When, in the seventeenth century, Arabic scholars such as Peter Kirsten, Vobiscus Plamp, Pierre Valier and Georg Welsch translated and published parts of the Canon directly from the Arabic, 'the context that made their work possible was the seventeenth-century flowering of Arabic studies rather than any developments in the world of medical learning.' In fact, in the seventeenth century the impact of Arabic medicine in Western European medicine, so large in the middle ages and into the renaissance, dried up.

Seventeenth-century England mirrored this situation even more clearly. English medicine had a few scholars in the sixteenth century like Linacre, Caius and Wootten to represent it amongst the humanists, and humanism had influenced the London College of Physicians which specified only Hippocratic and Galen for its examinations and excluded Arabic and medieval authors. By and large, Renaissance medicine came to England at second hand, in the form of popularisations and translations. Despite William Harvey (who after all was formed in Padua), English medicine was a relative backwater until at least the mid-seventeenth century. This, coupled later in the century with the rejection of tradition and authority in the form of Galenic, and hence Arabic medicine, and its replacement by chemical and mechanical/corporeal theories, means that a paper on the interest in Arabic medicine by seventeenth-century English medical writers will have to consist of bits and pieces dredged from a wide range of sources. What we are dealing with are the traces of a once influential medical system though, as M. B. Hall points out in chapter viii, there was a continuing interest in contemporary remedies used in the Middle East as opposed to classical Arabic medicine.

The sense of distance between Arabic medicine and English early modern medicine is very apparent. Arabic medicine was known to Europe in Latin translation; but English medical writers began to write in their own tongue. Thomas Phayre justified the practice:

For if Galen the prince of this art being a Grecian wrote in the Greek, king Avicene of Arabia in the speech of the Arabians, Celsus, Serenus and other of the Latins wrote to the people in the Latin tongue... What reason is it, that we should further mutter having among a few, the thing that was made to be common to all?1

Andrew Boorde in his Breviary of Health (1547) associated Greeks, Arabs and Latins with obscurity; writing in English was to be the key to understanding:

But for as much as old ancient authentic authors or doctors of physic, in their books, doth write many obscure terms, giving also to many and diverse infirmities, dark and hard names, difficult to understand, some and most of all being Greek words, and some and few being Arab words, some being Latin words, and some being barbarous words. Therefore I have translated all such

1. Andrew Boorde, Breviary of Health, 1547.

2. Nancy Siraisi has pointed out, this was the fruit of classical rather than Arabic scholarship.
obscure words and names into English that every man openly and partly may understand them. 7

The common link through Latin between Arabic and English writers was loosened largely by the vernacular and nationalist tendencies of English medicine. The very large number of medical books written in English in the seventeenth-century were not merely popularisations of academic, classically based, medical knowledge, but produced a new genre of medical writing which, by its huge output, came to dominate English medicine.4 One of its characteristics was an emphasis on English medicines for English bodies and minds. This nationalistic and essentially local point of view, implicitly hostile to Arabic medicine, was expressed early on by Timothy Bright in his Treatise Wherein is declared the sufficiency of English Medicines (1580) and plagiarised later in Nicholas Culpeper’s School of Physick (1659). 

Bright produced a sustained argument for English medicines. He admitted that foreign, exotic lands were commonly seen as the source of medicines:

But saith one, the East and West Indies, Arabia, Barbary, the Red Sea are the mines as it were, and the fountains of medicines; and Spain, Portugal and Venice the vents of such things and Navigation the means to obtain them.3

For Bright such remedies were ‘things rather of superfuous pleasure than necessary reliefs and serving rather for a certain pomp than for maintance of life’, (in fact, such remedies remained very popular—in 1704 Robert Pitt wrote that the ‘public has been grossly imposed on by the Arabian cookery of the natural medicines’, and complained of their expense and complexity).4

More specifically, Bright wrote:

Nay which is yet more absurd that the health of so many Christian nations should hang upon the courtesy of those heathen and barbarous nations, to whom nothing is more odious than the very name of Christianity? And who of malice do withhold from us such medicines, as they know most for our use? Whereupon the Turk denieth unto the Christians at this day the Terra Lemnia, a medicine to be preferred before the chief of those we persuade ourselves to enjoy. The corruption of their drugs, is it not so great, that in this light of all knowledge, scarce is one able to discern the right Bolus Armena from the oere of Apulia, or to discover the adulterating of ambreegree and musk. . . tamarinds are counterfeited with prunes. . . 5

Bright also found theoretical reasons for dismissing foreign medicines. Not only did individuals have different temperaments or complexions (balance of humours), but so did nations—a view held since the Hippocratic treatise Airs, Waters, Places:

