

Jan Kochanowski University Press

This is a contribution from *Token: A Journal of English Linguistics* Volume 8/2019. Edited by John G. Newman, Marina Dossena and Sylwester Łodej. Special Editors for volume 8: Giovanni Iamartino and Irma Taavitsainen. © 2019 Jan Kochanowski University Press.

A Physical Dictionary of 1655: When translating medical science is not enough

Giovanni Iamartino* and Giulia Rovelli**

* University of Milan ** University of Insubria

ABSTRACT

This paper analyses the lexicological and lexicographical characteristics of *A Physical Dictionary*, a 13-page medical glossary appended to the English edition of Lazare Rivière's *Praxis Medica*, translated, among others, by Nicholas Culpeper, and published by Peter Cole as *The Practice of Physick* in 1655. Notwithstanding a few inconsistencies in the form of variant spellings, repetitions, and inaccuracies, the glossary can be described as a useful addition to Rivière's treatise as evidenced by its inclusion in the following editions of the English text. With its generally short (often one-word) definitions which tend to present the literate but not highly educated readers of Rivière's book in English with easier language equivalents of the many technical terms that are part and parcel of a medical book of this kind, *A Physical Dictionary* can, indeed, be described as further evidence of Nicholas Culpeper's long-lasting activity as a translator and popularizer of medical discourse.

Keywords: specialized lexicography, historical medical lexicography, vernacularization, medical popularization, knowledge dissemination, Nicholas Culpeper.

1. Introductory remarks¹

The Practice of Physick (Culpeper et al. 1655), printed in London in 1655, is the English translation of the Latin treatise *Praxis Medica cum Theoria* (Rivière 1640), which was first published in 1640 by the renowned French

¹ This paper was jointly conceived, prepared, and written by the two co-authors, with Giovanni Iamartino responsible for sections 1, 2 and 4, and Giulia Rovelli for section 3.

physician Lazare Rivière (1589-1655). Rivière's *Praxis Medica* came to be considered one of the two "reference textbooks of seventeenth-century practical medicine" (Rinaldi 2018: 49) together with Daniel Sennert's *Practicae Medicinae* (1628). The English translation of both these texts was attributed to Nicholas Culpeper (McCarl 1996), widely recognized as a key figure in the popularization of medical lore in seventeenth-century Britain (Thulesius 1992; Sanderson 1999). Indeed, Culpeper's name was found to be associated with 8.5% of all medical books published in English between 1641 and 1740 (Fissell 2007: 115), and among his published works figure "the only appearances in English of three of the most popular text books of their time" (Russell 1956: 159), i.e. Johann Vesling's *Syntagma Anatomicum* (1641), Jean Riolan's *Encheiridion Anatomicum et Pathologicum* (1649), and Thomas Bartholin's *Anatomia* (1641), respectively Culpeper 1653, 1657 and 1663.

Although books of popular medicine had been written in the vernacular since Anglo-Saxon and medieval times,² the seventeenth century saw the publication of a number of texts of a more learned nature, as either translations of important Latin treatises (see, e.g., Iamartino 2014 and Rovelli 2018) or original productions (Fissell 2007). This development, which was especially strong in the second half of the century, was related to at least three different beliefs: that the use of the mother tongue would make the scientists' job easier; that knowledge, and especially medical knowledge, should be made accessible to more, if not all; and that the English language was adequate and capable enough for specialized, scientific and technical usage.³

However, owing to the still dominant role of Latin as the language for international communication among scientists (Taavitsainen 2006: 688) and the recent great advances in experimental science, English was found to be lacking in scientific terminology (Taavitsainen – Pahta – Mäkinen 2006), a situation which could only be remedied by the introduction of a huge number of neologisms, either adopted more or less verbatim from Latin texts or derived from Latin or Greek roots (see, among others, Johnson 1944, Barber 1976, Görlach 1991, Nevalainen 1999). This process, while adding to the English lexical store and thus allowing British scientists to

² See Pahta – Taavitsainen (2004, 2010). Irma Taavitsainen and Päivi Pahta are the two scholars who have most systematically researched historical medical discourse in English: their most outstanding contributions include Taavitsainen – Pahta (2004), Taavitsainen – Pahta – Mäkinen (2005), Taavitsainen (2009), Taavitsainen – Pahta (2011, 2011), Taavitsainen (2017, 2018), Taavitsainen – Hiltunen (2019).

³ Relevant information on Early Modern English is found in the still useful manuals by Barber (1976) and Görlach (1991).

communicate in their own mother tongue, also rendered these texts often extremely difficult to understand for anyone who had not had the privilege of a university education.

