titles of the three editions, and their translations. It is worth noting that following the 1536 *Thesaurus*, Stephanus began his line of bilingual dictionaries: he would produce editions of his *Dictionarium latino-gallicum* in 1538, 1543, 1546, and 1552, and of his *Dictionnaire françois-Latin* in 1539 and 1549 (see A. Renouard, *Annales de l’imprimerie des Estienne*, 2nd edn [Paris 1843] 46–48, 57, 67, 74, 82). The presence of these dictionaries had an effect on Stephanus’ main line of *Thesauri*: notably, the French glosses that had appeared in the 1531 and 1536 editions were no longer present in 1543 – if readers needed French translations, they could be found in the bilingual issues of 1538 and 1539.

¹⁴ Stephanus, ‘Robertus Stephanus studiosis lectoribus S.D.’ (1531) sigs *ii^v–*iii^r. Of course, Stephanus had daily aid in his travails, maintaining a staff to help with the many tasks, scholarly and otherwise, attending print production; see the discussion at Armstrong, *Robert Estienne* (n. 6, above) 58–61. Aside from his staff, Stephanus also had help from learned colleagues – men like Guillaume Budé, Lazare de Baïf, and Jacques Toussain, whom he consulted on occasion for help with particular points (note, e.g., the acknowledgments at ‘Robertus Stephanus Lectoribus S.’, in *Dictionarium, seu Latinae linguae Thesaurus* [Paris 1536] sig. *ii^r).

¹⁵ Stephanus, ‘Robertus Stephanus Lectoribus studiosis lectoribus S. D.’ (1531) sig. *iii^r.

services, at a level that counterparts could not match. An enumeration of these services gives us the initial, most obvious clues to the makeup of the lexicographic archetype that Stephanus meant to embody – an archetype that he believed could sell. In the first place, clearly, he was concerned with accuracy, which he could ensure by culling his material directly from the texts, consulting specialists when necessary, and emending the corrupt. Here his text-critical services were crucial: ‘Here, passages of authors that are often found in corrupt form in dictionaries, have almost all been restored as faithfully as was possible, not without the greatest labour’.¹⁶

And not only did he collect accurately (*accuratissime collectas*, reads the end of his subtitle for the 1531 edition), but he collected in abundance, pressing himself to look at so *much*, such ‘immense’ volumes, so ‘many’ fragments and indexes.¹⁷ In his perusal of Plautus and Terence – two writers distinguished for, among other things, their *copia* – he took down ‘even the most minute things’ (*etiam minutissima*), so that he ‘might pass over scarcely any word’ that suited his purposes.¹⁸ The emphasis on abundance finds clear expression in the successive editions of the *Thesaurus*, each of which boasted substantially more material than its predecessor – a fact that Stephanus took care to underscore. In 1536, for example, he remarks how ‘we have got up a great host of words – even an infinite number – which are contained in no other dictionary: so that these additions make the work itself much bigger and better’.¹⁹ Stephanus also thought that he

¹⁶ R. Stephanus, ‘Huius operis praecipua haec sunt commoda’, in *Dictionarium, seu Latinae linguae Thesaurus* (Paris 1531) sig. *iii^v. On this point, as in other respects, Stephanus is clearly trying to put distance between himself and Calepinus, whose text-critical work he portrays as neither so direct nor so painstaking as his own. Thus, in an address ‘Lectori’ in the front matter of the 1531 *Thesaurus* (sig. [*v]^r), he noted that in reviewing his own printed work he had found errors, made ‘partly by the vice of Calepinus, following whose error – appearing correct – I inserted many words in this work which had been taken by that man from corrupt passages of authors, by which, after they were diligently inspected, I noticed that he [Calepinus] had been deceived’.

¹⁷ See n. 12 above.

¹⁸ Stephanus, ‘Robertus Stephanus studiosis lectoribus S.D.’ (1531) sig. *ii^v: here, in a statement echoed in his prefatory address to the 1536 (sig. *ii^r) and 1543 (sig. [*ii]^r) editions of the *Thesaurus*, Plautus and Terence are ‘two authors of the Latin language most excellent in the abundance and elegance and propriety of their words’.

¹⁹ Stephanus, ‘Robertus Stephanus Lectoribus S.’ (1536) sig. *ii^r. The claim is repeated in the 1543 edition (sig. [*ii]^r), the title of which would declare ‘*Dictionarium sive Latinae linguae Thesaurus*...indeed now increased so that there may be just about nothing worthy of observation...which it does not make here ready and available’. I should emphasize again that in many respects the archetype outlined by Stephanus seems not a novelty, but a mere continuation by degrees along an established path. In this regard, consider Calepinus’ statement that his work ‘surpassed all dictionaries both in the multitude of words and interpretations of propositions, and in the citation and rank of authors’ – which shows quite clearly that the planks of a lexicographic archetype valorizing abundance (and quality of selection, which we will address shortly) were by no means an invention of the *Thesaurus*. Calepinus’ words are here drawn from a prefatory address to the *Dictionarium* (‘Ambrosius Calepinus Eremitanus, Senatui populoque Bergomensis...’), repr. in C. Du Cange, ‘Praefatio doctissimi viri Caroli du Fresne Domini du Cange ad Glossarium. De Causis Corruptae Latinitatis’, in *Glossarium Mediae et Infimae Latinitatis*, ed. Leopold Favre, vol. 1 (Niort 1883) xxxvii–xxxviii.

had an edge on the market in the orderliness of his presentation, which he pressed in a note invoking the ‘sequence and comely distinction’ with which his material was disposed, as opposed to prior efforts where he believed it to be ‘indifferently gathered into one confused heap’.²⁰ And finally, in the selection of words, the 1531 *Dictionarium* promised selections from ‘whatever authors were best’ – trumping, for example, the ‘several words’ on offer in Calepinus that Stephanus characterized as ‘neither sufficiently pure, nor representative of good Latin’.²¹

2. So far so good for the Stephanian lexicographer, who is shaping into a most reliable and industrious character: accurate, abundant, orderly, selective. But what of higher-order priorities? Explicit, first of all, is an emphasis on intervention at the level of usage – both oral and written composition. The subtitles of all three Stephanus editions bill the work as ‘containing not only single words, but also whole phrases for speaking and writing in Latin’. Elaborating on his scrutiny of both Plautus and Terence, Stephanus repeats the emphasis, declaring his intention to ‘pass over scarcely any word that I might judge suitable for speaking or for writing Latin’, and extolling the two authors not just for the extent of their vocabulary but their elegance and propriety as well – that is, presumably, their suitability as a model for turning a phrase.²² His stated aims were picked up by others. A few decades after Stephanus delivered his definitive edition of 1543, the *Thesaurus* was credited by the printer Philippus Thinghyus, busy reissuing the work, with ensuring that ‘everywhere a more pure method of speaking and writing raised its head’.²³ The compositional emphasis is clearly apparent in the structure of a Stephanus entry. The majority of examples cited in a 1543 Stephanus offering (Figure 2) are adduced following a line-break and are prefaced by a short note highlighting the particular word pattern (collocation) or phrase that a given citation is meant to exhibit. Sometimes the full quotation in which the word figures is given in addition to the phrasing note; sometimes – particularly if the sense of the pattern is self-evident – only the line citation is given. Thus the following segment of *concidere*, with the phrasing notes underlined:

²⁰ Stephanus, ‘Huius operis praecipua haec sunt commoda’ (1531) sig. *iii^v. The same claims, with the wording slightly tweaked, recur in 1536 and 1543 (sig. *iii^r). The orderliness here refers specifically to the care that Stephanus has taken to begin most of his examples on separate lines: see also n. 24, below.

²¹ Stephanus, ‘Robertus Stephanus studiosis lectoribus S.D.’ (1531) sig. *ii^r. See also Stephanus, ‘Huius operis praecipua haec sunt commoda’, in *Dictionarium* (1536) sig. *iii^r: ‘Instead of the testimonies of less trusty authors, which Calepinus often used, we have drawn examples from those most approved.’

²² Stephanus, ‘Robertus Stephanus studiosis lectoribus S.D.’ (1531) sig. *ii^v: *etiam minutissima quaeque adeo scrupulose annotavi, ut nullum fere verbum pratermiserim: quod ad Latine tum loquendum, tum scribendum, commodum esse existimarem*. The wording is altered slightly in 1536 (sig. *ii^r) and 1543 (sig. [*ii]^r) where he speaks of working in 1531 to ensure ‘quicquid ad Latine scribendum dicendumque pertineret, diligenter esset annotatum’. The praise for Plautus and Terence has been addressed in n. 18, above.

²³ P. Thinghyus, ‘Typographus Latinae Linguae Studiosis S’, in *Thesaurus linguae latinae: seu promptuarium dictionum et loquendi formularum omnium ad Latini sermonis perfectam notitiam assequendam pertinentium: ex optimis auctoribus concinnatum* (Lyons 1573) sig. *3^v.

Figure 2: *Concidere*, as presented in R. Stephanus, *Dictionarium, seu Latinae linguae Thesaurus* (Paris 1543). The article is split between two pages: the segment on the left is the first portion of the entry; the segment on the right is the final portion, which follows the page break.



Graviter concidere. Lucret. lib. 6. 152.

Graviter ad terram concidere. Virgilius 5. Aeneid. 89, Ipse grauis grauitérque ad terram pondere vasto Concidit.

Ad aliquem concidere. Ad supplicandum procidere in terram.

Tibul. lib. 1. eleg. 2. 13, Concidit ad magicos hostia pulla deos.

Concidere ex animi terrore. Lucret. lib. 3. 32.

Concidere in aliquo loco. Propert. lib. 1. eleg. 3. 2, Qualis in herboso concidit Appidano.

The general effect of this structural scheme is to create articles with long, browsable margins, showcasing a particular word's collocations – a configuration useful for a Latinist looking to scan for a compositional template. That this is what Stephanus intended is confirmed in his enumeration of the 'conveniences' of his work, where he extols his line-by-line arrangement precisely because it accessibly highlights word-patterns, variations of expressions that are, as a result, 'able to come into common use'.²⁴

Another component of Stephanus' lexicographic persona is a stated reluctance to formulate his own assertions about the semantic content of the words he treats. Of this interpretative reluctance, whose afterlife we will examine later in this paper, there are several suggestions. In 1531, in a passage similar to what would follow in the preface to his 1536 and 1543 editions, Stephanus warned:

If any interpretation by chance offends the reader, he ought not to become angry with me, who have added nothing from myself, but rather the authors from whom I have transcribed all things word for word. For I do not (as I will say with Pliny) pledge my own word on these things, but relegate [that trust] to those authorities who either have written [themselves], or have interpreted the writings of others.²⁵

²⁴ Stephanus, 'Huius operis praecipua haec sunt commoda' (1536) sig. *iii': *Istam seriem, & honestam rerum distinctionem, ea est utilitas consequuta, ut non modo constructionum, sed etiam loquendi varietas ab authoribus usurpata, antea obscurissima, omnibus deinceps exposita & in usu promiscuo esse possit.* The observation is repeated in the 1543 edition (sig. *iii'), with the first words changed slightly to *Istam seriem, facilemque & expeditam rerum distinctionem.* The analogous observation in the 1531 *Thesaurus* (sig. *iii') is a bit more muted: the sequencing allows a variety of constructions and locutions to be 'noted' (*annotata est*), and a 'certain fixed manner of speaking' among suitable authors to be 'observed' (*observata*).

²⁵ Stephanus, 'Robertus Stephanus studiosis lectoribus S.D.' (1531) sig. *iii'. *Siqua igitur interpretatio lectorem forte offendet, is non mihi, sed iis potius authoribus, ex quibus ad verbum omnia transcripsi, succensere debet. Non enim (ut cum Plinio loquar) in hisce rebus fidem nostram obstringimus: sed ad ipsos auctores, qui aut scripsere, aut aliorum scripta interpretati sunt, relegamus.* See also the corresponding passages in the 1536 (sig. *ii') and 1543 (sig. [*ii']^v) editions, where the wording of the first sentence is changed to read *Quapropter siquem legendo unius alicuius verbi offendet interpretatio, is non me, qui de meo addidi nihil, sed auctores ex quibus me ad verbum omnia transcripsisse fateor, accusare debet.* The Pliny reference in the first sentence is to Pliny the Elder, *Natural History* 7.8. Admitting that the habits of some far-flung peoples will seem unbelievable, the first-century CE Roman compiler reminds his readers that nature contains in its immense variety many things that, though they seem to defy credibility, are real: 'Nevertheless', he writes, 'in most of these things I will not pledge my own word, and will rather relegate trust to authors, who are cited on all doubtful things' (*nec tamen ego in plerisque eorum obstringam fidem meam potiusque ad auctores relegabo qui dubiis reddentur omnibus*). The Pliny citation is a reminder of the history (extending all the way to antiquity) behind Stephanus' purportedly non-assertive handling of semantic content. The medieval and early modern trajectory of this self-effacing attitude is treated in A. Blair, *Too much to know: managing scholarly information before the modern age* (New Haven 2010) 174-77, 186-88. Compilers in these centuries, we are told, tended early on to emphasize their marked humility or anonymity with respect to 'authors'; later on they played up their status as mere 'neutral reporters'. A range of practices served this programme – first claiming no independent authority and taking credit only for the presentation, not the content, of what was gathered, later shifting onto the reader the

The material necessary for this relegation was ensured by Stephanus' emphasis on accuracy and abundance, since he had in mind not just the collection of words to use as headings, but also the accumulation of examples of their use, and of their interpretation by commentators, both ancient and contemporary.²⁶ Even when no interpretation was forthcoming from elsewhere, Stephanus did not try to fill the gap himself. In such instances a *Thesaurus* entry would purposely be left without a definition, for, Stephanus wrote in 1531, 'we preferred to leave [the sense] to the judgment of the reader to be divined, rather than rashly from our own force and ingenuity to give it'.²⁷ Even in cases where a good interpretation could be collected, Stephanus was inclined to maintain an abundance of examples of a word's use as a sort of insurance policy. This allowed lexical acquaintance to be abstracted from the information itself, rather than from a pre-digested definition. 'The use of language, and its sense and propriety', he wrote, 'may often be made more manifest from so many examples (*exemplis*) gathered into this same place, than from any exposition of interpreters, no matter how attentive'.²⁸

On an explicit level, then, the Stephanian lexicographer washed his hands of semantic responsibility, depending for judgment in this area on other commentators, whom he quoted, and on the readers themselves. And yet the entries themselves suggest something more. The fact is that a Stephanus article is structured into subdivisions, many of them reflecting particular senses and set off by a pilcrow. We need only look at *concidere* (Figure 2) to spot three such divisions: the string of citations under the initial heading '*simul cadere*' represent examples in which a literal fall is indicated; the ones that follow under '*☞ Concidere, Mori*' represent instances where falling is synonymous with dying (e.g. 'to fall by the bow'); and those under '*☞ Animus concidit*' are generally extended meanings ('to fail in spirit', for instance; or to 'subside'; or to 'collapse', as a city might upon being conquered).