Neither do I see why the medicines of India or Egypt should be laid upon us, more than the Indian or Egyptian diet, which is to eat lizards, dragons and crocodiles: for if the proper medicine doth always regard his proper adversary which causeth the disease (as no doubt it should do) then there being a great difference betwixt our humors and theirs, as much as in a manner as in betwixt the flesh of a crocodile and a tender capon, our medicines which are so to fit us, must needs be of another kind than theirs, which in our bodies not finding such humors and excrements, as that strange diet doth in the former must needs seize upon the very substance of our bodies to have somewhat to work upon: which painfull working especially of the purgers, causeth the common saying among the people to the great discredit of our art: there is not a purgation but it hath a smack of poison.6

The universalism of classical medicine, into which Arabic medicine was incorporated, was thus not only threatened by the loss of its universal language, Latin, but also by the doctrine of national remedies for each nation. As the use of the English language was justified by appealing to ancient examples (the Greeks wrote in Greek for Greeks etc.) so Bright justified his position by showing that ancient medicine had also been local (something which humanist medical writers had done implicitly when they discovered that the herbs of Dioscorides were not always those of North Europe):

The whole art of physic hath been taken partly from the Greeks and partly from the Armenians. And as the precepts of the art, so likewise the means and instruments wherewith for the most part the precepts of the same art are executed: which hath bred this error in times past, now by a tradition received, that all the duty of the physician touching restoring health, is to be performed by the same remedies, not in kind only, but even especially with those which the Grecian and Arabian masters used, who wrote not for us, but for their Greeks and Armenians, tempering their medicines to their estates.7

Bright shied away, at first, from concluding that the rules of medicine, as opposed to its remedies, were also limited and local: ‘their rules be as common as reason to all nations’. Yet a few sentences later he came close to it:

Galen saith in his first book of preserving health he giveth the rules thereof no more to Germans than to boars and bears, but to the Grecians, which declareth, they respected their own nation both in rule and medicine; whom also the Armenians in the same point followed.8

Bright’s position was an extreme one, but it does help us to understand why Arabic medicine was of no great interest to many English medical writers. The idea that only national remedies would cure a nation’s ills, was quite widespread. It can be found also in French seventeenth-century books on medicine for the poor (cheapness of remedies being an obvious result of such a view), and in the early seventeenth century literature coming from the American settlements where New England was portrayed as a place fit for English bodies and their temperaments, and as having similar herbal remedies.
to those found in England. The sense of distance from Arabic medicine was produced by the English nationalism of the period and by the conscious attempt to make medicine more available in terms of language, knowledge and remedies to a large number of people. However, this distance also applied to Greek writers. Many English writers on practical medicine gave an anonymous compendium, as it were, of the teachings of previous writers. Phayre, in his *Treatise of the Pestilence*, referred to very few authorities and only a few times (for instance, Dioscorides, p.49r; Constantine the African, p.52v; Galen, 55v; Monardus, 56v; Monardus, Ficino, 59r.) He cited Avicenna once:

Excess of women is exceeding perilous, but if ye cannot rule your self take good heed, ye do nothing afor the first digestion, and till nature doth provoke you, for every such excess weakeneth more the body, than if ye should be let blood forty times as much, as witnesseth Avicenna, and is cause many times of pestilence and death.17

The Arabic writers, together with the Greek, seem to have become sources for gnomic, semi wondrous wisdom, attesting through their persons not to whole bodies of doctrine but to isolated pieces of efficacious knowledge. Phayre, in the *Book of Children* (1530?) introduced the remedy for limbs that were cold and could not feel anything with: ‘And here is to be noted a wonderful secret of nature, many times approved, written of Avicen in his first Canon’ [do not heat the limb, put it in cold, clear water].18 To cure the appetite we have: ‘Raisis a solemn practitioner among physisians, affirmeth that he healed a great multitude of this disease, only with the practice following . . .’ Or again: ‘Henbane Avicen saith: is exceeding good to resolve the hardness of the stones by a secret virtue’.19 The tendency for English medical writers to write in an empirical rather than in a theoretical or rational vein probably added to the parcelling out of Arabic and Greek medical knowledge.

