News, Notes and Queries

A SPECULATION CONCERNING THE GRAIN IN CHAUCER'S *PRIORESS'S TALE**

THE catholicity of Chaucer's interests has always fascinated and confounded those who seek to trace the origins of the *Canterbury Tales*. Numerous studies, for example, have been devoted to explaining the miraculous grain in the *Prioress's Tale*, and these attest to the many sources literary historians have investigated in their quest to understand even the smallest details of Chaucer's great work. The purpose of this paper is to suggest other sources possibly influential in determining Chaucer's use of a grain in this context, and to remind those who study the Middle Ages of the wealth of ideas to be found in the rich garners of medieval medical texts.

The *Prioress's Tale* is the account of the appearance of the Virgin to a child whose throat had been cut. She asked him to sing a hymn in her honour, and to effect this miracle, placed what he thought to be a grain on his tongue. This object permitted him to sing, and the Virgin then promised that even when the grain was taken away, she would not abandon him. After an abbot removed it from the boy's tongue, the child, 'yaf up the goost ful softely'.[1]

Although several versions of this legend are known, only in Chaucer's account is a grain the object by which the Virgin performs her miracle. In other analogues, the effective agent is a lily, a precious stone, or a white pebble.[2] The question why Chaucer chose to describe the miraculous object as a 'greyn' has long perplexed students of the *Canterbury Tales*, many of whom have tried to find solutions by focusing on one of the diverse meanings of the word. It has been shown that rosary beads were called 'greynes' in Middle English, and that a particle of the consecrated Host also could have been so designated.[3] Several interpretations have been based on the fact that the word was frequently used as a synonym for kernel or seed. Thus, it has been suggested that Chaucer may have been influenced by the Seth-legend in which three seeds were

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[1] Me thoughte she leyde a greyn upon my tonge.
"Wherefore I synge, and synge moot certeyn,
In honour of that blisful Mayde free,
Til fro my tonge of taken is the greyn;
And after that thus seyde she to me;
'My litel child, now wol I fecche thee
Whan that the greyn is fro thy tonge ytake.
Be nat agast, I wol thee nat forsake.' "
This hooly monk, this abbot, hym meene I,
His tonge out caughte, and took awey the greyn,
And he yaf up the goost ful softely.
Geoffrey Chaucer, *The Canterbury Tales*, VII, 662–72 (B², *1852–*1862), (hereafter cited as *C.T.*) *in* F. N. Robinson (ed.), *The Works of Geoffrey Chaucer*, 2nd ed., London, 1957, p. 163 (henceforth cited as *Robinson*.)

[2] Carleton Brown, 'The Prioress' Tale', *in* W. F. Bryan and Germaine Dempster (eds.), *Sources and Analogues of Chaucer's Canterbury Tales*, New York, 1958, pp. 457–58.

[3] Sister M. Madeleva, *Chaucer's Nuns and other Essays*, New York, 1925, pp. 39–40.

placed under Adam's tongue at his burial.[4] Another thesis is that the cardamon seed, known as the grain of paradise, served as the Virgin's instrument in the *Prioress's Tale*.[5]

Among the most interesting theories, however, is perhaps the one most recently advanced. Boyd Hill, Jr., having found that in a series of medieval anatomical treatises the arteries are described as arising from a black grain in the heart, proposed that the 'nigrum granum' of the arterial figure in the *Fünfbilderserie* might be related to the Virgin's grain in the *Prioress's Tale*.[6] The passage Hill cited from the anatomical work reads, 'Haec est historia arteriarum quae procedunt ex corde. Et haec venae sunt quae pulsant, etenim principium processionis earum est a nigro grano, quod est intus in corde, in quo spiritus habitat.'[7] Hill's theory is based on his opinion that in the *Fünfbilderserie*, 'spiritus' could mean the medium between body and soul, and that therefore, the 'nigrum granum' placed, according to the anatomical text, at the point where 'spiritus' entered the arteries, could have served in the *Prioress's Tale* as the child's spirit temporarily restored so that he might sing in praise of the Virgin.[8]