Given this linguistic and socio-cultural context, Nicholas Culpeper's The Practice of Physick is typical and peculiar at the same time. Typically, being the translation of a learned medical text, it is rich in technical terms, among them some 50 neologisms, a few of them certainly created by the translators/compilers themselves, others probably already in circulation but never before recorded in an English text, and undoubtedly introduced as the English equivalents of the Latin technical terms that were part and parcel of a medical book of this kind. However, what makes this text peculiar, or at least different from most others of a similar nature, is the fact that it also includes a 13-page glossary (Culpeper et al. 1655: unnumbered pages), supplied with its own title-page: A Physical Dictionary, Expounding Such Words, as Being Terms of Art, or Otherwise Derived from the Greek and Latin, are Dark to the English Reader (henceforth, A Physical Dictionary). It has been described as one of the possible sources of what Tyrkkö identified as the "first English dictionary to focus on medical terminology" (Tyrkkö 2009: 171; see also McConchie 2019: 68-77). Interestingly, this glossary does not simply list and explain all those learned medical terms and expressions that were felt to be incomprehensible for the intended readership of Rivière's translated book, but it is also declared to be "of use in the reading of all other Books of this Nature, in the English Tongue" (Culpeper et al. 1655: A Physical Dictionary title-page).⁴

Culpeper's book is described as being "chiefly a Translation" (Culpeper et al. 1655: cancel title-page) of Rivière's work, the adverb *chiefly* possibly alluding to the addition of the glossary but also to some adaptations and rewritings of the text itself, advertised in the address by "The Printer to the Reader" as a means of making it more comprehensible.⁵ This can also be evinced from the fact that the translated text has two partially different title-pages, the first or cancel title-page describing the work as *The Practice of Physick, in Seventeen Several Books*, the second or inner title-page, perhaps boastingly, as *The Compleat Practice of Physick, in Eighteen Several Books*, since it includes the glossary in the number. According to both title-pages,

⁴ McConchie (2019: 68) rightly notices that "the implication of general use puts it [*A Physical Dictionary*] beyond the scope of a glossary".

⁵ Here it is stated that "many hard phrases in these Seventeen Books are explained in the Context, by more easie words following, which signifie the same with the foregoing hard word" (Culpeper et al. 1655: The Printer to the Reader).

the translation was jointly made by Nicholas Culpeper, Abdiah Cole and William Rowland, while a fourth translator is mentioned in the address by "The Printer to the Reader" as "an eminently learned and pious Physitian, who desires not to be named, being (as he saies) content with the applause of his own Conscience" (Culpeper et al. 1655: The Printer to the Reader).⁶

This prefatory text is very important for two different but related reasons. Firstly, it makes clear that this translation from Rivière's Latin text is further evidence of Nicholas Culpeper's long-lasting activity as a translator and popularizer of medical discourse, as evidenced by the very long list of his published works (see McCarl 1996 and Fissell 2007), and of the purpose he aimed at, namely instructing already competent people to substitute more learned physicians when none could be found, as the following quotation shows:

The Compleat Practice of Physick, in Eighteen Several Books. *Wherein is plainly set forth, The* Nature, Differences, Diagnostick, *and* Prognostick Signs. *Together with the* Cure of all Diseases in the Body of Man. By Nicholas Culpeper, Physitian and Astrologer. *Abdiah Cole*, Doctor of Physick. And *William Rowland*, Physitian. Being chiefly a Translation of The Works of that LearnIed and Renowned Doctor, Lazarus Rivierius: Now living, and Physitian to the present King of *France*. Above fifteen thousand of the said Books in Latin have been Sold in a very few Yeers, having been eight times printed. *The Names of the seventeen Books of the* Practice of Physick, *and the Principal Matters treated in each of them, are printed in one sheet of Paper, and put before these Books. The Eighteenth Book is a* Physical Dictionary, *explaining hard Words used in these Books, and others*. London: Printed by *Peter Cole* in *Leaden-Hall*, and are to be sold at his Shop, at the Sign of the Printing-press in Cornhil, neer the Royal Exchange. 1655.

A Physical Dictionary, Expounding such words, as being terms of Art, or otherwise derived from the Greek and Latin, are dark to the English Reader. *This Dictionary is of use in the reading of all other Books of this Nature, in the English Tongue*. London: Printed by *Peter Cole* in Leaden-Hall, and are to be sold at his Shop, at the Sign of the Printing-press in Cornhil. 1655.

⁶ The cancel title-page, the inner title-page and the dictionary's title-page are perhaps worth reproducing in full:

The Practice of Physick, in Seventeen several Books. *Wherein is plainly set forth, The* Nature, Cause, Differences, *and Several Sorts of* Signs; *Together with the* Cure *of all Diseases in the Body of Man.* By *Nicholas Culpeper*, Physitian and Astrologer. *Abdiah Cole*, Doctor of Physick. And *William Rowland*, Physitian. Being chiefly a Translation of The Works of that Learned and Renowned Doctor, Lazarus Rivierius, Now living: *Councellor* and *Physitian* to the present *King of France*. Above fifteen thousand of the said Books in Latin have been Sold in a very few Yeers, having been eight times printed, though all the former Impressions wanted the *Nature, Causes, Signs*, and *Differences* of the Diseases, and had only the Medicines for the Cure of them; as plainly appears by the Authors Epistle. *The Names of the seventeen Books of the* Practice of Physick, *and the Principal Matters treated in each of them, are printed in one sheet of Paper, and put before these Books*. With these Books is bound a *Physical Dictionary*, explaining hard Words used in these Books, and others. London: Printed by *Peter Cole* in *Leaden-Hall*, and are to be sold at his Shop, at the Sign of the Printing-press in Cornhil, neer the Royal Exchange. 1655.

our intent is, That where in the Country there is no learned Physician at hand; at Sea, in the States and Merchants Ship, where the Chyrurgion is compelled to act both his own, and the Physitians part; In Armies and Leguers, &c. an ingenious and diligent Chyrurgion, Apothecary, or any other that hath from his youth been exercised in these kind of studies, and conversant about the sick, may attain such a competent knowledg in the Causes and Methodical Cure of Diseases, as they may with honor to themselves, and profit to the sick (by Gods Blessing) supply the place of a more learned Physitian. (Culpeper et al. 1655: The Printer to the Reader)