There were exceptions. Phillip Barrough in his *The Method of Physick* (1583) looked back, as did the title of his book, to Continental humanistic models. In his Preface Barrough mentioned Avicenna together with Hippocrates, Galen, Aegineta, Actius and Soranus as not being among the common physicians. Yet he was not sympathetic to the Arab writers, whom he saw as creating difficulties for the nomenclature and understanding of diseases. Here is a typical passage to illustrate the confusion of terminology:

Among this hard swelling kind of tumours are accounted the diseases called in the Latin tongue of the interpreter of Avicen, verrucar, which be swellings like unto little hillocks appearing on the skin, being called by the common sort porra. To this kind also may be referred myremecia . . . in which of our countrymen are called *pensiles verrucae and clavus also*, which in form is like a hard round pillar called of the Greeks *σπόρος* of Avicen they are called *almisanare, thymon* or *thyron*, representing the knobby tops of the heart thyme. Avicen seemeth also to have given it this name tisiam, or (as another translation hath it) tarseum.20

The topic of skin-diseases was in a state of confusion, but one can understand why Barrough wrote in the middle of this exercise in scholarship and untangling of words: ‘little credit is to be attributed to words or names, unless the matter be thoroughly discovered’, and, ‘we must not follow the names so much among the Barbarian and Arabian writers but the genuine and sincere descriptions of the things themselves’.21 This Baconian sentiment was to be echoed later by writers like Thomas Sydenham, and it reflects the way in which scholarship ceased to aid medicine, authority being replaced by observation.

Arabic medicine in England suffered two blows, apart from the general indifference of a backwater in humanist terms: its rejection by what humanist medical writers there were, which paradoxically kept it alive if only as a strawman against which a scholar-physician could pit his knowledge of Greek medicine, and the coming of a new empirical approach and novel theories (mechanical and chemical) which replaced Galenic medicine and its Arabic interpreters.

The second stage was by no means clear-cut. William Harvey told John Aubrey to ‘go to the fountain head and read Aristotle, Cicero and Avicen, and did call the neotericis shitt-breeches’.22 Harvey’s traditionalism is well known.23 He used Arabic authors (Avicenna and Averroes) in his *Anatomical Lectures* to illustrate a point: ‘Whence also exceeding smallness is a disease of the liver whose outward size according to Avicenna is shortness of the fingers’, or to set out a range of opinions as in the question of the number of lobes of the lungs.24 Harvey had read Avicenna’s *Canon*, probably in the Gerard of Cremona version, but his knowledge of Averroes may have been second-hand through references in works such as Bauhin’s *Theatrum Anatomicum* (1605) and Du Laurens’ *Historia Anatomica* (1599).25 In the *Lectures* the Arabs were seen just as any other body of knowledge to be deployed alongside the Greeks and the neoterics for teaching theory, illustrating a point, or for contradiction. They were fully part of the corpus of medical knowledge, even if not referred to all that frequently. This tone of acceptance is what one would expect of a pedagogical work. However, in *De Motu Cordis* and *De Generatione* there are hardly any references to Arabic medicine and nearly all of them are there in order to be contradicted. In anatomy and physiology the Arabs were not good starting points for research, for it was the Greeks, Aristotle and Galen, together with the sixteenth century anatomists who were seen by Harvey as worthy predecessors for the anatomist concerned with discovery. The Arabs were effectively by-passed.
More damaging, however, to the continued existence of Arab medicine in English medicine was Harvey’s declaration in De Motu Cordis that he was not concerned with the scholarly enterprise of citing numerous authors, and that his business was with observing nature rather than with reading books. The empirical approach of Harvey and his successors was hostile to the continued integration of scholarship with medicine, and hence to the continued interest in Arab medicine, just as Timothy Bright’s localism expressed the disappearance of a universal body of medical knowledge in which Arabic medicine had its place. The possible connections between the two processes should interest historians.

The total lack, as far as I can see, of any reference to Arabic writers in Thomas Sydenham’s works stemmed from the approach to knowledge represented by Harvey and the new science, of the seventeenth century. Sydenham hardly mentioned any authorities and he combined his scepticism of them with a reliance on personal observation:

In writing the history of a disease, every philosophical hypothesis whatsoever that has previously occupied the mind of the author, should lie in abeyance. This being done the clear and natural phenomena of the disease should be noted—these, and these only.25

Sydenham paid no attention to the history of his subject, apart from mentioning the preeminence of Hippocrates, he wrote generally only that ‘others have been conspicuous for their industry; men who, by attending to anatomy, to pharmacy, to the methodus medendi, have done their best towards enlarging the boundaries of medicine. . . . The praises of these I leave to better pens than my own.’26 The victory of the moderns was in the air, and when Sydenham’s attention was drawn to theory it was not to the shared humoral theory of the ancients and the Arabs but to the new mechanical and chemical philosophies, and to terms such as ‘fermentation’ and ‘ebullition’.27

With the coming of the new philosophies, Arabic medicine ceased to be of interest to ‘elite’, medical writers like Willis or Glisson. The former was generally sparing in his mention of previous authorities, whilst the latter, following the tradition of anatomical writers cited previous views in his Anatomia Hepatis (1654), but he jumped from the Greeks to the moderns with no mention of the Arabs.