Arena also exhibits a categorical division. Here, not all of the distinctions are semantic, but there are marked sub-sections for a range of meanings running from 'very small, dry dust' (*pulvis minutissimus, aridus*) to 'harbour' to 'shore' to 'dry earth' to

responsibility for interpretive appraisals of the material. While Blair does not deal in these segments with strictly lexicographical compilations, her analysis is crucial for understanding the stance that informed the *Thesaurus*. Stephanus' reluctance to avow his own semantic considerations, his assertion that his most important contribution lay in ordering and presentation (see below, n. 29), his desire to shift the onus of sense judgments on the reader (also below, n. 27 and n. 28) – these were not the product of individual whim, but part of the normal fabric of compilation, running from Pliny to early modern figures like Blair's Theodor Zwinger (1533-88).

²⁶ See, e.g., n. 12, above, where Stephanus describes his efforts collecting words and their interpretations. See also Stephanus, 'Huius operis praecipua haec sunt commoda' (1531) sig. *iii^v: *Et latina quidem interpretatio ex optimis quibusque linguae Latinae interpretibus desumpta est.*

²⁷ Stephanus, 'Huius operis praecipua haec sunt commoda' (1531) sig. *iii^v. In 1536 and 1543 (sig. *iii^r in each case), the wording is somewhat changed. In easy cases, and ones where 'no one came to mind who had given suitable interpretation', Stephanus preferred to rely on the readers' judgment 'rather than to offer something uncertain and unexplored'.

²⁸ Stephanus, 'Huius operis praecipua haec sunt commoda' (1531) sig. *iii^v: *sermonis usus, et vis, et proprietas saepe fit manifestior ex tot congestis in eundem locum exemplis, quam ex ulla interpretum expositione, quantumlibet curiosa.* Wording very slightly tweaked in 1536 and 1543 (sig. *iii^r for each).

‘amphitheatre’. Even granting the unlikely case that Stephanus did not make a semantic sub-grouping unless spurred by interpretations drawn from other authors, he could not have avoided judgments bearing on semantic content. He would have had to decide, for instance, which given interpretations were sufficient to determine a whole sub-division, and subsequently whether and how the sense of each citation might qualify it for entry under a particular heading. In short, semantic reflection was inherent in the very structure of a Stephanus article.

We can catch him at this sort of reflection from edition to edition, as he gathered more material and had more time to edit and review the information already collected. Our sample lemma, *concidere*, exemplifies how the use of subordination increased from 1536 to 1543:

1536	1543
<i>Simul cadere</i> (‘to fall at once’)	<i>Simul cadere</i>
[...]	[...]
<i>Concidere sub onere</i> (‘to fall under a burden’)	<i>Concidere sub onere</i>
<i>Concidere vulneribus</i> (‘to fall from wounds’)	[...]
<i>Concidere, Mori</i> (‘to fall’ in the sense of ‘to die’)	∅ <i>Concidere, Mori</i>
	[...]
	<i>Concidere vulneribus</i>

Here, instead of placing *Concidere sub onere*, *Concidere vulneribus*, and *Concidere, Mori* on the same plane of the entry (subordinate to the literal sense ‘to fall at once’), Stephanus elevates *Concidere, Mori* to a superordinate level, giving it a pilcrow, and moves *concidere vulneribus* beneath it, reading the sense ‘to succumb to one’s wounds’ as more akin to a sense of ‘to die’ than ‘to fall under a burden’. *Concidere sub onere*, meanwhile, remains classified as a simple case of falling. On paper, the move is small, but it does represent a further attempt by the lexicographer to analyse and categorize the sense behind particular word-patterns, and to manipulate the structure of the entry to reflect the findings.

Although he makes no mention of it, Stephanus also seems to have relied on his own semantic determinations when deciding how to order the senses of a word. That is, he appears to have arranged his semantic subcategories not arbitrarily but on the basis of theories about how definitions inter-related. The ordering of both *arena* and *concidere* sets the interpretations along a spectrum from literal to figurative (the continuum running from dust to dry earth to amphitheatre is incidentally roughly what would appear in offerings for *arena* in later dictionaries, where divining a progression between senses was precisely the goal). Once again, the point is simple: the imperative to lay out material clearly for users was generative of semantic reflection. It is possible that Stephanus had the sorts of contributions I have just outlined in mind when he wrote that what was ‘left over’, after deferring responsibility for all semantic judgments, was ‘diligence in ordering most carefully individual words and all those things which pertain to the elegance of our art [*i.e.* printing]’.²⁹ But the manner in which ‘ordering’ and ‘elegance’ bore on semantics remained unarticulated: his practice in this area, we might say, was ahead of his theory.

²⁹ Stephanus, ‘Robertus Stephanus studiosis lectoribus S.D’ (1531) sig. *iii^r: *Quod superest, de diligentia nostra in singulis vocibus curiosissime ordinandis, deque iis omnibus, quae ad nostrae artis decorum pertinent, vos ipsi videritis inter legendum*. See the similar remark in 1536 (sig. *ii^v) and 1543 (sig. [*ii^v]): *Quod vero ad eam laudem, quae nostra est et propria, attinet, diligentiam dico, in singulis*

We are left finally with a picture of our Stephanian archetype. He worked so the learned could have their words and their significations emended, in abundance, straight from the source, neatly arrayed. The proud metaphor for what he produced was that of a ‘treasury’ – or, as he glossed it in 1531, a sort of storehouse or cupboard:

And thus on account of a so great abundance and variety of formulas of Latin speech, it has pleased certain most learned men that, not without reason, this our work be called a Treasury (*Thesaurus*) of the Latin language: as if [it were] a cupboard (*promptuarium*) of the Latin language.³⁰

Here, he reliably laid things away for pedagogical ends – that is, so others could bring them forth, particularly for the purposes of speaking and writing better. His image is that of restorer and compiler. He is a text-critical authority, but he is not a semantic authority; he was in fact anxious to disavow rulings on issues of meaning. He claimed no semantic methodology of his own, only collections of the interpretations of others. And yet his arrangement of material could not be sealed off from his own interpretive analysis. In the lexicographer’s cupboard, a ferment was taking place.

II

1. To follow this development to its critical point, we turn first to the man who would become Stephanus’ final editor. Johann Matthias Gesner (1691-1761) was librarian and professor of eloquence at Göttingen, and director of the University’s philological seminar from 1738 – roughly the same time that he issued the proposal for a Latin lexicon based on Stephanus’ *Thesaurus*.³¹ Gesner had already put his hand to two editions (1726 and 1735) of a late sixteenth-century school dictionary, the *Thesaurus eruditionis scholasticae* of Basilius Faber, when he made up his mind to ply his trade on a recently released (1734-35) edition of the *Thesaurus* that had been printed in London by a quartet of Cambridge scholars.³² There

vocibus apte suo quoque ordine disponendis, quaeque ad nostrae artis decorum pertinent, exequendis, iis certe licebit existimare qui legerint. My sense is that this statement refers less to semantic categorization than to the pains Stephanus took in collecting and alphabetizing his material, and then printing it line-by-line with *phrases*. These are issues that he emphasizes in his prefaces (see, e.g., n. 24, above).

³⁰ Stephanus, ‘Huius operis... commoda’ (1531) sig. *iii^v. A similar formulation appears on sig. *iii^r of the 1536 and 1543 editions, although here he omits the gloss likening the *thesaurus* to a *promptuarium*. I read the early *promptuarium* gloss to reveal the force of what Stephanus had in mind when he spoke of a treasury – that is, a place where things, lots of them, were ‘stored’ – a usage that aligns nicely with his lexicographic attitude elsewhere.

³¹ J. M. Gesner, ‘Praefatio’, in *Novus linguae et eruditionis Romanae Thesaurus* (Leipzig 1749) fol. c2^r (4) gives the timeline.

³² Edmund Law, John Taylor, Thomas Johnson, and Sandys Hutchinson, ed., *Roberti Stephani Thesaurus linguae Latinae ed. nova prioribus multo auctior et emendatior*, 4 vols (London 1734-35). Another edition of Stephanus, also based on the London edition, was issued not long before Gesner’s *Novus Thesaurus*, claiming to be augmented with autograph annotations from Robert’s son, the famous Greek lexicographer, Henri (II) Estienne. Gesner acknowledged this work of Antonius Birrius, *Roberti Stephani lexicographorum principis Thesaurus linguae Latinae*, 4 vols (Basel 1740-43), but said that he used it little. See Gesner, ‘Praefatio’, fol. d^v (10).

was plenty to be done: Gesner turned on the London material with a ‘triple method: removing, emending, adding (*aufferendo, immutando, adiiciendo*)’.³³ Many geographical and historical terms, along with verbose bits of humanist explication, were excised.³⁴ Additions included some new words, and ‘much more in the way of phrases, which seemed worthy of observation, brilliant passages and sayings, interpretations’.³⁵

Gesner’s description of the pains of emendation, meanwhile, carries echoes of his sixteenth-century predecessor. The Stephanus had seen so many errors at the hands of its renovators, he wrote, that he considered whether it might not be prudent to start over, ‘to read all the Latin writers in order, to note down all things on separate slips [*scidulis*], thereafter to have someone first sort these slips somehow: finally, to order them more accurately by my judgment’.³⁶ But the thought occurred too late in the process. The Göttingen lexicographer stayed the course, consulting current editions of the classical texts to verify passages about which there was even the slightest doubt, banishing the corrupt, citing and emending when necessary, and supplying the reader an account of his labours:

Often it happened that several hours needed to be devoted first to discovering a single passage if it had not been cited except loosely, which often happened; then, to correctly interpreting it – and each thing I summarily set right, so that generally not even a trace of my labour remains: surely those who will use my thesaurus will not realize that those few numerical marks, those three or four words of interpretation, cost me so great a price of time and labour.³⁷

Evidence of Gesner’s work is not, in fact, lacking (Figure 3). His working copy of the London edition, preserved in the Göttingen University library, speaks for itself – annotations and alterations cram each page, and some entries have been rewritten wholesale on bits of paper and pasted in.³⁸ In our test entry *concidere*, specifically, there

³³ Gesner, ‘Praefatio’, fol. c2^r (5).

³⁴ Gesner, ‘Praefatio’, fol. c2^{r-v} (5-7).

³⁵ Gesner, ‘Praefatio’, fol. d^v (11).

³⁶ Gesner, ‘Praefatio’, fol. d^r (8). The statement is an interesting glimpse of (albeit unrealized) lexicographical working methods. Stephanus’ reference (‘Robertus Stephanus studiosis lectoribus S.D’ [1531] sig. *ii^v) to seeing that his notes (*annotationes*) on Plautus and Terence be ‘copied out and with all diligence arranged in alphabetical order’, could suggest marginal notes being copied onto slips by learned assistants, and then arranged (see Armstrong, *Robert Estienne* [n. 6, above] 85), but I have no specific evidence to confirm that notion. Blair, *Too much to know* (n. 25, above) 210-29 discusses the working methods of early modern compilers, including the advent of slips as a means of flexible information management and swift alphabetization; among lexicographers, she writes, both Samuel Johnson and Charles Du Cange were known to use slips. On Du Cange’s use of slips, in particular, see Considine, *Dictionaries in early modern Europe* (n. 10, above), 270-71.

³⁷ Gesner, ‘Praefatio’, fol. d^r (8).

³⁸ Göttingen, Niedersächsische Staats- und Universitätsbibliothek Göttingen, Cod. Ms. Philol. 230.

Figure 3: *Concidere*, as presented in J. M. Gesner, *Novus linguae et eruditionis Romanae thesaurus* (Leipzig 1749). With permission of Princeton University Library.

CONCIDO, idi, āsum, ēre. [καταπίπτω] Ex Cado, simul vel totum, vehementerque adeo cadere. Cic. Somn. Scip. 20 Vel concidat omne caelum, omnisque natura consistat necesse est. Grauitur concidere Lucret. 6, 758. Virg. Aen. 5, 448 Ipse grauis grauiturque 90 ad terram pondere vasto Concidit. Tibull. 1, 2, 64 Concidit ad magicos hostia pulla Deos. i. immolata DIs est. Concidere ex animi terrore Lucret. 3, 158. Propert. 1, 3, 6 Assiduis Edonis (mulier Thressa) fessa choreis Qualis in herboſo concidit Appidano. In humo concidit languinolentus Ouid. Fast. 6, 602. de Seruio Tullio. In ipſo ſolo concidit pronus Virg. Aen. 5, 333. Liu. 24, 8 Magis nullius intereſt, quam tua T. Octacili, non imponi ceruicibus tuis onus, ſub quo concidas. Repente concidere Stat. Theb. 6, 184. Repente equus concidit Cic. de Diuin. 2, 77. Columel. 8, 7, 1 Solae capellae, quamuis opimae, atque hilares, ſubito concidunt, de peſti-100 tentia, et interitu ſine praecedenti languore. Sic de ſubito mortis genera dicitur. Arcu concidere Claud. in Eutrop. 1, 33a. Armis Valer. Argon. 4, 123. Ictu fulminis Lucret. 3, 487. Sed Ouid. Epiſt. 21, 215 Concidimus macie: color eſt ſine ſanguine, etc. hoc tamen indicat maciam illam celeriter et praeter naturam a moſture et curis inductam 105