Secondly, this address to the reader also highlights the rationale for adding a glossary – which, it should be remembered, was not included in the source text – to the translation. Indeed, in a passage that reminds one of the title-page of Robert Cawdrey's *Table Alphabeticall* and the mention of "Ladies, Gentlewomen, or any other vnskilfull persons" (Cawdrey 1604: title-page) as the target users of the dictionary, "The Printer to the Reader" identifies its intended audience with

honorable Ladies and Gentlewomen in the first and chiefest place, and [...] all others unacquainted with the Greek and Latin Tongues, and consequently unable to understand divers terms of Art, and other words drawn from the said Tongues (which it was necessary to retain for brevity sake, and to avoid tedious Circumlocutions)... (Culpeper et al. 1655: The Printer to the Reader)

Here, the translation of Rivière's learned work gets justified by arguing that, far from favoring the spread of quacks and charlatans, it will help readers become aware of their own health problems. By

viewing the state of their own Bodies in such Books as these (as in Looking-Glasses) [readers] will perceive certain Diseases in themselves, either now in being, or likely ere long to seize upon them, which otherwise they would never have so much as dream'd of; and thereupon crave the Advice and Assistance of the learned Physitian. (Culpeper et al. 1655: The Printer to the Reader)

Moreover, such a translation might also be commended for its important social function. Since women were in charge of preparing medicines and tending to the sick, as the household still represented the main arena for medical treatment (Leong – Pennell 2007), by perusing these books they

might better help their "Husbands, Children, or other Relations and Friends in their respective Sickness [...] and be more apprehensive of the Physitians Directions, and so better able to practice them" (Culpeper et al. 1655: The Printer to the Reader). Furthermore, those

Honorable Ladies and Gentlewomen, that out of a truly Christian and Charitable Disposition have not disdained, but counted it a great Honor to be helpful to the poor in the time of their sickness, may by perusal of these Books, and the like, confirm and increase their knowledg, and become honorable Instruments in the Hand of God (Culpeper et al. 1655: The Printer to the Reader).⁷

The Practice of Physick may be described as a dispensatory, or recipe collection, as its main purpose is that of providing several cures for "all Diseases in the Body of Man" (Culpeper et al. 1655: cancel title-page). However, its content is much more comprehensive than that: as a matter of fact, the book is divided into different sections, each one dealing with a specific body part and organized into a head-to-toe order. At first, all diseases that affect a given body part are fully described, then their probable causes are explained, and finally different alternative remedies are provided, in the form of traditional medical recipes (Leong – Pennell 2007).

2. Aims and methodology

This paper aims at providing a detailed lexicological and lexicographical analysis of the glossary appended to *The Practice of Physick*, with the purpose of understanding its role in the popularization of learned medicine in early modern Britain.⁸

In order to carry out the analysis of *A Physical Dictionary*, both entrywords and definitions were transcribed, and tagged for word-class, semantic field, etymological source, and type of definition.

Moreover, a close reading of a sample section of *The Practice of Physick*, namely "Of the Diseases of the Eyes" (Culpeper et al. 1655: 61-94), and of the corresponding book in the Latin source text ("De Affectibus Oculorum", Rivière 1640: 167-262) was also carried out in order to understand: (a) to

⁷ See also the discussion in McConchie (2019: 68-69).

⁸ Of course, any research on early modern English glossaries should rely on Schäfer's (1989) seminal work and, among others, on the essays included in Considine (2012).

what extent *The Practice of Physick* may be described as "chiefly a translation" (Culpeper et al. 1655: cancel title-page) of Rivière's *Praxis Medica;* (b) how much the glossary and its definitions rely on the translated text itself; and (c) how the glossary must probably have been compiled.

3. Results and discussion



Figure 1. Sample page of A Physical Dictionary (Courtesy of Wellcome Library, London)

As can be seen from the sample page of A Physical Dictionary (Fig. 1), entries in the glossary are printed in two justified columns and listed in firstletter alphabetical order.9 Indeed, the very first entries under the letter D are Diureticks, Diagnosis, Distillation, Decoction, and Diagnosticks, which shows that not even etymologically related words (namely DIAGNOSIS and DIAGNOSTICKS) necessarily follow one another in the word-list. The entry-words are systematically printed in italics, and, in most cases, they are linked to their definitions by either a semicolon or a colon (see e.g. DISTENTION, DEPRAVED and DILATATION) or, more rarely, by a comma (e.g. VISCOUS and VICISSITUDE). Most entries are 1 to 5 lines long, while only some are longer: in the sample page (Fig. 1), the entries The Day of Judgement, or Critical Day and Distillations by DESCENT are both 8 lines long, whereas the longest entry in the dictionary is ELIXIR PROPRIETATIS, which takes up 18 lines. Obviously enough, the length of each entry depends on its encyclopedic as opposed to its linguistic character, and also on what is being explained; for example, an anatomical feature (see CORNEA and STERNON) may be easier and shorter to be defined than a morbid condition in a patient (see COINDICANTS and PALLIATIVE CURES):