In the more popular, downmarket, medical books influenced by the work of Paracelsus and Van Helmont there was a vestigial interest in the Arabs. They were associated with alchemy and astrological medicine. Early on, George Baker had given to the Arabs the honour of inventing the art of distillation. This was repeated by William Thaxter in 1679, whilst Salmon, in 1707, had translated from Latin ‘The Sum of Geber, Arabs, and included it

in his Medicina Practica.28 However, despite the Arabic connection with alchemy, Islamic physicians especially in the shape of Avicenna, were condemned along with Galen and his followers by those who tried to produce a new type of medicine based on chemical principles. Paracelsus had addressed his fellow physicians with:

Let me tell you this: every little hair on my head knows more than you and all your scribes, and my shoe-buckles are more learned than your Galen and Avicenna, and my beard has more experience than all your high colleges.29

And on the famous occasion of the bonfire of St. John’s Day in Basle he had ceremoniously thrown Avicenna’s Canon to the flames. Van Helmont also included Avicenna and the Arabs, in his rejection of traditional medicine:

I read the works of Galen twice, once Hippocrates (whose Aphorisms I almost learned by heart) and all Avicen, and as well the Greeks, Arabicans as moderna, happily six hundred, I seriously, and attentively read through . . . At length, reading again my collected stuff, I knew my want and it grieved me of my pains bestowed, and years. When as indeed I observed, that all books with institutions, singing the same song, did promise nothing of soundness, nothing that might promise the knowledge of truth or the truth of knowledge.30

The Arabs were thus caught up in the iatrochemists’ condemnation of Galenic medicine. Noah Biggs, whose radical Puritan reforms for English medicine in the Protectorate have been described by Charles Webster, styled himself ‘Chymiatrophilois’ and wrote of the ‘lovely face of chymistry’.31 He hardly mentioned Arabic medicine in his vituperative condemnation of the Galenists ‘(Galen, their Prince, hath not shown one medicine, that is not borrowed from empiricks)’, except when condemning the whole business of traditional medicine: ‘they read the voluminous books of Galen, Avicen and the interpreters’.32 This extreme hostility to Galenic, and hence Arabic medicine, is another reason for the decline of Arabic medicine in England.

There were still some dying embers. Walter Harris in his Pharmacologia Antic Empirica (1683) took a more Galenic approach; and when writing of the nobility of past medical practitioners he included the Arabs: ‘Mesue was son (some say nephew) of Abdelas king of Damascus and Avicenna that great writer was an Arabian Prince’. He referred to the passage in the Oriastrake concerning Van Helmont’s reading of Greek and Arabic authors:

But they all proved very unsavoury to his delicious or rather depraved palate: he concluded after all that there was no real knowledge but by inspiration and enthusiasm and fancied that he had no less than Raphael to inspire him.33

Culpeper and Blagrave in their remedy books made the occasional mention of the Arabs. Culpeper in the English Physician Enlarged (1655) conveyed a sense of distance when writing of the Arabs: ’Jakeps were first invented, as
I suppose in Arabia, and my reason is, because the word Julep is an Arabick word.\(^{34}\) Whilst Blagrave in his Supplement to Richard Culpeper’s English Physician (1674), unlike Culpeper, did refer to particular Arabic authorities but without specific citation of their works:

Divers have been the opinions of authors about the temperature of camphire: some take it to be hot because it is of such tenuity of parts. Rhasis saith, it is cold and moist and Avicenna saith it is cold and dry, and that it causeth watchings and wakefulness and quieteth the senses of those that are hot.\(^{35}\)

Another spark can be found in Gideon Harvey’s rambling diatribes against the medical profession. At one time he seemed to favour ancient medicine:

The ancient Greek and Arabian physicians, are now so much despised by the supposed accession and advancement of a new theory and Cortex-Steel practice, that in my opinion one certain part of Europe would in some tract of time want inhabitants were not a robust constitution and expectation the guaranties of health.\(^{36}\)

This was typically countered with his description of the ‘velvet flatcap’—physicians deciding to gather together all medical knowledge amongst which were ‘great forgetful readings of Arabian authors’, and ‘materials extracted out of Messes, Avenzoar, and what could be pick’d out of the rest of those Barbarian unpolish’d superstitious and incredibly ignorant Arabian (or rather mad rabious) impostors.’\(^{37}\)

There is little point in giving other bits and pieces to show that there was still some interest in Arabic medical writers. In general, what I have been describing is the victory of the moderns over the ancients, the triumph of the new science over the Aristotelian-Galenic medical world view of which Arabic medicine was a part.