C O N 1100
eſſe. Iuuencae iſtae conciderant Ouid. Met. 10, 272. Cic. Tuſc. 3, 1 Conſtabat eos, qui concidentem vulneribus Cn. Pompeium vidiffent, quum, etc. In praelio Cic. Tuſc. 1, 89. Corpus concidit magna ruina Lucret. 3, 584. ¶ 2 Metaphor. Cic. Tuſc. 5, 40 Quod ſi cui, vt ait idem, ſimul animus cum re concidit, a grauibus illis antiquis philoſophis petenda medicina eſt, non ab his voluptariis. Mens debilitata metu concidit Cic. pro Domo 15. Vita concidit, i. perit Lucret. 4, 511. Caef. Bell. Gall. 8, 19 Hoſtes concidunt animis, atque itineribus diuerſis ſigam quaerunt nequidquam. Cic. Philipp. 3, 24 Allato nuntio de leſione quarta, mente concidit. Cic. in Pison. 88 Quid debilitatio atque abiectione animi tui. Macedonia prouincia nuntiata, quum tu non ſolum quod tibi ſuccederetur, ſed quod Gabinio non ſuccederetur, exſanguis et mortuus concidiſti? Cic. Att. 3, 10 Equus vnquam ex tam amplo ſtatu, in tam bona cauſa, tantis facultatibus ingenii, conſilii, gratiae, tantis praefidiis bonorum omnium concidit? Add. ib. 7, 25. Per ſe concidere Cic. Att. 10, 7. Cic. pro Lege Manil. 19 c. 7 Ruere illa non poſſunt, vt haec non eodem labefactata motu concidant. Lapſi conciderunt Ouid. Met. 5, 77. Artes forenſes et actiones publicae concidunt Cic. in Orat. 148. Id. Acad. 4, 146 Sed quomodo tu, ſi nihil comprehendere poſſet, artificia concidere dicebas: neque id mihi dabas, etc. Senatus auctoritas concidit Cic. Att. 1, 16. Auxilium concidit Ouid. ex Pont. 4, 6, 14. Bellum concidit morte illius Tacit. Hiſt. 2, 57. Caelum concidere dicitur Cic. Somn. Scip. 20. De immutatione totius rerum naturae. Cic. pro Roſe. Com. 17 c. 6 Nonne vt ignis in aquam coniectus continuo reſtinguitur et refrigeratur, ſic referuens falſum Crimen in puriſſimam et caſtiſſimam vitam collatum, ſtatim concidit et exſtinguitur? Sen. Herc. Oet. 221 Tibi cuncta domus concidit vni, dum me genitor negat Alcidae. Cic. pro Lege Manil. 19 c. 7 Nam tum quum in Aſia res magnas permulti amiſerunt, ſcimus Romae ſolutione impedita fidem concidiſſe. Ouid. Met. 15, 422 Sic tempora verti Cernimus, atque alias aſſumere robora gentes: Concidere has. 35 Cic. Verr. 2, 3 Neque enim tam facile opes Carthaginis tantae concidiffent, niſi illud, etc. Troia concidit Ouid. Triſt. 2, 317. Sic Auſt. ad Her. 4, 13 Vrbs acerbiffimo conflagrata incendio concidat. Veni concidunt, i. quieſcunt ſubito Hor. Carm. 1, 12, 30. Venas concidere Celſus dixiſſe videtur, vt verbum ζυμπίπταν, et ζυμπίπτιος, vocem Hippocrati familiarem, qua (vt enarrat Galenus) την κίνηſον ſignificat, exprimeret. Nam ζυμπίπταν vel ζυμπίπτιον eſt, ſi verbum e verbo exprimas, Concidere: et, vt annotat Budaeus, ανιζάναν, id eſt conſidere et conſtringi. Inanitates enim venas conſidunt et adſtringuntur. 45 CONCIEO, iui, itum, ēre. [συγκίω, συγκίω] vel CONCIO, iui, itum, ire. Commouere, Conuocare. Liu. 1, 8 Deinde ne vana vrbs magnitudo eſſet, acciendae multitudinis cauſa, vetere conſilio condentium vrbes, qui obſcuram atque humilem conciendo ad ſe multitudinem, natam e terra ſibi prolem eminentebantur. Ter. Hec. 3, 1, 33 Fortaſſe vnum aliquod verbum inter eas iram hanc concieuerit. 50 Liu. 1, 59 Elatum domo Lucretiae corpus in forum deferunt, concientque miraculo (vt ſit) rei nouae, atque indignitate homines. Valer. Argon. 6, 35 Quanto Scythiam molimine Perſes Concierit. Lucret. 6, 826 Quippe etenim primo quaſi quendam conciet actum. Hoſtes Plaut. Merc. 5, 2, 36. Idem Afin. 4, 2, 15 Tu ergo face, vt illi 55 turbas, lites concias. Liu. 4, 48 Quum ex compoſito relatum ad Senatum eſſet de ſeditione, quam Maecilius Metiliuſque largitione pellimi exempli concierent, etc. Plaut. Amph. 1, 2, 14 Actum vxori turbas conciet, atque intumulabit eam probr.

appear arrangements and explanatory gestures present neither in the 1543 Stephanus nor its 1734 London edition, some of them detailed and expository.³⁹

And yet, for all of Gesner's efforts and revisions – he was at work for over a decade – he remained, by his own admission, situated on a material foundation laid by Stephanus centuries earlier.⁴⁰ Nor was the continuity solely a matter of content; Gesner's lexicographical outlook, too, showed broad similarities to that of Stephanus. The emphasis on text-critical work and on time spent emending passages for accuracy as an indicator of lexicographical excellence is one such likeness. Another is the sense of the dictionary as a pedagogical tool, a supply-depot for the provisioning of the learned. Gesner had, he wrote, enriched the lexicon not to flaunt himself, but so that 'from it in the future all might fetch as much as they wish'. It was clear, he continued, 'that, for the Lexicographer, no other law is ordained than that he gather into common storehouses (*in communia horrea*), whatever is of a good fruit, and faithfully indicate the first – and I mean the first – sources, [that is,] the

³⁹ Some short contextual notes occur, e.g., *de Servio Tullio* ('concerning Servius Tullius') in Figure 3 at 1099.95 and *de immutatione totius rerum naturae* ('concerning the alteration of the whole nature of things') at 1100.24–25. By way of semantic exposition, consider (at 1099.99–1100.1) the handling of Columella's *De re rustica* 7.7.1: *Solae capellae quamvis opimae, atque hilares, subito concidunt* ('Only the she-goats, although fat and lively, suddenly perish'). This, we are told, is a usage of *concidere* that 'concerns pestilence and destruction without preceding weakness'. Gesner continues: 'Thus [the word] is used concerning a sudden kind of death' – as is the case with selections from Claudianus, Valerius Flaccus' *Argonautica*, and Lucretius (dying 'by the bow', 'by weapons', by 'a bolt of lightning'). And yet, a problem arises with a passage in Ovid's *Heroides* (21.215 in modern editions): *Concidimus macie: color est sine sanguine* ('I am wasting away [lit. collapsing from leanness]: my colour is bloodless'), since wasting is not *per se* synonymous with sudden death. Gesner has the answer: 'nevertheless, this [the Ovid passage] indicates that the leanness has been swiftly and unnaturally brought on by grief and anxieties'. For yet another Gesnerian adjustment, consider the change of citational ordering at 1100.37, where he has moved *Auct. ad Her. 4,13 Urbs acerbissimo conflagrata incendio concidat* to immediately after *Troia concidit*. In this configuration a lengthy discussion of the constriction of veins is moved aside so that 'Troy falls' can come immediately adjacent to 'the city may collapse, consumed by most bitter fire' – the correspondence is highlighted with *Sic* at 1100.36. On this last point, concerning ordering, see Gesner's remark at 'Praefatio' fol. d' (10): 'Often indeed I have changed the ordering both of the very headings [*i.e.*, words] or subdivisions [*articulorum*], and of the examples under the headings – and I would have done this more often had I not preferred to devote that effort to greater necessities, and to remove from the clerical and typographical work opportunities for new errors'.

⁴⁰ Thus in the case of *concidere*, from the selection of fifty-three citations that appear in the 1543 offering, fully forty-five made their way into the 1749 version. These forty-five remain in precisely the same order, relative to each other, that they were assigned in the 1543 Stephanus, with two exceptions: the sifting of *Urbs...concidat* to 1100.37 (see further n. 39, above), and the reversal of two citations from Cicero's *Epistulae ad Atticum* (1100.14–16). Gesner has inserted a single citation not present in 1543 (*Senatus auctoritas concidit* at 1100.22), and also re-introduced a Ciceronian citation (the '*Add. ib. 7, 25*' of 1100.16) that, while included in 1543, had not appeared in 1734. All eight citations from the *concidere* 1543 sample that did not find their way into Gesner were already missing in the 1734 London edition that he used as his basis and had in fact been stripped away by the Thinghyus edition of 1573 (n. 23, above). The case of *arena*'s transmission and alteration is more complicated and I will not try to address it here; my point is only to highlight an example of continuity between what was available in 1543 and in 1749.

passages of the classical authors, from which something is copied down'.⁴¹ From Stephanus' *promptuarium* to a *horreum*, from cupboard to storehouse, the thrust of the metaphor is the same: the dictionary furnished what was necessary for the early modern *studiosus* to see to his self-presentation.

Yet here we must tread carefully, for the genus that is self-presentation comes in many species, and Gesner's agenda in this area was not identical to that of his forebear. The concern for composition *per se*, in the sense of written and spoken reproduction of classical phrases, does not seem to be Gesner's. For him, the words themselves are merely a stepping stone to a more deep-seated emphasis on cultivation and manifest personal enrichment.⁴² In this spirit, he claims to write out long passages in his lexicon, not just so that the sense can be clearer, but so that 'some pasture may be furnished to a liberal spirit – one destined to accomplish things – by which it [the spirit] might be nourished, and be rendered more apt for accomplishment'.⁴³ The project is not simply to know what words are suited for writing, but rather to launch an edifying pursuit of the exemplary men who spoke them, engendering a 'familiarity with the ancient leading men of the Roman republic and empire'.⁴⁴ The storehouse user would find items for speaking, to be sure, but he would also find wisdom. The *Novus Thesaurus* could be consulted for a ready word, but young readers, Gesner noted, would not regret reading the whole thing from beginning to end.⁴⁵

This slight shift in orientation was accompanied by big changes in presentation. Before beginning in earnest, Gesner had Georg Matthiae, a Göttingen librarian and member of the medical faculty, go through the London edition to prepare it, cutting all the phrasing notes. He remarked particularly on 'how much profit' was gained in this fashion: 'much more was able to be included – and indeed so much of the other sorts of observations, which men particularly seek, when they take such a work into their hands'.⁴⁶ Gone, too, was the corresponding system of line-breaks that had established the distinctive look of a Stephanus entry. In terms of what an article was equipped to highlight, both departures are

⁴¹ Gesner, 'Praefatio', fol. d2^r (12).

⁴² A. J. La Vopa, *Grace, talent, and merit: poor students, clerical careers, and professional ideology in eighteenth-century Germany* (Cambridge 1988) 209-15 has some analysis of the connection between Gesner's notion of language and eighteenth-century shifts in the conception of classical education.

⁴³ Gesner, 'Praefatio', fol. e^v (17): *Hac de causa non detrectavi laborem exscribendi locos etiam longiores, non modo ut ex ipso orationis contexto melius iudicari possit de sententia verbi vel formulae, quae tractatur; sed ut simul exhibeatur animo liberali et rebus agendis nato, pastus aliquis, quo ille nutriatur, et rei gerendae reddatur aptior.*

⁴⁴ Gesner, 'Praefatio', fol. d^f (8).

⁴⁵ Gesner, 'Praefatio', fol. e^v (17).

⁴⁶ Gesner, 'Praefatio', fol. c2^r (4). Traces of this working method are apparent in the *Novus Thesaurus*: where a phrasing note has been removed from a Stephanus example, the citation precedes the quotation in Gesner; where Stephanus had only a phrasing note, with no independent example, it has been maintained in Gesner's edition, with the citation following (as in the 1543 *Thesaurus*). For illustration, track the transfer from 1543 to 1749 of two adjacent citations, early in *concidere* – the Lucretian *Graviter concidere* and the Virgilian *Graviter ad terram concidere*. Since the Lucretian example contained only a *phrasis*, the citation occurs after it in 1749; the Virgilian example, by contrast, has its phrasing note removed, so that the quotation is *preceded* by the citation, (see figure 3, 1099.89-91).

significant: the browsable, vertical margin, the visible instantiation of Stephanus' compositional orientation, had become, in the eyes of its Göttingen handler, a waste of space. The word-pattern had been dislodged as a subject of structural emphasis.

Still another typographical alteration separates the lexica of Stephanus and Gesner. Where the former presented interpretation and evidentiary citations in the same typeface, the latter distinguished commentary from quoted material by setting it in italics. This brand of typographical distinction originated well before Gesner: the list of precedents is long, and certainly already by the first quarter of the seventeenth century it is present in lexicographical practice.⁴⁷ For our purposes, the *locus classicus* is not crucial. It is enough simply to note that while two other contemporary revisions of Stephanus' *Thesaurus* (both the London of 1734-35, from which Gesner worked, and the Birrius of 1740-43, which he consulted) maintained upright uniformity, the 1749 edition did make a distinction. Subsequently, only one lexicon surveyed in this paper (that of Gesner's contemporary Forcellini) failed to do the same. In all others (Scheller, Freund, and the *Thesaurus Linguae Latinae* itself) there is a differentiation of the lexicographer's remarks (set in italics or in *Fraktur*) from the words of the Latin authors on which those remarks are based.⁴⁸

⁴⁷ The practice of using different script types to mark different classes of writing within a text (including, *e.g.*, the differentiation of a text from its translation, or of a word from its explanation) extends long before the invention of print (see J. P. Gumbert, "'Typography' in the manuscript book", *Journal of the Printing Historical Society* 22 [1993] 5-28). The working out of a regularized complementarity between italic and upright types, in which italic moved from a stylistically independent typeface (used, *e.g.*, to print whole texts) to a signal of variance or distinction as against upright lettering within a single text appears to have played out towards the middle of the sixteenth century (see H. Carter, *A view of early typography up to about 1600* [Oxford 2002 (1969)] 125-26, and M. Twyman, 'The bold idea: the use of bold-looking types in the nineteenth century', *Journal of the Printing Historical Society* 22 [1993] 107-43 [108-9]). The specific use of italic versus upright texts to distinguish interpretation or commentary from evidence is noted in mid-sixteenth century examples by, *e.g.*, G. Pomata, who finds it in medical case reports in the *Centuriae curiationum* (1551-66) of Amatus Lusitanus ('Observation rising: birth of an epistemic genre, 1500-1650', in *Histories of scientific observation*, ed. L. Daston and E. Lunbeck [Chicago 2011] 56-57), and E. J. Kenney, who identifies it in Denis Lambin's 1561 commentary on Horace (*The classical text: aspects of editing in the age of the printed book* [Berkeley 1974] 64). In the field of lexicography specifically, an important precursor is Stephanus' use of italics for the French-language definitions in the 1536 *Thesaurus*, as well as in his *Dictionarium latino-gallicum* of 1538, 1543, and 1546. But in these editions, as in the 1543 *Thesaurus*, Latin comments introduced by the lexicographer are in the same upright text as the quoted evidence. By 1623, a Wittenberg edition of Basilius Faber's *Thesaurus eruditionis scholasticae* distinguished Latin citations (in italics) from Latin exposition (in upright), while further differentiating German exposition (in *Fraktur*). The 1678 *Glossarium ad scriptores mediae et infimae Latinitatis* of Charles Du Cange also makes a distinction, putting remarks and exposition in upright, while using italics for quotations from the source material, both Latin and vernacular (this reverses the use of italics versus upright in Gesner).

⁴⁸ Worth noting is that in the prospectus to the *Thesaurus Linguae Latinae*, circulated *ca.*1900, a nineteenth-century edition of Forcellini (that of Vincenzo De Vit) is said to fall short in part because of the typography's failure to make sufficiently clear 'what Varro or Pliny says, and what Forcellini' ('Erster Thesaurus-Prospekt', repr. Krömer, ed., *Wie die Blätter* [n. 5, above] 193-94).