- (1) *Cornea,* a Coat of the Eye like the Horn of a Lanthorn. See *Veslingus* in English.
- (2) *Sternon*: the breast bone, See Veslingus Anatomie in English.
- (3) Coindicants, are divers things in a Disease or Patient, which plead for one and the same Remedies. So in a putrid Feaver, the person being full bodied, and the season warm also, the person lusty and yong: The Feaver, the fulness of Blood in the Patient, his Age and strength, and Season of the Year, are Coindicants that he must be let Blood.
- (4) *Palliative Cure*: is when a Disease is not taken away, but only mitigated and made more mild, so that the patient may have as much ease as

⁹ First-letter alphabetical order was common practice in medieval glossaries, and "the process of alphabetization was a slow and a gradual one" (Sauer 2009: 23). At the start of the seventeenth century and of English monolingual lexicography, Robert Cawdrey still thought it necessary to explain to his "gentle Reader" that "if the word, which thou art desirous to finde, begin with (a) then looke in the beginning of this Table, but if with (v) looke towards the end. Againe, if thy word beginne with (ca) looke in the beginning of the letter (c) but if with (cu) then looke toward the end of that letter. And so of all the rest. &c." (Cawdrey 1604: *To the Reader*, sig. A4v). And yet, alphabetization is often wrong in *A Table Alphabeticall*, ABERRATION preceding ABDICATE, ALLEGORIE preceding ALLEGIANCE etc.

possible. Or if the Disease deform the Body, a palliative Cure, does hide as much as may be that deformity. So an Eye being thurst out, cannot be properly cured; but it may admit of a palliative cure, in asswaging the pain, and other Symptoms, and by putting into the place thereof a Glass or other Artificial Eye.

The sample page (Fig. 1) also exemplifies the admittedly rare cross-references to a chapter in the book or to other medical books translated by Culpeper and published by Peter Cole: THE DRUM, for example, refers back to page 96 and the chapter on deafness, and also mentions *"Veslingus* his Anatomy in English", that is, Culpeper's (1653) English translation of Johann Vesling's *Syntagma anatomicum* (1641). The entries DIAPHOENICON and DIACATHOLICON, too, refer to another book: it is *"the London Dispensatory* in English", another most successful work by Culpeper, first published in 1649 as *A Physicall Directory* and reprinted a dozen times until 1720. This was the unauthorized translation of the *Pharmacopoeia Londinensis*, that is, the catalogue of simple and compound medicines which had been compiled by the Royal College of Physicians in 1618 to exert their control over the newly established Society of Apothecaries (Sanderson 1999: 25).¹⁰

WORD CLASS IN A PHYSICAL DICTIONARY	#	%
TOTAL	587	100
NOUNS	429	73.1
ADJECTIVES	122	20.8
VERBS	31	5.3
ADVERBS	4	0.7
PROPER NAMES	1	0.2

Table 1. Entries' word-class in A Physical Dictionary

As Table 1 shows, out of nearly 600 entries almost three quarters are – quite unsurprisingly – nouns (94 of which are listed in the plural form), 122 are adjectives, 31 are verbs, four are adverbs, while one is a proper name.

¹⁰ As a matter of fact, a passage in "The Printer to the Reader" explains the reason for this kind of intertextual references: "When the Reader meets in these Books, with the names of Simple or Compound Medicaments, and desires a more full knowledg of them, let him have recourse to the *London Dispensatory* in English, where he may be satisfied; for it had been an endless and vain work, to repeat what hath there been said" (Culpeper et al. 1655: The Printer to the Reader).

Most entry-words are borrowings of Latin (76%, e.g. DILATATION) or Greek (20%, e.g. OEDEMA) origin. The remaining 4% is divided among words of Germanic origin that, however, are to be intended in a specialized sense (e.g. WATER-GATE), and borrowings from other modern languages (e.g. TACAMAHACA).¹¹

24 terms were found to antedate the first attestation in the *Oxford English Dictionary* (henceforth, *OED*), some of them by one or very few years (e.g. ANEURISM and EPISPASTICK), thus showing that the compiler of the glossary focused on words that were probably being used in those days; others antedate the *OED* by 20 years or more (e.g. BRONCHIA and DYSPNAEA), which could be taken as evidence of the compiler's attitude towards lexical innovation. More examples (27 altogether) can be added of entries defining further, new acceptations of words that already existed in 1655 and as such are listed in the *OED*, although the specialized meaning introduced by the compilers of the dictionary is not mentioned as it did not catch on:

- (5) *Adverse*: contrary to, of a contrary Nature.¹²
- (6) Alteratives, are such Medicines as only change the qualities of the Body and its Humors, by heating, cooling, moistening, drying, &c. they are opposed to such as do cause Vomiting, Purging, Sweating, Transpiration, &c.¹³

As evidenced by all these instances, the entry-words in *A Physical Dictionary* may, therefore, be considered hard words for an English readership on two different grounds: firstly because, etymologically speaking, they are of classical origin; and secondly, because they have adopted a specialized, technical meaning and are, therefore, used in the text in a restricted acceptation. It is to be added, though, that *A Physical Dictionary* lists entrywords that are not typical of medical use (ADVERSE, in example 5, for one). According to McConchie,

¹¹ "*Tacamahaca*: A sweet Gumm. See the London *Dispensatory* in English". According to the OED, s.v. TACAMAHAC / TACAMAHACA, the word is from obsolete Spanish *tacamahaca*, but ultimately from Aztec, and it is first attested in English in 1577.