The intensity of the fight meant that insight into the nature of Arabic medicine generally was lacking. There were certainly elements in Arabic medicine (as in Greek) which had analogies or even continuities with newer approaches. For instance, the Arabic descriptions of simple and compound drugs and their effects (with regional differences being emphasised) had similarities with the empirical attitude of the early Royal Society to the usefulness of remedies. Even more significant for the seventeenth century could have been the experimental alchemical approach which Jâbir and Rhazes had integrated into medicine; for, while Arabic medicine was apparently in decline, it was being echoed, albeit on a popular level, by the Paracelsian or ‘new’ chemical medicine which ostensibly had rejected it.

The upsurge of Arabic studies in seventeenth-century England associated with Edward Pococke, John Selden, Edmund Castell, John and Thomas Greaves and Thomas Hyde did not include an interest specifically in Arabic medicine, except for Pococke’s translation of a treatise on coffee and Castell’s Lecture on the merits of the study of Arabic as exemplified by the interpretation of the Canon of Avicenna (1667). In a sense, Arabic medicine, like Galenic medicine, was still too well known, still part of the life-blood of medical learning, and only when it was replaced by new approaches and theories, could Arabic medicine be studied historically.

POSTSCRIPT

Although lying strictly outside of our period John Freind’s History of Physick (1726) written to Richard Mead and Mead’s own work should be mentioned. Freind did view the Arabic writers from a more historical perspective, although we may disagree with his assessment of their writings: Arabic learning was wholly borrowed from the Greeks, their translations of the Greeks were ‘not only loose and luxuriant, but far from being faithful’.\(^{38}\) Freind moved from these gloomy generalisations to concede that ‘something may be glean’d out of this set of writers ... not to be met with anywhere else’.\(^{39}\) Freind also looked back at the career of Arabic medicine and summarised its rise and fall:

for many centuries they kept possession of the schools of Physick, and were magnified beyond all measure ... after the taking of Constantinople, a new turn soon followed, and these Arabians were as unreasonably decry’d. And since that time the fashion has been amongst a great many, to condemn and expel them in the gross, without examining their writings or comparing them with the Greek authors.\(^{40}\)

Freind could write as a historian, able to see overall patterns; but he was also a physician interested in the content of Arabic medicine. What he picked out were case histories, just as a modern doctor would find Hippocratic case histories easy to empathise with. Freind described, for instance, Rhasis ‘speaking of his own experience, and he relates not a few particular cases, and some very remarkable, which he was concern’d in himself’.\(^{41}\) Although Freind was not interested in humoral theory per se, he found not only the description of the disease but also the treatments used of interest in a practical medical sense. Arabic medicine still had a common link with eighteenth-century medicine in therapeutics and the practice of medicine.

Richard Mead was interested in Arabic medicine through his work on smallpox. He wrote that smallpox was not known to the Greeks, but had been described by Rhasis and he took the trouble to have Rhasis’ treatise on the subject translated from Arabic (a copy of a manuscript was made for Mead through Boerhaave). The translations were made by ‘Solomon Negri, a native
of Damascus, extremely well versed in all oriental tongues; the other John Gagnier, Arabic reader at Oxford'. As their two versions differed and Mead knew no Arabic he got Thomas Hunt 'Arabic professor' at Oxford to collate the two Latin translations and compare them with the original Arabic. What is significant is Mead's wish to have a translation direct from the Arabic, although he knew of three Latin translations of a Greek version of the treatise, but, as he explained, the Greek had not been translated directly from the Arabic but had come through a Syriac version. The translation was a product of the new expertise in Arabic in England. And as Freind also pointed out, the description of smallpox was original to the Arabs and clearly Rhasis' treatise held both historical and medical interest.

Mead and Freind took the Arabs seriously (Mead, for instance, described Arabian measures against plague). However, they were able to do so because they held radically different theoretical views from the Arabs. This allowed them to see the Arabic writers from a historical perspective, and the experience and interest that they shared with the Arabs in the stuff of medicine, patients and diseases, gave them the motivation to get involved in the study of Arabic medicine.

NOTES


6 Timothy Bright, A Treatise wherein is Declared the Sufficiency of English Medi-