The embrace of this distinction is important. It is a marked visual acknowledgment of the dictionary-maker's analytical contribution to the lexicographical process, a step away from the Stephanian compilatory stance, in which the dictionary-maker claimed to collect and arrange only. It engineers a 'change in the structure of attention', to borrow Gianna Pomata's phrase, in which readers of the lexicon are presented with two streams of lexicographical output.⁴⁹ And to the extent that it highlights anew the lexicographer's presence, it also circumscribes it and establishes it as of a different, immiscible order from the raw material from which it is drawn. The lexicographer's capacity for contribution was recognized, but at the same time it was ordered, marked off, cordoned in. In typographical terms, that cordon was easily accomplished. In practice, it would prove far more difficult to manage.

2. Just decades after Gesner's death, the great Leiden classicist David Ruhnken (1723-98) would take stock of the Göttingen professor's effort with all the derision of a new age for the foibles of old:

The authors of lexicons have in no area less satisfied experts than in separating the meanings of polysemes [πολυσήματων – words with multiple significations] and putting them in order. Gesner [...] thinking it enough to have mentioned one sense or another, immediately pours out the examples with no discrimination, as if into a sack, delegating to the reader the problem of separating this hodgepodge. Thus that which is easiest, he takes to be done by him; that which is more difficult he leaves to others.⁵⁰

We can read a new paradigm clearly in Ruhnken's dismissal: no longer would it be enough for the lexicographer to boast of collecting, emending, arraying, and educating. Stephanus had depicted the labours of collection; Gesner bemoaned hours spent tracking down and verifying the sense of individual citations. Now hours would go into interrogating the citations together, 'separating' their meanings, 'putting them in order' – that is, teasing out conclusions about the relations between them. The new breed of lexicographer highlighted not just his collection of the 'good fruit', but also his ability to analyse it. The locus of what was truly difficult – and therefore valuable – lexicographically had changed for good.

How did things get to this point? We can trace the process in the pages of two Latin lexica released in the latter half of the eighteenth century. The first was the work of Aegidius Forcellini (1688-1768), a Paduan seminarian already three decades into his project when Gesner's *Novus Thesaurus* appeared.⁵¹ Where his Göttingen contemporary had refurbished an old edifice, Forcellini sought to build anew. Like Stephanus before him, he started from an encounter with the Calepinus, which he spent four years editing, finding enough in need of alteration to justify a new lexicon.⁵² Beginning work in 1718, he showed the Stephanian

⁴⁹ Pomata, 'Observation rising' (n. 47, above) 57.

⁵⁰ D. Ruhnken, 'Davidis Ruhnkenii Praefatio ad Schelleri Lexicon', in *I. J. G. Schelleri Lexicon Latino-Belgicum Auctorum Classicorum* (Leiden 1799) iv.

⁵¹ The timeline for the work is given at A. Forcellini, 'IX. Cal. Mart. MDCCLIII Aegidius Forcellinus...', in *Totius Latinitatis Lexicon* (Padua 1771) xlvi. Forcellini began in 1718, spending three and a half years on the letter 'A'. Fluctuations in his duties in the following decades affected the pace of the work, which he did not finish until 1753. Work then proceeded on a transcription, which was completed in 1761. The lexicon did not see print until 1771, three years after Forcellini's death.

⁵² Forcellini, 'IX. Cal. Mart.', xlvi.

eye for abundance and critical accuracy: the ‘first concern’, he wrote, was ‘diligently to take down all the Latin words’. He would not simply use the lists of others, and so worked his way attentively through those ‘not few’ authors for whom *indices verborum* were lacking, moving on to the ancient grammarians and six or seven collections of inscriptions, and even ancient coins, from which he plucked new material.⁵³ Assembling the lexicon, he imposed a steadfast prohibition on quoting any passage that he had not seen with his own eyes in its original context, ‘preferring to omit a certain example, even if it suited very well a particular thing, than to offer up uncertainties as if they were certain’.⁵⁴

Although Forcellini’s collection was new, his aim was not. His address to the Paduan seminarians ‘eager for gaining an intimacy with Latin’, and his identification of ‘two kinds of students who have need of this work, both those who wish to understand Latin, and those who wish to write in Latin’, remain squarely pedagogical.⁵⁵ In its focus specifically on linguistic training, his aim is probably closer even to Stephanus than to Gesner. But he did do something that Stephanus had not. He noted explicitly his method of handling the relationship *between* senses of a given word, writing:

I have generally always taken care that in the first place I might indicate the sense that is fundamental to each word when taken literally (*proprie accepto*): for which thing the derivation helps a great deal, when it is clear and convenient: next I have added figurative meanings both of prose and verse.⁵⁶

The acknowledgment did not correspond to a revolution in practice (Stephanus, as we noted above, had tacitly followed something like this ordering principle), nor can we say that it originated with Forcellini (Gesner, at the end of his preface in 1749, seems to try a similar gesture).⁵⁷ But it does tell us something: by the eighteenth century, at least, dictionary-makers felt compelled to articulate a certain theory for how they arranged the senses of a lexeme. The lexicographer could no longer gloss over his responsibility in this arena; the spotlight had begun to turn onto issues of semantic handling.

The *novus ordo* comes into focus with our next lexicon, that of a Silesian schoolmaster named Immanuel Johann Gerhard Scheller (1735-1803), whose *Ausführliches und möglichst vollständiges lateinisch-deutsches Lexicon* occasioned the reflections of Ruhnken above.⁵⁸

⁵³ The details of methodology are given in A. Forcellini, ‘Clericis Seminarii Patavini Latinae consuetudinis adsequendae cupidus’, in *Totius Latinitatis Lexicon* (Padua 1771) xlv.

⁵⁴ Forcellini, ‘Clericis Seminarii’, xlv.

⁵⁵ See the title of Forcellini’s prefatory epistle in n. 53, above. The identification of the audience for whom the work was intended is at Forcellini, ‘Clericis Seminarii’, xlv: *Cum enim duo sint studiosorum genera, qui hoc opera indigent, et qui Latin intelligere, et qui Latine scribere volunt.*

⁵⁶ Forcellini, ‘Clericis Seminarii’, xlv: *Ego id fere semper servavi, ut primo loco indicarem, quae sententia cuique vocabulo proprie accepto subesset: cui rei maxime servit notatio, cum aperta et conveniens est: deinde figuratas significationes subjeci, tum solutae, tum ligatae orationis.*

⁵⁷ Gesner, ‘Praefatio’, fol. e^v (17): ‘I held to this method: that, as much as was possible, I might establish some general, certainly primary sense of the words, on which the others depend or are derived...’.

⁵⁸ Ruhnken’s remarks were prefatory to a Dutch translation of the Scheller lexicon, (n. 50, above).

Introducing his first edition (1783), Scheller struck an urgent theme. The ‘chief difficulty’ involved in the making of a lexicon, he wrote:

is that we do not understand correctly – that is, in their actual and true sense – innumerable words, even in some cases [ones that are] very known and familiar. That is, generally we cannot say: *this word means this, it does not mean this*. I have particularly in the editing of this dictionary, sadly, all too often grasped this (although other lexica and interpreters have been silent about it), and have even here and there marked it candidly, and hence, as an honest man, often have spoken with uncertainty.⁵⁹

Semantic doubt was in itself nothing new. Stephanus, reluctant to implement his own ‘force and ingenuity’ on the uncertain territory of sense, had professed to solve the problem by remaining a collector, importing authoritative interpretations or leaving out definitions altogether. But here we encounter firm contrast, for Scheller is stridently critical of received authorities. It would not do, he wrote, to ‘follow blindly the authority of the ancient Grammarians and new interpreters, as famous as they may be (for they also make missteps), but purely the traces of the truth, which alone must enlighten us’.⁶⁰ That truth – which ‘although it often lies hidden somewhat deep, is not always unfathomable’ – was the lexicographer’s quarry:

Not on account of this does a word have a meaning, not on account of this has a passage of the ancients this or that sense: because Donatus, Nonius, Servius, Festus, Scaliger, Salmasius, Gronovius, Gesner, *etc.*, has said it – but because the language subjected to careful independent study, together with thoroughly contemplated context, history, geography, *etc.*, demands it. Certainly it is more tedious to mine the silver itself, to purify it, etc, than to get the gold out of the father’s chest; certainly it is more trying to pluck the apple oneself from the peak of the tree, than to be given it by mother: certainly it is more trying to dig oneself in the language and among the ancients [...] than to use the spadework of others. But there is more security to be had in the first case.⁶¹

In the days since Stephanus, the old compilatory solution for semantic uncertainty had crumbled. Compositional patterning, an end to which compilation was so well suited, was devalued; the old authorities, whose words had once provided the substance to be gathered, looked increasingly suspicious.

⁵⁹ I. J. G. Scheller, ‘Vorrede zur ersten Auflage’ (1783), repr. in *Ausführliches und möglichst vollständiges lateinisch-deutsches Lexicon*, 3rd edn (Leipzig 1804) v-vi. The edition of 1804, from which I cite the words of Scheller’s prefaces, is misnumbered, moving directly from page number xiiii to xvii. Rather than offer a correction in each case, I cite the pagination as given.

⁶⁰ Scheller, ‘Vorrede zur ersten Auflage’ (repr. 1804) xvii. This is not to say that Scheller denied consulting other authorities: his tack was rather, he said, to go through them after he made his collection, ‘walk[ing] through their ranks with cold blood so to speak, searchingly, something like a cautious buyer at fair-time going through the stalls – in order to see left and right what they have (that is what they *present*) in the way of wares, and to examine it, and after due examination make use of it’ (Scheller, ‘Vorrede zur ersten Auflage’ [repr. 1804] xviii).

⁶¹ Scheller, ‘Vorrede zur ersten Auflage’ (repr. 1804) xvii–xviii.

A space, meanwhile, had been carved out for the lexicographer's analytical input and his semantic theory had become an ever more explicit part of his programme. Scheller articulated a lexicographical agenda that fitted these developments. The way to deal with uncertainty was to have the newly assertive lexicographer put his mind to work – his would be the problem of fathoming semantic truth. Lexicographical efforts would no longer culminate in emendation and compilation; the value-added was to consist instead in analysing, foraging in the sources for the 'actual and true sense' *behind* the words. The solution had parallels in contemporary textual criticism. New Testament scholars earlier in the century had begun to advocate a turn away from the *textus receptus* and towards the reconstitution of the scriptures based on a systematic survey of the manuscript tradition. By the last decades of the century, classical scholars were following their lead, recognizing in theory, if not always in practice, the importance of reaching *behind* a text's readings, even those traditionally accepted as unproblematic, and establishing them afresh through a consideration of the manuscript history.⁶² The words of the classical authors, just like their meanings, were to be rigorously assembled, not passively received.

The new attitude had effects on the page. In Scheller's scheme, the continuum from literal to figurative was no longer simply an ordering principle – it was part of the imperative for semantic elucidation. The concern was to show not just where senses stood literally or figuratively, but *how* one sense arose from the other. Scheller described his efforts:

The definitions are arranged (at least according to my understanding) as exactly as possible – that is, in such a way that the reader sees how one has arisen from the other, or may have arisen. This has delayed me the most, since – believe me – with this ordered arrangement alone I often spent six to eight hours on a single word before I came to a decision.⁶³

The time made a difference. Figures 4 and 5 display, respectively, a summary of *arena* as presented by Forcellini, and the full article for the same lemma given by Scheller in his third edition (1804). We see that Forcellini has built many shades of meaning into his disposition, but that it has a winding quality. It is not clear how plural usages, or the use of sand in buildings, or prefixed aspiration, for instance, fit into the semantic progression. Scheller, by contrast, brings us along in uninterrupted succession from (1) 'der Sand' (sand) to its extension (2) 'ein sandiger Ort' (a sandy place), to specifically (3) 'das Ufer des Meeres' (the seashore), because – after all – it is full of sand ('weil es voller Sand ist'). From there, a bit further: Scheller reasons that 'the place in the Amphitheatre upon which the gladiators fought, was covered with sand, so that the blood might flow hither', and so we get another sense (4) 'dieser Kampfplatz oder das Amphitheater' (this area for fighting or the very amphitheatre). And finally, outward from there: *arena* can stand for the 'fighting itself' and hence any centre for fighting, or place where man fights or contends ('jeder Kampfplatz oder Ort, wo man ficht'). This might include the theatre of war, or even one's professional field – Pliny's *in arena mea* is taken to mean 'in my profession, job, namely as a lawyer'.

A clear signature of Scheller's emphasis on exposing the progression in senses is the mirroring of language from one heading or gloss to the next:

⁶² S. Timpanaro, *The genesis of Lachmann's method*, ed. and trans. G. W. Most (Chicago 2005) 58-74.

⁶³ Scheller, 'Vorrede zur ersten Auflage' (repr. 1804) xxi.

[1] **der Sand** [...] [2] **Sand**, *i.e.*, ein **sandiger** Ort [...] [3] das Ufer des Meeres, weil es voller **Sand** ist [...] Weil der Platz im Amphitheater [...] mit **sand** bedeckt war [...] daher: [4] dieser Kampfplatz oder das Amphitheater [...] [5] jeder Kampfplatz oder Ort, wo man ficht.⁶⁴

Figure 4: Outline of *Arena*, as presented in A. Forcellini, *Totius Latinitatis Lexicon* (Padua 1771).

Arena

¶ Very fine dust: derived from *arere*, ‘to be dry’, since it lacks all liquid, and moisture, whence also it takes up a great deal of water. There are three kinds, as Pliny and Vitruvius indicate: *fossicitia*, *fluviatilis*, and *marina*.

¶ Used in the plural: Forcellini has brought together these examples ‘for this reason, since Caesar, as reported in Gellius, denied that it is used in the plural’.

¶ *Arenae mandare semina* (to commit seeds to sand) is a proverb meaning to lose one’s time and effort.

¶ *Arena* used for ‘a sandy place’.

¶ On the use of sand in buildings, Pliny and Vitruvius note many things.

¶ It is often given for ‘the shore’ or ‘harbour’.

¶ By metonymy it is used in place of ‘amphitheatre’ or ‘circus’, since they are usually strewn with dust, lest those who are training or fighting slip.