¹² This definition seems to specifically refer to the different and opposing qualities of the four humours, and as such does not correspond to any of the adjectival uses of *adverse* listed in the *OED*.

¹³ *OED* antedatings in *A Physical Dictionary* are the topic of a forthcoming paper by Giulia Rovelli.

The presence of such terms suggests the recognition of a 'halo' lexicon, or medical metalexicon, which enables the core medical lexicon by way of explanation, avoiding 'circumlocutions', as well as reinforcing its status through the use of a further set of hard words. (McConchie 2019: 69)

As to the ways in which the entry-words in the glossary are defined, since they are mostly of Latin or Greek origin, the most common strategy to which the compiler resorted was that of providing an easier lexical equivalent, generally a word of Germanic origin. This strategy was very popular, especially with those technical terms (e.g. ABDOMEN and THORAX) and uncommon adjectives (e.g. OCCULT and PUTRID) which already had simpler or less formal equivalents in everyday English, as the following examples show:

- (7) *Abdomen*: The Belly, or Paunch
- (8) *Thorax*: the Chest.
- (9) *Occult*: hidden, unknown.
- (10) *Putrid*: rotten, filthy, stinking.

Sometimes, the specialized usage and technical meaning of a word or expression is also foregrounded by means of an added clause (e.g. FRACTURE, where the scope of the equivalent "breaking" is restricted to the breaking of bones), or the reference to an anatomy book (e.g. VISIVE NERVE, where the compiler provides the reader with a Germanic equivalent of the technical term, describes its function, and also refers the reader to another medical book for further reading or clarification):

- (11) Fracture: breaking, as fracture of the Skul or Arm, &c.
- (12) *Orifice*: the whol which is made by a Surgeon when he lets blood. Also the mouth or passage into the Womb, or Stomach, &c.
- (13) *Visive Nerve*: the seeing Nerve. The Sinnew wherewith the Objects of sight are carried into the Brain, to the Imagination or Common-sence. See *Veslingus* Anatomy.
- (14) *Sternon*: the breast bone, See Veslingus Anatomie in English.

As is demonstrated by the above examples, the compiler of the glossary clearly endeavoured to find equivalents in everyday English, not unlike the authors of contemporary hard-word dictionaries. However, when such equivalents did not exist, a new term had to be coined, as in the case of "Womb-Madness", which is introduced by the compiler as the English equivalent of *Furor Uterinus* and is defined as follows:

(15) Furor Uterinus: Womb-Madness; when Women are mad by reason of a disorder in the Womb. See the Chapter of that Disease.¹⁴

As an alternative, an explanatory gloss or definition of sorts was provided, either by pivoting it around a classificatory term (e.g. ALTERATIVES, example 6 above, and ELIPHANTIASIS, which are described as a type of medicine and a type of disease, respectively), or by filling it with key medical terms (as in the case of CHOLLICK and MATTER) or by writing purely encyclopedic definitions (e.g. OPTICKS and SAL-PRUNELLAE):

- (16) *Eliphantiasis*: a leprous disease, which makes the Patients skin like the Hide of an Elephant.
- (17) *Chollick*, pain and griping of the Gut *Colon*; and because the pain proceeding from the Stone, is very like thereunto, it is called the Stone-Collick.
- (18) *Matter, or Quittor*: a snotty kind of filth which comes out of Imposthumes when they break, and out of the Ulcers when they are in a good way of cure.
- (19) *Opticks*: a Part of Natural Philosophy (though falsly reckoned for a branch of the Mathematicks) opening all the Mysteries of sight, and the reasons of the Deceptions, or mistakes thereof, and teaching to make augmenting Glasses, mutiplying Glasses, Perspective Glasses, burning Glasses, &c.
- (20) *Sal-prunellae*: salt-peter purified with Brimstone Clean white salt Peter is as good for use, only the Chymists love to mend *Magnificat* and many times take great paines to little purpose.

While most entry-words are immediately followed by their translational equivalents or definitions, the compiler sometimes resorts to some less

¹⁴ The so-called 'Madness from the womb' is discussed in Berrios (2006).

orthodox structures. In the following examples, for instance, the semantic connection between the difficult entry-word and its easier equivalent is made explicit by using such redundant linking elements as "that is" or "signifies":

- (21) Infuse: that is, steep.
- (22) *Stupid*: that is benummed, besotted, hath no feeling or sense, blockish.
- (23) *Opiate* signifies an Electuary: properly it is put for Venice Treacle, Mithridate, Diascordium, &c. which have Opium in them: from whence the name is derived. But secondarily, it signifies any Electuary or Antidote made up in such a body as Treacle, &c. though it have no Opiate in it.

Moreover, when the compiler is at a loss to define a given term, he may also recur to such definitional structures as "is/are that which", "is/are when", which, although not completely acceptable, can help convey the meaning:¹⁵

- (24) *Morbifical*, or *Morbifick matter*; is that which is the principal cause of any Disease.
- (25) *Cupping-glass,* is that which Physitians use to draw out Blood with Scarrifying of the Skin, Glasses fastened with lighted Tow or Flax.
- (26) *Distillations by descent*: are when the Liquor which comes from the Materials stilled, doth not rise up above the said Materials, as in ordinary distillation; but falls down under the Materials stilled, which are therefore laid upon a Grate, that the bottom of the Vessel may be empty, and free to receive the distilled Liquor.
- (27) *Luxation*: is when one Joynt is loosned from another.

Besides these minor inconsistencies on the compiler's part, the glossary also presents some lexicographic mistakes,¹⁶ which include inaccurate, if not utterly wrong, definitions, as is the case with JUGULAR VEINS, which pertain to

¹⁵ Incidentally, these definitional structures are still sometimes used in present-day learner's dictionaries (cfr. Atkins – Rundell 2008: 444).

¹⁶ McConchie briefly discusses this problem and states that "This physical dictionary itself is, frankly, rather messy" (2019: 70).

the neck rather than the throat, and ANUS, for which *fundament*¹⁷ is no proper synonym (at least, technically speaking):

- (28) *Jugular Veins*: that is, the Throat Veins. See *Veslingus* Anatomy in English.
- (29) Anus, the Fundament.

Moreover, while it is fairly common and certainly right for some entries to refer to others, or for some definitions to be complemented by a reference to a chapter in *The Practice of Physick* or even to another medical book, it is a lexicographic flaw on the compiler's part when the other entry referred to is spelt in a different way (e.g. ECLEGMA, which refers the reader to LAMBITIVE, which is actually spelt as "Lambative") or when a given entry simply refers to another book without providing any attempt at a definition (e.g. ELECTUARY):

(30) *Eclegma*. See Lambitive.

A Lambative or *Lohoch*: is a medicine to be lickt from a Liquoris stick, and to be swallowed softly down, being chiefly ordained for the Lungs.

(31) *Electuary*: See the *LondonDispensatory*.¹⁸

Finally, another lexicographical mistake of sorts is represented by the repetition of an entry in the wordlist, as is the case with the verb ASTRINGE, the nouns DILATATION and SUPPRESSION, and the adjective LIVID, which are found twice in *A Physical Dictionary*, at a short distance from one another and sometimes having partly different definitions:

- (32) Astringe: bind, fasten, close;[...] Astringe, to bind.
- (33) *Dilatation*: widening;[...]*Dilatation*: widening, opening.

¹⁷ See *OED*, s.v. Anus and Fundament, 2.

¹⁸ Still, A Physical Dictionary includes the entry "Electuaries. Medicines made up of Conserves of Flowers or Herbs; to which is added some sweet Spicy pouder for the most part, and so with Syrup it is made up in the form of Mithridate or Treacle." See also the entry OPIATE, reproduced as example 23.

- (34) *Suppression*: stoppage; [...] *Suppression*: stoppage.
- (35) *Livid*: black and blew;[...]*Livid*: black and blew, Lead-coloured.

While this kind of mistake is certainly not uncommon in early modern dictionary-making, it may provide an insight into how the glossary was compiled. Indeed, this imprecision, together with the fact that entry-words are only listed in first-letter alphabetical order, suggests that the compiler most likely went through the translation of *The Practice of Physick* probably after it had been printed (as some entries refer to specific pages in the book, e.g. DE GUTTETA)¹⁹ and, while reading it page after page, he listed and defined the words worth including in the glossary by writing them on a number of sheets of paper, possibly one for each letter of the alphabet. And sometimes, when he encountered a difficult word for the second time, the compiler forgot having already included it in the wordlist and added it again.

This interpretation is also supported by the fact that some definitions seem to reproduce word-for-word or just slightly rephrase the explanations which had been introduced in the text itself, as a sort of in-text glossing, to render it more comprehensible. The analysis of a sample section of *The Practice of Physick*, indeed, revealed that many technical words are made clear in the text itself through the traditional means of doublets, which were not present in the Latin source text, and are sometimes either copied verbatim or closely imitated in the glossary, as is demonstrated by the following examples:

- (36) The Optick Nerves are many waies affected, but chiefly by obstruction or stoppage, astriction or binding, and by solution of continuity. (Culpeper et al. 1655: 62)
 Obstruction stopping. Astriction: binding, knitting together.²⁰
- (37) "Of Ophtalmia, *or Inflamation of the Eyes*" (Culpeper et al. 1655: 78) *Ophtalmy*: an Inflamation of the Eyes, causing soreness and redness.

¹⁹ *de Gutteta*: a Pouder used in Falling-sickness and Convulsion of Children by the French. It is described page 33. at the bottom.

²⁰ The glossary also includes the variant form "Adstriction: binding together, shutting up."

- (38) "There is also another difference taken from the immediate cause, which is defluxion, or congestion, that is, gathering of humors" (Culpeper et al. 1655: 78-79) *Defluxion*; the same with Distillation: also a running together of Humors into any part, causing pain or swelling, &c. *Congestion*; a gathering together or heaping up.
- (39) "If the pain be intollerable, you must fly to Narcotick or stupifying Medicines, which you must use sparingly, and with good advice" (Culpeper et al. 1655: 82)
 Narcotick medicines: stupefying medicines: that dull the sence of feeling, and cause profound sleep.

The close reading of the sample section also showed that most technical terms which are made use of in the translated text are included in the glossary, albeit occasionally with slightly different spellings:

(40) "The Dilatation of the Pupilla, which is a hole in the Uvea Tunicle, by which the Species of Objects pass into the Eye" (Culpeper et al. 1655: 74)

Pupil of the Eye: is the middlemost round circle, which we commonly call, *the sight of the Eye*, and which in Cats, is seen to widen and contract it self.

Uvea tunica: a coat of the Eye, resembling the skin of a Grape, from whence it is named. See *Veslingus* Anatomy in English.