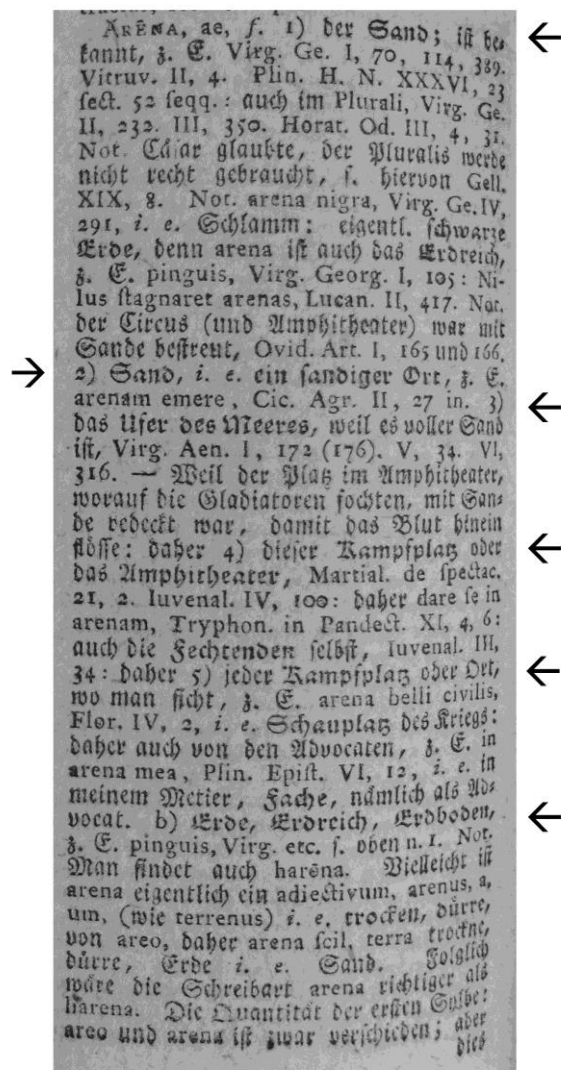
¶ It can denote those who are engaged in the theatre/arena.

¶ Hence, the word is used for whatever other place in which there is fighting, or in whatever kind of activity at which one plays. So, *e.g.*, Pliny: ‘especially in my arena, that is, among the Centumvirs’.

¶ It is also written *harena*, with an aspirate.

⁶⁴ See also *concidere*, where compare the literal ‘fallen, einfallen, zu Boden fallen’ with the figurative explanation ‘daher tropisch einfallen, zusammen fallen i.e. zusammen schrumpfen...’ and onwards through many of the subsequent figurative senses. See [1] fallen *i.e.* nachlassen...; [2] fallen, von Getödteten, bleiben, umkommen, sterben...; [3] fallen, zu Grunde gehen, unglücklich sein’.

Figure 5: *Arena* as presented in I. J. G. Scheller, *Ausführliches und möglichst vollständiges lateinisch-deutsches Lexicon*, 3rd ed. (Leipzig 1804). The image below shows the first portion of the article (a few further citations follow after a page-break. Arrows indicate different headings in the disposition. With permission of Princeton University Library.



We can see, too, that he has introduced another level of subordination (lettered, in addition to numerical) to his dispositional apparatus (see [b] in *arena*, the use of the word not in the sense of ‘sand’ or ‘dust’, but ‘earth’, properly) – an important move, offering a further dimension in which to compare sense relationships.

What we have, in sum, is evidence of a new archetype, present at the turn of the nineteenth century, for whom Gesner and Forcellini had helped to pave the way. The Schellerian lexicographer was an excavator of semantic truths, a miner of meaning. He

was wary of tradition, wracked not just by the rigors of collection and emendation, but by the difficulties of disposing senses. A schoolmaster, he had not renounced his pedagogical role (his title [see Figure 1] maintained the promise of Übung – *practice* – in the Latin language), but it was clear that he was not content simply to lay in supplies as a support for the stylings of his readers. His role was not to compile but to create, not simply to emend or organize but to analyse, not to accept the interpretations of others but to purify semantic theses from lexicographic ore. This was the value he proffered to his readers. His role was generative. His ambitions were growing. So too, as we will see, were his liabilities.

III

1. Scheller completed the preface to his final edition of the *Ausführliches Lexicon* in March 1803. He was not likely to live to revise the work again, he wrote. For any putative successor, seeing a future edition to press, he wished one thing – that he ‘not be ashamed of the necessary caution, and of an honourable timidity, which does not assert everything with mathematical certainty, but often leaves room for doubt’. With proper care, one could avoid ‘tak[ing] back something in shame, after some time, which had been boldly decided and presented as beyond doubt’.⁶⁵ Within months Scheller was dead. His lexicographic work would have a remarkably long afterlife, which we will not follow here.⁶⁶ Our focus will instead rest on this final, printed wish for a future editor.

Caution and uncertainty had been recurring themes in the presentation of the *Ausführliches Lexicon*. In the first edition of 1783, Scheller stressed that he ‘often in the definitions of the words and in the explanations of passages expressed timidity and uncertainty (*Furchtsamkeit und Ungewißheit*)’.⁶⁷ This practice apparently drew notice, occasioning a bitter footnote to his preface of 1804:

It has been a cause of wonder to some that in the dictionary I so often with uncertainty state my opinion, *etc.*, and a famous teacher at a University – as has been reported to me by ear-witnesses – has expressed his wonderment about it, publicly in lecture to the auditors, whether perhaps because he took it for an affectation of mine, or so that the auditors could see that he knew with certainty,

⁶⁵ I. J. G. Scheller, ‘Vorrede zur dritten Auflage’, in *Ausführliches und möglichst vollständiges lateinisch-deutsches Lexicon*, 3rd edn (Leipzig 1804) xxxvii.

⁶⁶ In the preface to his second edition of the *Ausführliches Lexicon*, Scheller promised, for the benefit of youths with little to spend on books, to prepare a cheap extract (see I. J. G. Scheller, ‘Vorrede zur zweiten Auflage’ [1788], repr. in *Ausführliches und möglichst vollständiges lateinisch-deutsches Lexicon*, 3rd edn [Leipzig 1804] xxxi). It appeared under the title *Lateinisch-deutsches und deutsch-lateinisches Handlexicon vornehmlich für Schulen*, of which the Latin-German component was published first in 1792. A second edition appeared in 1796, and the work continued to be revised after his death, remaining in use, in various subsequent releases, throughout the twentieth century. For far greater detail, see: D. Krömer, ‘Grammatik contra Lexikon: *rerum potiri*’, *Gymnasium* 85 (1978) 239-58 (246-48).

⁶⁷ Scheller, ‘Vorrede zur ersten Auflage’ (repr. 1804) xxii.

and could say, that which I assert with uncertainty. I do not begrudge him this haughty preference, but cannot be so brazen.⁶⁸

Elements of the ‘uncertainty’ posture belonged no doubt to the rhetorical (and practical) position of a schoolmaster in faraway Brieg (modern Brzeg in Poland), bitterly acknowledging the cushioned complacency (and ready resources) of the distant ‘authorities’ in places like Leipzig, Berlin, and Göttingen.⁶⁹ But it was also an inescapable corollary of his project, a logical flipside of the Schellerian lexicographer’s sceptical agenda. There were advantages to undermining the old compilatory props, the revered scholiasts and interpreters: the dross of faulty interpretations and false certainty was dissolved from the classical texts and fresh insights put within reach. But new problems also followed. Lexicographers, even Schellerian lexicographers, are, after all, fallible and their search for the ‘traces of truth’ is subject to error.

Of such error, Scheller was only too aware. The prefatory material to his lexica is full of relevant diagnoses: scholars who are slaves to the opinions of the majority; ill-read critics emending texts on the basis of unsupported insight and feeling (*Einsicht und Gefühl*); editors by turns accepting senseless readings from the manuscripts and imagining readings for which the manuscripts offered no support.⁷⁰ All this increasingly distorted the texts themselves. ‘Many of the ancients, if they were to come back’, he wrote, ‘would now occasionally wonder over their own style, and would – in part – not recognize it’.⁷¹ As if to underscore their flimsiness, editors’ conclusions were utterly inconsistent. For centuries, words would wander in and out of editions as one critic overturned another, making the lexicographer’s task as vexing as the geographer’s – no sooner was a border drawn, a word established, than it disappeared again.⁷²

Here was evidence that modern scholars were, in some respects at least, little better than the errant scholiasts and commentators of old. How then could their lexicographical pronouncements be preferred? Scheller prescribed certain qualities that could minimize unreliability: a ‘philosophical’ knowledge of the language gained through wide reading and reflection; an independence from grammatical dogmas and from the judgments of other interpreters; a reserve in judging what words belonged where (certain periods, genres, *etc.*).⁷³ For the problem of differing readings, his ideal solution (which he never claimed to implement) was something suspiciously like the old compilatory manoeuvre of deference to the reader. In a truly complete lexicon, he wrote, the readings of *all* editions would be included, preferably with indication as to their manuscript support, so that ‘one could decide if this one or that one has merit’; as it was, he drew his citations from ‘good

⁶⁸ Scheller, ‘Vorrede zur dritten Auflage’ (1804) xxxv–xxxvi.

⁶⁹ Scheller alludes to his position on the periphery on more than one occasion. See especially: Scheller, ‘Vorrede zur zweiten Auflage’ (repr. 1804) xxxi, where he mentions his inability to consult the many books available in major cities, and his distance from his printer in Leipzig.

⁷⁰ See, *e.g.*, Scheller, ‘Vorrede zur ersten Auflage’ (repr. 1804) viii (for majority influence), vii (*Einsicht und Gefühl*), x (on readings).

⁷¹ Scheller, ‘Vorrede zur ersten Auflage’ (repr. 1804) x.

⁷² Scheller, ‘Vorrede zur ersten Auflage’ (repr. 1804) xi.

⁷³ Scheller, ‘Vorrede zur ersten Auflage’ (repr. 1804) xi–xviii.

editions', which he listed.⁷⁴ But none of this was, in the end, surety for a lexicographer's pronouncement: always and chiefly, uncertainty and restraint was in order. 'It is always better in such things', remarked Scheller of text-critical decisions, 'to be somewhat too timid than somewhat too bold'.⁷⁵

2. That this timid equilibrium was not easy to maintain is amply demonstrated by the case of Wilhelm Freund, who delivered the first instalment of his *Wörterbuch der lateinischen Sprache* in 1834. Freund felt himself to be of a different era from his predecessors. In the half-century and more since Forcellini, Gesner, and Scheller, he wrote, 'classical philology has experienced so thorough a transformation that for precisely this reason the enterprise of bringing out a dictionary of the Latin language that better corresponds to the altered condition of the philology needs no excuse'.⁷⁶ He began by wiping away the pedagogical sensibility; the point of Freund's lexicon would not be to take others by the hand. Instead, sharing in a trend already ascendant in contemporary Greek lexicography, the goal would be generating new knowledge – specifically historical knowledge – about language.⁷⁷ 'Latin lexicography has for its object the history of every single word of the Latin language', wrote Freund:

It is, therefore, a purely objective discipline (*eine rein objective Wissenschaft*); and even if through it the understanding of Latin writings is furthered, it regards this not

⁷⁴ For the handling of different readings, in principle, see Scheller, 'Vorrede zur zweiten Auflage' (repr. 1804) xxvii; also 'Vorrede zur ersten Auflage' (repr. 1804) x–xi. See 'Vorrede zur ersten Auflage' (repr. 1804), xxi for the list of 'good editions' from which Scheller, in practice, drew his passages in 1783. In the third edition he has had more time to compare different readings (Scheller, 'Vorrede zur dritten Auflage' [1804] xxxiii).

⁷⁵ Scheller, 'Vorrede zur ersten Auflage' (repr. 1804) xi. The remark pertains to Christian Gottlob Heyne's edition of Virgil, in which Scheller marvels that Heyne has restrained himself even from taking up readings for which there was sound evidence.

⁷⁶ W. Freund, 'Vorrede', in *Wörterbuch der lateinischen Sprache nach historisch-genetischen Principien, mit steter Berücksichtigung der Grammatik, Synonymik und Alterthumskunde*, vol. 1 (Leipzig 1834) iii.

⁷⁷ A key influence here is that of the Greek lexicographer Franz Passow (1786-1833), who was notably credited by Henry George Liddell and Robert Scott with providing the basis for their Greek-English lexicon of 1843 (still much beloved and widely used in its later editions), both in terms of material and method: 'viz. to make each Article a History of the usage of the word referred to'. See H. G. Liddell and R. Scott, 'Preface', (1843), repr. in *A Greek-English lexicon, based on the German work of Francis Passow*, ed. H. Drisler (New York 1853) xx. Certainly no later than the 1820s Passow was already articulating the precise principle that 'the dictionary should thus outline, so to speak, the life-history of every single word (*die Lebensgeschichte jedes einzelnen Wortes*) in a conveniently ordered overview'. See F. Passow, 'Vorrede', in *Johann Gottlob Schneiders Handwörterbuch der griechischen Sprache*, vol. 1 (Leipzig 1826) xvi–xvii. The echo in Freund's contention that 'die lateinische Lexikographie hat zu ihrem Objecte die Geschichte eines jeden einzelnen Wortes der lateinischen Sprache' (translated in the next sentence of this paper, citation n. 78, below) is obvious. A full explanatory accounting for the nineteenth-century turn to a historical agenda in lexicography has not to my knowledge been pursued. Scheller's determination to show how a word's senses evolved seems to deserve a place in the genealogy.

as its end, but is, like every objective discipline (*jede objective Wissenschaft*) its own end.⁷⁸

This was the Schellerian inclination toward research and sense development extended and enshrined as its own *raison d'être*. Each article in Freund's scheme was to be a separate 'monograph', an independent piece of scholarship whose historical narrative would consist in 'unfolding [a word's] outer nature, that is, its form, gender, syntactical connections, and so on; and with its inner nature or meaning'.⁷⁹ To this end, Freund proposed an extensive analytical programme. 'Grammatical' and 'etymological' examinations would establish a word's constructions, orthography, derivation; 'exegetical' work would examine its meanings and their development. Synonyms would be examined for better semantic perspective. Other queries would be 'chronological' (to what period did a word belong?); 'rhetorical' (in what genres was a word found?); and 'statistical' (which words are used only once, and which several times?).⁸⁰

These last three elements are of particular interest. Determinations of words' frequencies, eras, and generic affiliations had made Scheller explicitly leery. In judgments of what was, for example, 'obsolete' and 'poetic', he had made a point of counselling circumspection. Such classifications, he believed, were often normative, and the necessary evidence could rarely be brought to hand. A lexicographer would rule a particular word to have been abandoned; Scheller would find it consistently in use.⁸¹ Freund had not forgotten the need for caution: 'It is plain', he wrote, 'that, lacking a Latin Concordance, information about the frequent or seldom occurrence of a word or a meaning cannot be expressed with fixed numbers'.⁸² He conceded that statistical judgments could 'only by continued improvement and correction' attain to certainty.⁸³ And yet he believed that he could support qualitative assessments about what words were 'frequent', 'very frequent', 'rare', and so forth, alongside *inter alia* more precise identifications of *hapax eirēmēna* (words used only once).⁸⁴

For Freund – a lone man with a lone man's resources at his disposal – such ambitions ultimately proved too much of a leap, at least in the arena of learned opinion. His method, he said, was to prepare from his own research special lexica of ante-classical Latinity and to flesh out the rest with the yield of his own 'many years' reading' and the contents of the lexica already available.⁸⁵ This procedure was unequal on its face to making the kinds of statistical determinations he had in mind. He was criticized for importing errors from

⁷⁸ Freund, 'Vorrede' (1834) iv.

⁷⁹ Freund, 'Vorrede' (1834) iv, xi; the mentions of a 'monograph' are at xi and xxvi.