However, some terms which might be expected to be listed in the glossary, by reason of analogy with others, are actually left out, and for no apparent reason. Indeed, while *corrode, corroding* and *corrosion* are all present both in the text and in the glossary, the same cannot be said for all lemmas: *repelled, repelling* and *repellers* are all used in the translation, but only the first two are listed in the glossary.

4. Concluding remarks

Despite a few shortcomings, namely variant spellings, repetitions, and somewhat inaccurate definitions, *A Physical Dictionary* can be considered a useful tool for the literate but not highly educated readers of *The Practice*

of *Physick* and similar works for the same target readership. The compiler's choice of limiting the wordlist to medical terminology and to the medical acceptation of more general words, and his strong preference for short (often, one-word) definitions made this glossary a useful addition to Rivière's book in English, as it provided a solution of sorts to what must have been the readers' main difficulty in understanding such texts, namely technical and specialized vocabulary. Indeed, the glossary was included in all the following editions of the book (six of them, published between 1658 and 1678 - clear evidence of its editorial success), and in some of them it was placed at the beginning of the book, right after the table of contents. Moreover, while the inclusion of encyclopedic material might fall outside the main purpose of the glossary, i.e. that of providing easier equivalents for the technical terms which could not be dispensed with in the translation (Culpeper et al. 1655: The Printer to the Reader), A Physical Dictionary nonetheless provides a further channel for knowledge dissemination, thus emphasizing the popularizing process which lies behind the concept of scientific and technical translation itself, and confirms Nicholas Culpeper's role in the movement towards the "democratization of learned medical knowledge" (Sanderson 1999: 5) - a growing trend interestingly also fostered, in this specific instance, by the other translators involved in the compilation, not to mention the printer Peter Cole.

REFERENCES

Sources

Bartholin, T.	
1641	Anatomia Ex Caspari Bartholini. The Hague: Adriani Vlacq.
Cawdrey, R.	
1604	A Table Alphabeticall, Contayning and Teaching the True Writing and
	Vnderstanding of Hard Vsuall English Words, Borrowed from the Hebrew,
	Greeke, Latine, or French London: Edmund Weauer.
Culpeper, N.	
1649	A Physicall Directory, or a Translation of the London Dispensatory Made by
	the College of Physicians in London. London: Peter Cole.
1653	Anatomy of the Body of Man: Wherein is Exactly Described Every Part
	Thereof, in the Same Manner as it is Commonly Shewed in Publick
	Anatomies. London: Peter Cole.

1657	A Sure Guide; or, the Best and Nearest Way to Physick and Chyrurgery:
	That Is to Say, The Arts of Healing by Medicine and Manual Operation.
	London: Peter Cole.
1663	Bartholinus Anatomy; Made from the Precepts of his Father, and from
	the Observations of all Modern Anatomists, together with his own. London:
	Peter Cole.
Culpeper, N.	– Cole, A. – Rowland, W.
1655	The Practice of Physick in Seventeen Several Books Wherein is Plainly
	Set Forth the Nature, Cause, Differences, and Several Sorts of Signs:
	Together with the Cure of All Diseases in the Body of Man. London:
	Peter Cole.
Oxford Englis	h Dictionary Online (OED Online),
	http://www.oed.com/, accessed April 2019.
Riolan, J.	
1649	Encheiridium Anatomicum et Pathologicum. Leiden: Adriaen
	Wyngaerden.
Rivière, L.	
1640	Praxis Medica cum Theoria. Paris: O. de Varennes.
Sennert, D.	
1628	Practicae Medicinae in Libri Sex. Wittenberg: Zacharias Schürer.
Vesling, J.	
1641	Syntagma Anatomicum Publicis Dissectionibus, in Auditorum Usum,
	Diligenter Aptatum. Padua: Paolo Frambotti.

GIOVANNI IAMARTINO and GIULIA ROVELLI

Special studies

Atkins, B.T. –	M. Rundell
2008	The Oxford Guide to Practical Lexicography. Oxford: Oxford University
	Press.
Barber, C.	
1976	Early Modern English. London: André Deutsch.
Berrios, G.E.	
2006	"Madness from the womb", History of Psychiatry 17, 223-235.
Considine, J.	(ed.)
2012	Ashgate Critical Essays on Early English Lexicographers. Volume 4:
	The Seventeenth Century. Farnham, Surrey: Ashgate.
Fissell, M.E.	
2007	"The marketplace of print". In: M.S.R. Jenner – P. Wallis (eds.)
	Medicine and the Market in England and Its Colonies, c. 1450 – c. 1850.
	Basingstoke and New York: Palgrave Macmillan, 108-132.
Görlach, M.	
1991	Introduction to Early Modern English. Cambridge: Cambridge
	University Press.

26

Iamartino, G.

2014 "Translators as wordsmiths: Lexical innovations in Harvey's *De Motu Cordis* in English". In: M. Sturiale – C. Nocera – G. Iamartino (eds.) *English Words in Time*. Milan: Polimetrica, 59-78.

Johnson, F.R.

1944 "Latin versus English: the sixteenth-century debate over scientific terminology", *Studies in Philology* 41 (2), 109-135.

Leong, E. – S. Pennell

2007 "Recipe collections and the currency of medical knowledge in the early modern 'medical marketplace'". In: M.S.R. Jenner – P. Wallis (eds.) *Medicine and the Market in England and Its Colonies, c. 1450 – c. 1850.* Basingstoke and New York: Palgrave Macmillan, 133-152.

McCarl, M.R.

1996 "Publishing the works of Nicholas Culpeper, astrological herbalist and translator of Latin medical works in seventeenth-century London", *Canadian Bulletin of Medical History* 3, 225-276.

McConchie, R.

2019 *Discovery in Haste. English Medical Dictionaries and Lexicographers* 1547 *to* 1796. Berlin and Boston: Walter de Gruyter.

Nevalainen, T.

"Early modern English lexis and semantics". In: R. Lass (ed.)
 The Cambridge History of the English Language. Vol. III. 1476-1776.
 Cambridge: Cambridge University Press, 332-458.

Pahta, P. – I. Taavitsainen

2004	"Vernacularization of scientific and medical writing in its sociohistorical context". In: I. Taavitsainen – P. Pahta (eds.) <i>Medical</i> <i>and Scientific Writing in Late Medieval English</i> . Cambridge: Cambridge University Press, 1-22.
2010	"Scientific Discourse". In: A. Jucker – I. Taavitsainen (eds.) Historical
	Pragmatics vol. 8. Berlin and Boston: Walter de Gruyter, 549-586.
Rinaldi, M.	
2018	"Organising pathological knowledge: Théophile Bonet's Sepulchretum
	and the making of a tradition". In: S. De Renzi – M. Bresadola –
	M. Conforti (eds.) Pathology in Practice. Diseases and Dissections in Early
	Modern Europe. Abingdon-on-Thames and New York: Routledge, 39-55.
Rovelli, G.	
2018	"'For the benefit of those who understand not the Latine tongue'.
	The vernacularization of medicine in late-seventeenth-century
	England", Expressio 2, 123-151.
Russell, K.F.	
1956	"Nicholas Culpeper. His translations of Bartholin, Riolan and
	Vesling", ANZ Journal of Surgery 26 (2), 156-159.

Sanderson, J.		
1999	Nicholas Culpeper and the Book Trade: Print and the Promotion of	
	Vernacular Medical Knowledge, 1649-65. PhD Dissertation. Leeds:	
	University of Leeds.	
Sauer, H.		
2009	"Glosses, glossaries, and dictionaries in the medieval period".	
	In: A.P. Cowie (ed.) The Oxford History of English Lexicography. Vol. I.	
	Oxford: Clarendon Press, 17-40.	
Schäfer, J.		
1989	Early Modern English Lexicography: Volume 1. A Survey of Monolingual	
	Printed Glossaries and Dictionaries 1475-1640. Oxford: Clarendon	
	Press.	
Taavitsainen,	I.	
2006	"Medical discourse: Early genres, 14 th and 15 th centuries".	
	In: K. Brown (ed.) <i>The Encyclopedia of Language and Linguistics</i>	
	(2 nd edn.). Oxford: Elsevier, 688-694.	
2009	"'My brother Ihesu Crist that is the principal leche': Religious	
	discourse in Middle English medical writing", Poetica 72, 59-76.	
2017	"Meaning-making practices in the history of medical English:	
	A sociopragmatic approach", Journal of Historical Pragmatics 18 (2),	
	252-270.	
2018	"Scholastic genre scripts in English medical writing 1375-1800".	
	In: R.J. Whitt (ed.) <i>Diachronic Corpora, Genre, and Language Change</i> .	
	Amsterdam: John Benjamins, 95-115.	
Taavitsainen,	I. – T. Hiltunen (eds.)	
2019	Late Modern English Medical Texts: Writing Medicine in the Eighteenth	
	Century. Amsterdam: John Benjamins.	
Taavitsainen, I. – P. Pahta (eds.)		
2004	Medical and Scientific Writing in Late Medieval English. Cambridge:	
	Cambridge University Press.	
2010	Early Modern English Medical Texts: Corpus Description and Studies.	
	Amsterdam: John Benjamins.	
2011	Medical Writing in Early Modern English. Cambridge: Cambridge	
	University Press.	
Taavitsainen, I. – P. Pahta – M. Mäkinen		
2006	"Towards a corpus-based history of specialized languages: Middle	
	English medical texts". In: R. Facchinetti – M. Rissanen (eds.)	
	Corpus-based Studies in Diachronic English. Bern: Peter Lang, 79-94.	
	I. – P. Pahta – M. Mäkinen (eds.)	
2005	Middle English Medical Texts. Amsterdam: John Benjamins.	
Thulesius, O.		
1992	Nicholas Culpeper, English Physician and Astrologer. New York:	
	St. Martin's.	

Tyrkkö, J.

 2009 "A Physical Dictionary (1657): The first English medical dictionary".
 In: R.W. McConchie – A. Honkapohja – J. Tyrkkö (eds.) Selected Proceedings of the 2008 Symposium on New Approaches in English Historical Lexis. Somerville, MA: Cascadilla Proceedings Project, 171-185.

Address: GIOVANNI IAMARTINO, Dipartimento di Lingue e Letterature Straniere, University of Milan, piazza S. Alessandro 1, 20123 Milano, Italy. ORCID code: http://orcid.org/0000-0002-7019-2592.

Address: GIULIA ROVELLI, Department of Law, Economics and Culture, University of Insubria, via S. Abbondio 12, 22100 Como, Italy. ORCID code: http://orcid.org/0000-0001-6282-4097.