⁸⁰ Freund, 'Vorrede' (1834) iv-vi, xi-xxvi, for the categorization and explanation of these areas of inquiry.

⁸¹ Scheller, 'Vorrede zur ersten Auflage' (repr. 1804) xiii-xvii.

⁸² Freund, 'Vorrede' (1834) xxv.

⁸³ Freund, 'Vorrede' (1834) xxvi.

⁸⁴ Freund, 'Vorrede' (1834) xxv-xxvi.

⁸⁵ Freund, 'Vorrede' (1834) xxxii-xxxiv.

other lexicographers, for inaccurate citation, sloppiness, and unsupported conclusions.⁸⁶ ‘If a word [in Freund] is marked “rare”, it is probably very common [...] if a single example is cited, and no note of rarity affixed, the word may very likely be ἄπαξ εἰρημένον’, wrote the English scholar J. E. B. Mayor.⁸⁷ ‘[Freund] did not come up to the ideal of himself or his age’, offered the Harvard classicist George Martin Lane, citing the work’s uneven quality and its apparent failure, in certain instances, to return to the classical authorities.⁸⁸

But the problem was not particular to Freund. In truth, by the mid-nineteenth century, the lexicographer’s aims had soundly outstripped his old means. Practice and theory were once again, as in the time of Stephanus, at a disjuncture, although this time the latter was far ahead.⁸⁹ The hunger for new sorts of queries and new levels of detail on which to build word-histories demanded analysis and evidence that a single mind, a single pair of hands could not deliver. Lane put it well in 1859:

The minute criticism to which the ancient authors had been subjected, the great range of reading required, the necessary concentration and condensation of the vast material, made the [lexicographical] task too great for the powers of one man.⁹⁰

It is no coincidence that Europe in the middle decades of the nineteenth century had seen more than one Latin dictionary go unfinished, as individual authors found themselves unequal to meeting disciplinary demands.⁹¹ Collaboration was the way forward. Three centuries after Stephanus, the stage for a new *Thesaurus Linguae Latinae* was set.

3. Loud applause greeted Karl Halm in Vienna in September 1858, as he finished addressing the eighteenth annual Assembly of German Philologists. At the gathering’s opening meeting, Halm had a prime speaking slot, immediately after the president of the Assembly, and he took full advantage. The subject of his talk was a plan for a new lexicon, a ‘*Thesaurus Linguae Latinae* prepared according to the current demands of *Wissenschaft*’, that would contain ‘the most complete possible history’ of each word

⁸⁶ Some criticisms are surveyed in K. E. Georges, ‘Jahresbericht über lateinische Lexikographie für 1879 und 1880’, in *Jahresbericht über die Fortschritte der classischen Alterthumswissenschaft* 23 (1882) 391-436 (393-94).

⁸⁷ J. E. B. Mayor, ‘The new *Thesaurus Linguae Latinae*’, *Classical Review* 8.4 (April 1894) 133-34 (134).

⁸⁸ G. M. Lane, ‘Latin lexicography’, in *Bibliotheca sacra and biblical repository*, ed. E. A. Park and S. H. Taylor 16 (1859) 139-67 (140-43).

⁸⁹ Lane, ‘Latin lexicography’ 140: ‘The Preface, in which [Freund] lays down his principles, is a masterly production [...] It was soon evident, however, that Freund’s theory was in advance of his practice.’

⁹⁰ Lane, ‘Latin lexicography’ 140.

⁹¹ C. A. Stray, ‘Lex wrecks: a tale of two Latin dictionaries’, *Dictionaries: Journal of the Dictionary Society of North America* 32 (2011) 66-81, examines the failed nineteenth-century attempts of Henry Nettleship and Thomas Hewitt Key to write dictionaries, largely unaided, from the Latin source material.

treated.⁹² The lexicon would seek to exploit as fully as possible the oldest bits of the language, providing in addition a critical handling of the ‘best writers’ and a ‘systematic, not eclectic, exploration’ of the rest.⁹³ In keeping with the lessons of Freund, the project was to be a joint effort, built on the toils of several scholars undertaking special lexicons. But the scheme never bore fruit.⁹⁴ It would fall to Eduard Wölfflin, Halm’s successor at the University of Munich, to resume the push, establishing in 1883 a journal whose title embodied its intent: *Archiv für lateinische Lexikographie... als Vorarbeit zu einem Thesaurus Linguae Latinae*.⁹⁵

Wölfflin, like Freund before him, saw lexicography as a discipline, a *Wissenschaft*, unto itself. Its goal, as articulated in the *Thesaurus* plan eventually approved by the principal German academies, was to make clear in every individual word ‘the history of both the written and vulgar language through all the centuries in which Latin was a living language’. Beyond that, the history of the language reflected the spirit of a people, a civilization. Thus lexicography’s task was not just historical, but ‘psychological-historical’. ‘The word’, read the plan:

is the mirror of thought. Thus the life-history of individual words – their origin, connection, reproduction, alteration in form and meaning, their mutual substitution and replacement, and finally their death – represents in thousandfold refraction the history of the national feeling and thinking; and the two most important changes in the Roman culture – first by Greek, then by Christian influence – are reflected no less concretely in the Latin lexicon than in the Latin literature. The words have no separate existence, but they live and interweave in the soul of the people from which they are born.⁹⁶

In order to bring these life-histories to the fore, Wölfflin once again, like Freund, directly emphasized the importance of a statistical component to lexicography. Unlike Freund, he made it his business to secure the necessary evidentiary foundation. If certain elements of a word’s story were going to be told – its affiliation with a particular era, for instance –

⁹² K. Halm, ‘Über die Begründung eines *Thesaurus Linguae Latinae*’, in *Verhandlungen der achtzehnten Versammlung Deutscher Philologen, Schulmänner und Orientalisten in Wien* (Vienna 1859) 6 and 9, with the applause noted at 14. (The address is reprinted in Krömer, ed., *Wie die Blätter* [n. 5, above] 113-21).

⁹³ Halm, ‘Über die Begründung’ (n. 92, above) 12 (repr. Krömer, ed., *Wie die Blätter*, 119).

⁹⁴ On the demise of the 1858 plan and its aftermath, see Wölfflin, ‘Vorwort’ (n. 5, above) 2-3, and M. Hertz, ‘Rede vor der Philologen-Versammlung in Görlitz’, *Verhandlungen der 40. Versammlung Deutscher Philologen und Schulmänner in Görlitz* (Leipzig 1890) 9–10 (repr. Krömer, ed., *Wie die Blätter* 123-24). See also D. Krömer, ‘Ein schwieriges Jahrhundert’, in Krömer, ed. *Wie die Blätter*, 14, especially the reference at 14, n. 8 to published correspondence between Halm and Ritschl concerning the plan.

⁹⁵ ‘Archive for Latin Lexicography, as preparation for a *Thesaurus Linguae Latinae*’. The first volume of the *Archiv* appeared in 1884, with an editor’s note dated November 27, 1883. It would run to 1908, its title modified from *als Vorarbeit zu einem Thesaurus Linguae Latinae* to *als Ergänzung zu dem Thesaurus Linguae Latinae*, (‘as supplement to the *Thesaurus Linguae Latinae*’).

⁹⁶ ‘Plan zur Begründung’, (n.5 above), 622 (repr. Krömer, ed. *Wie die Blätter* 188).

then ‘absolute completeness of the collections must be presumed’.⁹⁷ Wölfflin intended to make it possible to highlight ‘striking differences in the frequency of use, which lexicography has not yet observed’, and even when and where certain words were *not* present in the record – in what genres and times and authors a particular word might have suspiciously subsided.⁹⁸ While ambitious, Halm’s plan had not been so pointed about the statistical importance of ensuring utterly complete evidence, nor had it stressed this ‘so-called negative observation’, which Wölfflin tagged as a new feature. ‘It was not back then customary’, Wölfflin wrote of the 1858 scheme, ‘to observe the missing or conspicuously receding words, just like the ones appearing in their stead’.⁹⁹

By 1893, a plan had been outlined. The task was, in essence, to create a complete index of every instance of every word for all works of archaic and golden age Latin and on into the second century CE. Later works would be excerpted.¹⁰⁰ In physical terms, the index would take the form of an archive of small slips of paper (*Zettel*), each accounting for a single instance of a single word. A lexicographer looking to write an article for a particular word could then call before him something close to a complete record of its attestations, making possible a nuanced and thorough analysis of its history and characteristics. The whole business was to take twenty years – five for collecting the material and fifteen for writing the articles – and to be carried out as a joint enterprise of the five great German-speaking academies: Berlin, Göttingen, Leipzig, Munich, and Vienna.¹⁰¹ By 1899, things had progressed swiftly enough that the slips could be combined at Munich and the dictionary itself begun. The first fascicle (*a – absurdus*) appeared in 1900. Modern *Wissenschaft* would have its lexicon. The *Thesaurus Linguae Latinae* was underway.

4. ‘Ever less has the memory – even of the most widely read – proven itself sufficient for securing in detail an idea of form and construction’, announced the prospectus of the *Thesaurus* in 1900. ‘Ever more has it been evident how often a general feeling for speech and style alone mislead’.¹⁰² The admission would not have surprised Scheller, who had laid the responsibility for uncovering lexical truth at the scholar’s feet only while warning of his limitations: the boundaries within which a lexicographer could reliably work were narrow. But Freund had refused to accept these boundaries, and the *Thesaurus* was constructed to transcend them. The Schellerian lexicographer had been a single, bodied

⁹⁷ Wölfflin, ‘Vorwort’ (n. 5, above) 8.

⁹⁸ Wölfflin, ‘Vorwort’, 8. For further discussion of words’ absence see 4-5, 9.

⁹⁹ Wölfflin, ‘Vorwort’, 4. For another statement of the imperative for complete collections, and of the claim that earlier research had not given attention to the *absence* of particular words, see ‘Plan zur Begründung’, 622 (repr. Krömer, ed. *Wie die Blätter* 188).

¹⁰⁰ ‘Plan zur Begründung’, 623-24 (repr. Krömer, ed. *Wie die Blätter* 189); reference to the corresponding planning can be found in ‘Protokoll der Berliner Konferenz (1893)’, in Krömer, ed. *Wie die Blätter* 157, 159. For more precise information on what works from the later period have now received full coverage, see U. Keudel, *Praemonenda de rationibus et usu operis*, trans. J. Blundell (Leipzig 1990) 28, n. 1.

¹⁰¹ Wölfflin, ‘Plan zur Begründung’, 624 (repr. Krömer, ed. *Wie die Blätter* 190).

¹⁰² ‘Erster Thesaurus-Prospekt’, repr. Krömer, ed. *Wie die Blätter* 193.

individual – active and independent, but unreliable, sitting ever on the border of uncertainty. His successor was to be, in a certain sense, *disembodied*, and his contributions therefore larger and more lasting. Wölfflin wrote at the outset of the *Archiv* of hoping ‘to create something that would never be lost and could be of use for all later work’.¹⁰³

Disembodiment has an undesirably mystical flavour, but it suitably gathers the array of attempts by which the planning of the *Thesaurus* aimed, late in the nineteenth century, to neutralize the limits facing the scholar *qua* mortal, fallible individual. The conception of lexicography as a collaborative effort was itself framed in this mode. Wölfflin had lamented the legions of lexicographers who ‘have died over the task and their papers have gone to God knows where without scholarship benefiting from them’. The solution to the bounds of individual industry and lifespan was precisely, he wrote, to rest projects ‘on learned corporations, which are undying and whose archives can preserve all the work that is done’.¹⁰⁴ Likewise the *Thesaurus* itself – a truly ‘exhaustive and reliable’ lexicon – could, its prospectus suggested, be an antidote to the bounds of human cognition. It could counter flaws of memory and feeling, or, in textual criticism, help ‘firm knowledge’ to displace ‘subjective taste and wandering imagination’.¹⁰⁵ This, too, was a type of disembodiment: the transcendence of the humble equipment inside a scholar’s head.

The mechanism that underpinned such claims was *completeness*, the basing of the dictionary not just on a collection of *many* key authors or *many* key passages, but of *all the evidence* available. A new tool, distinct from mere Stephanian abundance, completeness had the ability – in theory at least – to eliminate judgment and decision from certain stages of lexicographical practice. At the initial level, the collection of the lexicographical material (*i.e.*, the instances of a word’s occurrence), the work’s reliability could no longer be undermined by tendentious rulings about which of a word’s appearances were ‘important’ or ‘significant’ enough to take into the slip-archive for later use: *everything* was to be taken, the evidence left undistorted for the eventual article author.¹⁰⁶ Beyond that, at the level of authorial composition, certain pronouncements hitherto difficult or unattainable, such as whether a word was a *hapax eirēmenon* (Freund’s stumbling block) or whether a word was lacking in a particular sector of the evidence-field (Wölfflin’s new *negative observation*) were reduced in the presence of

¹⁰³ Wölfflin, ‘Vorwort’ (n. 5, above) 6.

¹⁰⁴ Wölfflin, ‘Vorwort’, 6.

¹⁰⁵ ‘Erster Thesaurus-Prospekt’, repr. Krömer, ed. *Wie die Blätter*, 199. The latter statement about ‘firm knowledge’ belongs to the part of the prospectus penned by the publisher, Teubner.

¹⁰⁶ Wölfflin noted already in 1884 the problem with collecting evidence via excerption rather than through complete uptake: ‘the judgments even of thoroughly educated philologists will vary widely from each other in the selection of the linguistically noteworthy’, he wrote, and the development of new viewpoints could render important even what had seemed entirely insignificant (Wölfflin, ‘Vorwort’ 4). H. Diels, ‘Stellungnahme zum Memorial’ (1893) in Krömer, ed. *Wie die Blätter* 177-79 indicated the same issue in advocating for a fuller collection procedure: collectors could not be relied on to make judgments about what was, for example, ‘interesting or characteristic’ as they collected.

complete evidence to matters of counting and registration.¹⁰⁷ In the end, what the author *did* with the material, how he *analysed* an absence or a *hapax*, remained of course fraught with the same uncertainties. But by assuring that all the evidence was there, by avoiding the evils of what one *Thesaurus* planner termed a ‘subjectively coloured and incomplete, therefore unscientific (*unwissenschaftliches*) material’, the lexicon could at least delay the inevitable.¹⁰⁸

How then to describe the lexicographic archetype envisaged at the close of the nineteenth century? This dictionary-maker, whom we will call *Thesaurus*-1, has purged the last traces of pedagogy from his makeup; he knows only the investigative programme of the historical researcher. He does not work alone. The Herculean labours of the one yield to the collaborative labours of a corporation. His analytical apparatus is ambitious and precise. His modes of interrogation are many. He seeks to know not just what is there but what is missing, and if he does his job well he can reap insights that extend beyond words to the history of a civilization. In service of this agenda, he has a new resource: abundance of evidence has given way to designs on completeness. This serves as a means of *disembodiment*, freeing the lexicographer from some of the human liabilities that Scheller had brought to prominence, securing the assertion of what would before have been uncertain, and making his bold analytical programme – it was hoped – less subjective, more durable, even eternal.

IV

1. As elsewhere in this study, life on the ground at the *Thesaurus* did not measure up to its theoretical aspirations. Four years into his tenure as the *Thesaurus*’ first *Generalredaktor*, Friedrich Vollmer went before the Assembly of German Philologists and Schoolmen and said as much. He meant, he said, not to deal with ‘new or old thoughts and theories’ about lexicography, but with how things proceeded in practice.¹⁰⁹ What emerged was a vivid picture of just how bodied – how unreliable and limited – dictionary-making remained. True completeness had proved impossible to attain: even in the collection from literature prior to the second century, which had been slated for complete ‘slipping’ (*Verzettelung*), *lacunae* remained when work on articles began in 1899. The excerption of subsequent works, from the second to the seventh century, was, unsurprisingly, imperfect. Comparison of drafted *Thesaurus* articles to their counterparts in previous lexica consistently revealed important passages that had been missed.¹¹⁰

Collaboration meant many moving parts to manage, and they did not always work seamlessly together. If those charged with sorting the material had misfiled a word in the

¹⁰⁷ See n. 99, above. The indispensability of completeness to the ‘negative observation’ was a significant point in planning the extent of the collection operation. See, e.g., Mommsen’s remark in Hertz and Mommsen, ‘Gutachten’ (n. 5, above) 688 (repr. Krömer, ed. *Wie die Blätter* 142), and H. Diels, ‘Stellungnahme’, repr. Krömer, ed. *Wie die Blätter* 179.

¹⁰⁸ Diels ‘Stellungnahme’, repr. Krömer, ed. *Wie die Blätter* 177.

¹⁰⁹ Vollmer (1867-1923) was *Generalredaktor* from 1899-1905. See the list at D. Krömer and M. Fliieger, ed., *Thesaurus – Geschichten* (Leipzig 1996) 190. The quotation is from F. Vollmer, ‘Vom Thesaurus Linguae Latinae’, in *Neue Jahrbücher für das klassische Altertum* 13 (1904) 46-56 (46).

¹¹⁰ Vollmer, ‘Vom Thesaurus Linguae Latinae’, 47-48.

slip-archive, there appeared gaps in the evidence.¹¹¹ Even prior to reaching the archive material was to have been critically appraised, the manuscript readings distinguished from the conjectures, but not all those undertaking such appraisals understood precisely what was required, let alone achieved it. There was not the time to re-check each passage while writing the article itself. The solution could be ‘only subjective’ – an article author consulting the record only when something struck him as suspicious.¹¹²

Even with all the material gathered and verified, the extent and variety of the information, for all its advantages, made authorship in some ways a more uncertain proposition than ever. Vollmer asked the audience to imagine an author receiving a middle-sized article, about 700 citations on archival slips. Time and money were limited. In the space of only a few days he would be expected to hunt the word’s interpretation from Plautus right through late antiquity. He would need to move through all sorts of genres – from poetry to technical works – rarely with the help of adequate context, only with slips of paper before him. Often young article-authors would be encountering texts and authors of whom they had never heard. All of which was to say that ‘even with the greatest care, mistakes are inevitable’.¹¹³ The author remained, firmly, unreliable.

Vollmer’s solution, and the item that will round out our picture of *Thesaurus-1*, was a familiar one: let the material speak for itself. ‘It cannot be the purpose and aim of this work, to solve all the interpretive difficulties in Latin texts’, he said of the *Thesaurus*. ‘To bring together the stones so that others might build with them is its first purpose [...] the material is what is eternal – our opinions about it change and will change’.¹¹⁴ To this end, the article author in Vollmer’s era was charged with taciturnity, limiting his own words, communicating a lexical history ‘as much as possible only through a clear, neat arrangement of the citations’, that is, through the material itself.¹¹⁵ The tracing of the finest linguistic threads, the spinning of cultural histories from lemmatic entries – that business was simply not commensurate with the real-time pressures of lexicographic production.¹¹⁶ Furthermore, he said, to subject an article to very fine divisions was to move the lexicographer too much to the fore, compromising the ability of the reader to form his own judgments:

things belonging close together linguistically will be picked apart and downright hidden in different parts of a larger article according to [mere] accidents of grammatical construction or indeed stylistic caprice. Every artificial division of a larger article severely disturbs the user, who perhaps approaches the material with

¹¹¹ Vollmer, ‘Vom Thesaurus Linguae Latinae’, 50.

¹¹² Vollmer, ‘Vom Thesaurus Linguae Latinae’, 50.

¹¹³ Vollmer, ‘Vom Thesaurus Linguae Latinae’, 51.

¹¹⁴ Vollmer, ‘Vom Thesaurus Linguae Latinae’, 51-52.

¹¹⁵ ‘Erster Thesaurus-Prospekt’, repr. Krömer, ed. *Wie die Blätter* 195: ‘Des Bearbeiters Aufgabe ist es, auf Grund des ihm gelieferten Stoffes die Geschichte des Wortes zu schreiben...alles ohne viel eigene Worte, möglichst nur durch klare, übersichtliche Anordnung der Citate’.

¹¹⁶ Vollmer, ‘Vom Thesaurus Linguae Latinae’, 46-47.

an entirely different question, who perhaps wishes to make an entirely different cross-section than [the one] the article offers him.¹¹⁷

Here, after hundreds of years, after countless modifications, emerge once again the chief tenets of the Stephanian compilatory solution: the stifling of authorial pronouncement; the shifting of responsibility for analysis to the reader; the sense that the material itself, gathered together, could be privileged at the expense of even the most attentive interpreter. These were components of an archetype already in full flower centuries earlier, in a Parisian scholar-printer, who sat down to set out all the words suitable for speaking and writing.

2. But no longer did the solution sit quite as stably as in the sixteenth century. One way to model the problem is to tell the story as an evolving struggle with two components of error. On the one hand is what I will call negative error – an inability, either through lack of tools or an overly conservative methodology, to grasp necessary information or nuance. It can be read in many junctures of our narrative: the continuing emphasis on abundance, for instance, which drove Stephanus to augment his editions and Forcellini to peruse coins and inscriptions; the concern of Ruhnken that information about the different senses of the polyseme was being lost; the ever-more extensive gauntlet of queries to which words were subjected (Freund's 'grammatical' and 'statistical' and 'exegetical' elements; Wölfflin's 'negative observation'). On the other hand is positive error, which is precisely *over-reach*, *over-determination*: the aggressive importation of human judgment, the introduction of distortion, the manufacture of tendentious conclusions. Anxiety about positive error has also been consistently present – from Stephanus unwilling to deliver semantic judgment, to Scheller ruing the distortion of ancient texts, to Vollmer reviewing the lexicographer's limitations and counselling a simple disposition of material.

An interesting paradox arises here, namely that at a certain point efforts to reduce error's positive and negative components run contrary to each other. Analyse more (*contra* negative error), and even if no overt falsehood is introduced, one risks disturbing the user, disrupting the word's organic fullness, straitjacketing its manifold associations and implications (increasing positive error).¹¹⁸ But analyse less (*contra* positive error), and one can offer fewer conclusions (increasing negative error). The lexicographer Theodor

¹¹⁷ Vollmer, 'Vom Thesaurus Linguae Latinae' (n. 109, above) 52. On Vollmer's embrace of a decidedly understated style of article composition, see P. Flury, 'Vom Tintenfaß zum Computer', in Krömer, ed., *Wie die Blätter* (n. 5, above) 29-56 (30-32). Flury considers Vollmer's tack to be characteristic of the very early years of the *Thesaurus*, although he also identifies, at 33-34, considerable variation from article to article (on increasing standardization of *Thesaurus* articles in later years, see below n. 124). Krömer and Flieger, ed., *Thesaurus – Geschichten* (n. 109, above) 57, n. 7 note resistance to Vollmer's approach.

¹¹⁸ See, e.g., the observation at Flury, 'Vom Tintenfaß' (n. 117, above) 35: 'the finer and more complicated is the system in which the author orders his evidence, the greater is the danger that even at places where the meaning of the word is uncertain, he tries to pin it down to an unambiguous interpretation.' Or similarly, former *Thesaurus* author Anthony Corbeil's admission that a *Thesaurus* article 'necessarily imposes on a once organic word a subjective form of organization within which is fitted (and sometimes repressed) the relevant ancient evidence'. (A. Corbeil, "'Going forward": a diachronic analysis of the "*Thesaurus Linguae Latinae*"', *AJPh* 128 [2007] 469-96 [470]).

Bögel, recalling the beginning of his work at the *Thesaurus Linguae Latinae* in 1901, noted the balancing act required:

The difficulty for the newcomer was initially that he had to decide how far in the structure of the article he desired or was able to indulge the nuances *without losing himself in a host of subjectively perceived groups*.¹¹⁹

And Bögel was hardly unique. Indeed, the tricky negative-positive trade-off may explain the tendency towards internal contradiction in the makeup of all of our lexicographic archetypes: Stephanian (claiming not to offer semantic judgments but certainly doing so); Schellerian (insisting on responsibility for finding truth but riddled with uncertainty); and now *Thesaurus-1* (promising the history of a language but giving just ‘the stones so that others might build’ in early articles later judged to be ‘by and large, relatively simple enumerations of passages’).¹²⁰ In each case, we are witnessing uneasy resolutions of the error conundrum – attempts to square the circle posed by the understanding that *both* ‘doing more’ *and* ‘doing less’ were, at once, highly dangerous – and obviously desirable – options.

Some resolutions were sturdier than others. For Stephanus, the compilatory solution supported a lexicon for which *compiling* compositional patterns was precisely the goal, at a time in which leveraging the analysis of ‘authorities’ in place of one’s own (to circumvent positive error), was acceptable, even expected. By the time of *Thesaurus-1*, not *compiling* but analytical *creation* was the lexicon’s *raison d’être*, and the lexicographer himself had vowed to do it. In this context, the compilatory solution would not long satisfy. No surprise, then, that the *Thesaurus*’ approach has evolved from its early Stephanian echoes. Time for development has been ample: Vollmer’s practical tack notwithstanding, the work’s original schedule proved unrealizable.¹²¹ Early planning put the completion date around 1914; that goal was later changed to 1930. By 1922, the estimated time remaining stood between ten and thirty years. By 1948, it had widened to between thirty and eighty. Recently, the suggested end date has been something closer to 2050.¹²²

How to characterize the changes in methodology across these many decades? In the past twenty-five years a handful of studies have focused on doing just that, generally

¹¹⁹ T. Bögel, ‘Beiträge zu einer Historia Thesauri linguae Latinae’, in Krömer and Flieger, ed., *Thesaurus – Geschichten* (n. 109, above) 57-58, emphasis mine.

¹²⁰ Quotation from Keudel, *Praemonenda*, trans. J. Blundell (n. 100 above) 28.

¹²¹ Vollmer declared in 1903 that it was his task to bring the *Thesaurus* material into circulation (*i.e.*, publication) as soon as possible, but already he was appealing for extra help; the work was not meeting its yearly production goals (Vollmer, ‘Vom Thesaurus Linguae Latinae’ [n. 109, above] 46, 55).

¹²² Initial assessment of twenty years for the whole project can be found, *e.g.*, at ‘Plan zur Begründung’ (n. 5 above) 624 (repr. Krömer, *Wie die Blätter* 190). For the revision to 1930, see Krömer, ‘Ein schwieriges Jahrhundert’ (n. 94, above) 20 n. 43. Between ten and thirty years was an estimate related by W. A. Oldfather in ‘An appeal for the Thesaurus Linguae Latinae’, *Classical Journal* 18.1 (Oct. 1922) 54. A range of thirty-two to eighty years is discussed in a letter from H. Comfort to H. Haffter, Rockefeller Foundation, *et al.* 21 Nov. 1948. Thesaurus Linguae Latinae Archive, Munich. In 1995, Krömer, ‘Ein schwieriges Jahrhundert’, 27 called an estimate of fifty years to completion ‘not entirely unrealistic’.

finding increases in three areas: *standardization*, *navigability*, and *semantic specificity*.¹²³ Later *Thesaurus* volumes are more *standardized* in that they are more consistent from article to article – an observation that encompasses everything from conventions of labelling, to the organizational logic of an article, to accuracy in citation.¹²⁴ They are also more *navigable* because they more explicitly mark and describe the sections into which they divide their material, the logic of their divisions is exclusive, and they employ, for instance, more cross-references and clearly marked parenthetical insertions.¹²⁵ Their greater *semantic specificity* lies in their tendency to privilege or to make semantic observations that would have gone unemphasized or unmade in very early articles.¹²⁶ The sum of these three developments gives us a bare outline of our final lexicographic archetype: *Thesaurus-2*.

This archetype has shed the taciturn compilatory attitude of *Thesaurus-1*. A corollary of *Thesaurus-2*'s evolution, particularly in the area of semantic specificity, is that the lexicographer must assert himself – more words must be spent, disposition must occur more finely and more frequently.¹²⁷ What this means is that exposure to positive error has

¹²³ The best work on *Thesaurus* development is Flury, 'Vom Tintenfaß' (n. 117, above). Flury's piece drew on his decades as *Thesaurus* Generalredaktor, and is rich with appendices and detail. See also: Flury, 'Der Thesaurus Linguae Latinae', *Eirene* 24 (1987) 5-20; Corbeill, "'Going forward'" (n. 118, above); and G. Hays, 'Latin from A to P: The TLL in the 20th century', in 'The Thesaurus Linguae Latinae and classical scholarship in the 21st century: five perspectives', *TAPhA* 137 (2007) 483-90.

¹²⁴ See, for example, Corbeill, "'Going forward'", 474-75 on accuracy; Flury 'Vom Tintenfaß', 32-33 on illogicalities in article organization and on inconsistency in general; also 44-45 (Exkurs 1) specifically on logical inconsistency.

¹²⁵ On labelling of sections, see Flury, 'Der Thesaurus' (n. 123, above) 9-10, 13; Flury, 'Vom Tintenfaß' (n. 117, above) 31-32; Hays, 'Latin from A to P' (n. 123, above) 484-85. On the logic of article divisions, which in early articles tended not to be exclusive (so that a given citation could legitimately reside under several headings of a given dispositional level), see: Corbeill, "'Going forward'", 479-81; Flury, 'Der Thesaurus', 11; Flury, 'Vom Tintenfaß', 32-33, 35, and 44-45 (Exkurs 1). On parentheses and cross-referencing, see Corbeill, "'Going forward'", 482-83; Flury, 'Vom Tintenfaß', 47-48; Hays, 'Latin from A to P', 487.

¹²⁶ This is what the 1990 *Thesaurus praemonenda* (see Keudel, *Praemonenda*, trans. J. Blundell [n. 100, above] 26, also 28) means when it notes that 'experience led to methods and norms of linguistic commentary and lexicographical presentation which differed from those of the earliest years in the progressively more subtle distinctions drawn'. See also Flury, 'Der Thesaurus', 8-15; Flury, 'Vom Tintenfaß', 35-37, 53-54 (Exkurs 6); Hays, 'Latin from A to P', 485-87. Semantic specificity is in large part linked to the issue of navigability: clearer, subtler labels and smaller, more precise semantic compartments are components of both.

¹²⁷ It is tempting to trace much of this development to the advent of the computer. By the 1960s, computers were making the business of compiling concordances quicker and easier, and in the last couple of decades electronic databanks have made vast swathes of Latin searchable at the touch of a button. These resources threaten to render *Thesaurus-1* redundant, since they can do very efficiently the work of presenting 'the material – the 'stones' for building – ' to the reader with minimal authorial intervention. (Thus Corbeill, "'Going forward'", 486, remarks *e.g.*, that insofar as the *Thesaurus*' 1901 article for *anteire* demands that the user must read the whole of it to begin excavating conclusions, it 'functions hardly differently from a modern database, and databases abound nowadays'.) But the practices characteristic of *Thesaurus-2* appear to have arisen well before the computer made its mark

increased – a development that has not gone unchecked. In the nineteenth century, modes of disembodiment – measures like collaboration and completeness – had entered to counter the uncertainty of Schellerian assertiveness. Likewise, the increased analytical intervention of *Thesaurus-2* came alongside regulatory technologies capable of buffering it. Corbeill has argued, for instance, that cross-references, along with other uses of parentheses, serve in newer *Thesaurus* articles as a ‘precaution against [...] an overly subjective arrangement’ by allowing readers to be shown not just one, but several, routes through the same article.¹²⁸ Likewise, increasingly strict rules were instituted in the course of the century for alerting readers as far as possible to where material available in the *Thesaurus* archive has been omitted from the selection displayed in the article – *i.e.*, mitigating the distortive potential of authorial choice by giving the reader the tools to reconstruct more closely its sources.¹²⁹ Thus *Thesaurus-2* arrived, but did not come alone. New sources of error, as elsewhere in our story, brought new tools for its management.¹³⁰

3. And yet error is just one way to arrange our evidence. Suppose we now shift our terms so that Latin lexicography is defined not as the making of Latin dictionaries *tout court* but as the challenge of knowing things about Latin words, or, more specifically, of *observing* Latin words and *verifying* conclusions about them. Here, finally, the particularities of Latin lexicography *per se* will recede, allowing us to catch a glimpse of the wider frames in which the story of these lexica might fit.

Where *observation* is concerned, we have picked out a trajectory for the evolution of a principal unit. From the sixteenth century, when the lexicographer’s eyes were drawn to patterns for composition and when he laid out his work (with *phrases* and line breaks) so as to bring these same units to readers’ attention, we move by the end of the eighteenth century to a more pregnant sort of observation. Here, lexicographers were less concerned with looking *at* words and their collocations, and more interested in looking *through* them. That is, they sought to interrogate them not individually for their compositional and text-critical suitability, but as a group, analytically, in hopes of divining the semantic information that lay behind them. Still, this species of observation lacked the microscopic precision that would arise later, as well as the emphasis on Wölfflin’s *negative Beobachtung* – the penchant for training the eyes not on the data itself but on its gaps.

on humanities research. Flury, who did more than anybody to trace the relevant developments, saw, for instance, a high point in complexity and semantic subtlety in the second half of the ‘E’ volume, which was under production from 1931 to 1953; he notes also that cross-references probably saw their maximum in ‘E’. Furthermore, he framed these maxima as the results of a gradual evolution that extended even earlier: ‘C’ (1906-12), ‘D’ (1909-34), and ‘F’ (1912-26) show already articles that look ‘newer’ in their systems of labelling and differentiation. (See Flury, ‘Vom Tintenfaß’, 35 for the subtle dispositions; 48 for the references; 31 n. 4 and 33-34 for early evidence of evolution.)

¹²⁸ Corbeill, “‘Going forward’” (n. 118, above) 482.

¹²⁹ Flury, ‘Vom Tintenfaß’ (n. 117, above) 50-52 (Exkurs 4).

¹³⁰ More methods of policing error could be noted: Flury, ‘Vom Tintenfaß’, 42, *e.g.*, notes that systematic training of new *Thesaurus* authors began to be emphasized by the editors of the ‘E’ volume, precisely where complexity of semantic disposition reached a high point. There followed far more elaborate and extensive systems for proofing and editing articles than seem to have existed in earlier years (see Flury, ‘Vom Tintenfaß’, 41-42 and Corbeill “‘Going forward’”, 472).

While this trajectory provides a way into the history of observation, it does not move us far outside the realm of lexicography. But there is evidence, at least in the later parts of our story, that lexicographers themselves identified their observational habits with concerns beyond the world of dictionaries, particularly in the realm of natural science. Thus, for instance, we find the great lexicographer of Greek, Franz Passow, in his 1812 work *Über Zweck, Anlage und Ergänzung griechischer Wörterbücher* (On the aim, plan, and supplementation of Greek dictionaries) setting up a comparison between the researcher of nature and the researcher of the ancient world. The former, he said, ‘will perceive sacred allusions in the most inconspicuous blade of grass, in the most colourless stone, and so pay great attention to even the smallest thing’. Likewise, even the classical researcher, he wrote, ‘has for a long time been accustomed to think the most dull coins, weathered shards and mangled marble bits worth just as careful examination and observation, if any mark of ancient significance is impressed on them, as the most complete monuments of ancient art’.¹³¹ No less attention was merited, he believed, by the fragments of classical languages.

Nearly a century later, Wölfflin too would mark key components of his programme – the word-historical orientation, the careful attention to its spread and distribution, and the negative observation – as bringing the practice of philology closer to that of biology and the natural sciences.¹³² Here, then, is an interesting glimpse of where a history of observation, if it is to be written, might reach – everywhere from field notebooks and microscopes to the desks of classicists, and to their lexica as well.¹³³ From the pages of dictionaries and the pens of textual scholars arise hints about how to write a story that unifies the ways in which scholars across many fields of study, from Latin to the natural sciences, have established and examined their objects of inquiry.¹³⁴

¹³¹ F. Passow, *Über Zweck, Anlage und Ergänzung griechischer Wörterbücher* (Berlin 1812) 3. Further mention of Passow is at n. 77, above.

¹³² E. Wölfflin, ‘Moderne Lexikographie’, *Archiv für lateinische Lexikographie* 12 (1902) 343-400 (384), repr. Krömer, ed. *Wie die Blätter*, 209.

¹³³ For work towards a history of observation, see L. Daston, ‘On scientific observation’, *Isis* 99.1 (2008) 97-110; also L. Daston and E. Lunbeck, ed., *Histories of scientific observation* (Chicago 2011). The latter work takes an admirably ecumenical approach in which, *inter alia*, the economy and the subconscious self are taken as fields of observation (on economic observations, see the contributions by Harro Maas and Mary S. Morgan at 206-29 and 303-25, respectively; on psychoanalysis, see Lunbeck’s essay at 255-75). Certainly, philological or textual observation will fit nicely under the same umbrella as Daston suggests, mentioning a trained attention to “Greek verbs” as an example of the disciplining of scientific observation.

¹³⁴ The potential for bridging natural and textual inquiry is often raised by Lorraine Daston (see n. 133, above, as well as her ‘Taking notes’, *Isis* 95.3 [2004] 443-48 [444-45], and, more recently, ‘The sciences of the archive’, *Osiris* 27.1 [2012] 156-87). It is a motif in the work of Anthony Grafton and Ann Blair, who between them have, for example, stressed the cross-over between philological and scientific contributions in the early modern period, linked the methodological and observational demands posed by texts and astronomical data, and highlighted the relationship between the humanist discipline of extracting commonplaces from books and the Baconian programme of noting down discrete facts from nature. See, for example, their contributions to *Journal of the History of Ideas* 53.4 (1992), under the heading ‘Reassessing humanism and science’, specifically their joint-authored

Similarly suggestive is the concept of *verification*, by which I mean the attempt to minimize the rift between putative truths about the world and their representation by investigators. Our consideration of error is directly relevant here – negative and positive error both serving, in the lexicographic tradition, to widen the rift between what is ‘true’ about a word and what is produced by the dictionary-maker, on a page, to represent that truth. We have already reviewed briefly how our lexicographic archetypes have navigated the minimization of these error components. Of further interest is how their efforts may relate to stories about verification in other areas of inquiry. Work by Kathryn Olesko and Simon Schaffer, for instance, has made us keenly aware of how in the nineteenth century astronomers and physicists dealt with verification problems of their own, grappling with the observer’s increasingly apparent fallibility in registering and reporting results.¹³⁵

In astronomy, attempts to eliminate this source of inconsistency, which ensured variation in different individuals’ assessments of transit times, were several. One response was to measure a ‘personal equation’ for different observers or sets of observers, providing constants that could be used to standardize results across observatories. Another was to move towards mechanization of the observation process, using techniques like astrophotography to take some of the work of observation out of human hands.¹³⁶ In physics, the method of least squares helped to reduce scattered observations to a reliable value; as the century progressed, increasingly precise instrumentation was deployed to produce the more nearly error-free measurement that human hands could not.¹³⁷ These sorts of efforts seem to me to represent quite neatly an attempt to close the inevitable gap between a ‘true’ value and its registration by investigators. The question for further research that the ‘frame’ suggests is to what extent they parallel the dictionary-maker’s verificatory struggle for identity between lexical ‘truth’ and his own conclusions.

Ways in which these stories, lexicographical and scientific, might enrich each other are not difficult to imagine. To cite a prominent example: Lorraine Daston and Peter Galison, in their 2007 book *Objectivity*, present a model for understanding precisely the sorts of nineteenth-century concerns about subjective distortions that Olesko and Schaffer describe. In their account, such anxieties are typical of a movement, emergent in the 1800s, and reaching a crescendo in the second half of the century, to elevate ‘mechanical

introduction at 535-40; Blair’s contribution ‘Humanist methods in natural philosophy: the commonplace book’, 541-51 (esp. 547 and 550); and Grafton’s ‘Kepler as a reader’, 561-72 (esp. 564-65, 571). See also Grafton’s ‘Introduction: the humanists reassessed’, in the oft-cited *Defenders of the text* (Cambridge MA 1991) 1-22 (esp. 4-5), as well as, in the same volume, ‘Humanism and science in Rudolphine Prague: Kepler in context’, 178-203. More recently in this vein, see Martin Mulso’s remarks in ‘Muskatnüsse und Paradiesvogelfüße’, review of *Matters of exchange: commerce, medicine, and science in the Dutch Golden Age*, by Harold Cook, *Frankfurter Allgemeine Zeitung*, 4 June 2008.

¹³⁵ See K. Olesko, ‘The meaning of precision: the exact sensibility in early nineteenth-century Germany’, in *The values of precision*, ed. M. Norton Wise (Princeton 1995) 103-34; S. Schaffer, ‘Astronomers mark time: discipline and the personal equation’, *Science and Context* 2.1 (1988) 115-45.

¹³⁶ See Schaffer, ‘Astronomers mark time’ (n. 135, above); photography is at 133-35.

¹³⁷ Olesko, ‘The meaning of precision’ (n. 135, above).

objectivity' as a principal virtue in the production of knowledge. This new virtue, 'objectivity', was a sort of 'willed willessness', purging human interference from the results of scientific investigation – thus the valorization of un-retouched photographs and mechanical measurement in the place of the human eye and hand.¹³⁸ According to Daston and Galison, it tuned itself to the epistemological liabilities posed by a particular model of the self – appetitive, prone to distortion and over-determination – regnant in the same period.¹³⁹ It is, in short, a corrective to a species of what we have identified above as 'positive error'.

I do not think it a stretch therefore to spot a similar objective concern in our contemporary lexicographic archetype, *Thesaurus-1* – distrustful of human memory and impression, vilifying subjectivity, looking to remove judgment from the process of collection as well as from certain elements of observation, presenting results, like an unretouched photograph, only by ordering the *material*, 'without many of [the lexicographer's] own words'.¹⁴⁰ And we have seen that this archetype, too, was calibrated to a newly assertive self, the one represented in the vastly increased ambitions of the Schellerian lexicographer. Our error conundrum, the contradictory problem of reducing positive and negative error components, is similarly confronted by Daston and Galison's scientific atlas-makers in the age of mechanical objectivity, '[c]aught between the Charybdis of interpretation and the Scylla of irrelevance' – faced, that is, with the impossibility of at once curating examples for the reader and refraining from intervention.¹⁴¹ These parallels are in themselves useful, if only for bridging the gap between the world of lexical scholarship and the world of natural investigation that provides many of the sources for Daston and Galison's study.

But there is something further. In our account of the Latin lexicographical tradition, many tools for controlling the dictionary-maker's incursions – things like taciturnity, marking analysis as distinct from evidence, giving examples in abundance to allow readers unmediated access to the immanent truth – were being employed even before Scheller, at the threshold of the nineteenth century, pronounced the imperative for semantic assertion. In short, many of the measures against positive distortion in nineteenth and early twentieth-century lexicography represent a rebirth or continuation of the compilatory strategies of another era. We can therefore contextualize the reserved ethic of *Thesaurus-1*, or at least the instruments for effecting it, as one stage in an ongoing struggle with positive error that is present from the very beginning of our story. This by no means disproves the notion that the nineteenth century is a pivotal point, nor that it was home to a new understanding of subjectivity, alongside which objectivity crystallized in its distinctive totality as the ripe *fusion* of constituent beliefs and practices associated with

¹³⁸ L. Daston and P. Galison, *Objectivity* (Brooklyn 2010 [2007]), esp. ch. 3 'Mechanical objectivity', 115-90 (the term 'willed willessness' appears at 53).

¹³⁹ The argument is central to the book and can be found in many places, but see, e.g., Daston and Galison, *Objectivity*, 27-39.

¹⁴⁰ 'Erster Thesaurus-Prospekt', repr. Krömer, ed., *Wie die Blätter* (n. 5, above) 195. See n. 115, above.

¹⁴¹ Daston and Galison, *Objectivity*, 186.

the concept today.¹⁴² But it does suggest that scrutinizing the pre-nineteenth-century history of precisely those practices and the concerns to which they were geared, and – still more importantly – widening the sources and the fields of inquiry through which they are tracked, can give us a fine way to test such hypotheses. One potential proving ground? The long tradition of Latin lexicography, with its rich and ongoing set of observational and analytical challenges. Much more work on these points is necessary: our frame has grown wide indeed. For now I hope only to have made the case that for the history of thought, not just lexical but ‘scientific’ as well, the *Thesaurus* matters.

¹⁴² Daston and Galison, *Objectivity* (n. 138, above) 27-35 for defence of this stance against sceptics who would doubt mechanical objectivity’s novelty in the nineteenth century; see also 205-16.