Unfortunately, there are serious flaws in this argument. First, as Hill admitted, 'spiritus' in the *Fünfbilderserie* would seem to refer only to the material substance of respiration.[9] Furthermore, the crux of Hill's thesis that 'the properties of the "nigrum granum" of the *Fünfbilderserie* anatomical tradition could account for the powers attributed to the grain by Chaucer',[10] is unsubstantial. The only characteristics of the

[4] Walter W. Skeat first suggested this theory, see 'Notes to the Canterbury Tales' in his *The Complete Works of Geoffrey Chaucer*, V, Oxford, 1894, pp. 180 and 491; but John M. Steadman, in 'The Prioress's Tale and "Granella" of "Paradiso",' *Mediaeval Studies*, XXIV, Toronto, 1962, pp. 389–90, reviewed and elaborated on it.

[5] Paul E. Beichner, C.S.C., 'The grain of paradise', *Speculum*, 1961, **36**, 302–7.

[6] Boyd H. Hill, Jr., 'The grain and the spirit in mediaeval anatomy', *Speculum*, 1965, **40**, 63–73.

[7] Hill, loc. cit., p. 63. Hill's source for this passage is Karl Sudhoff's 'Abermals eine neue Handschrift der anatomischen Fünfbilderserie', *Arch. Gesch. Med.*, 1910, **3**, 362–63, 11. 32–35 (hereafter cited as 'Abermals'.) Sudhoff asserted that he had established the text cited above by critically comparing the *Fünfbilderserie* texts in five manuscripts; *Cod. lat. Monacensis 13002* (A.D. 1158), *Cod. lat. Monacensis 17403* (A.D. 1250), *Cod. Ashmol. 399*, Oxford Bodl. (A.D. 1292), *Cod. Dresd. C. 310* (A.D. 1323), and *Cod. Raudn.* (now Prague, University Library) *MS VI. Fc. 29* (A.D. 1399). Previously Sudhoff had published separately the text of the Dresden manuscript, and the texts and drawings of the two Munich manuscripts. In the Dresden manuscript, the passage in question reads, 'haec est ystoria arteriarum. quae procedunt a corde. et venae sunt quae pulsant. etenim principium processionis earum est. cor in dextra et de ipsa. procedit magna vena.' Karl Sudhoff, 'Der Text der anatomischen Bilder aus Prüfening (Prüfling) und Scheyern in weiterer handschriftlicher Überlieferung', *Stud. Gesch. Med.*, 1908, **4**, 6, 11. 24–27. The section on the arteries in the two Munich manuscripts begins, 'Haec hystoria arteriarum quae procedunt ex corde et haec venae sunt quae pulsantur, et iterum procedunt. Ab ea duae magnae venae. etenim principium processionis earum est a nigro grano quod est intus in corde eius quo spiritus habitat.' Karl Sudhoff, 'Anatomische Zeichnungen (Schemata) aus dem 12. und 13. Jahrhundert und eine Skelettzeichnung des 14. Jahrhunderts', *Stud. Gesch., Med.*, 1907, **1**, 56 (hereafter cited as 'Zeichnungen'.) Although Sudhoff indicated certain minor orthographic variations in his supposedly critical later edition, he did not clearly demonstrate, nor did Hill, that in the two earliest examples of the *Fünfbilderserie* treatise, only two large vessels are said to arise from the 'nigrum granum', and in a fourteenth-century copy of the text all mention of a black grain has been expurgated.

[8] Hill, loc. cit., p. 72.

[9] Hill, loc. cit., pp. 63–64. Aside from the initial invocation of the Trinity which appears in some manuscripts, the word 'spiritus' appears only twice in the *Fünfbilderserie*; once in the passage cited in n. 7 above, and again in the muscle section of the treatise where the word clearly refers to the inspiration and expiration of air, see Hill, loc. cit., p. 64, n. 6. Hill's citation is taken from Sudhoff's later edition, and it should be noted that in the earliest manuscripts, the muscles are described as two pairs, rather than two small muscles (that is 'pare', not 'parve'), see Sudhoff, 'Abermals', p. 365, 11, 109–11, and compare with Sudhoff, 'Zeichnungen', p. 58.

[10] Hill, loc. cit., p. 72.

'nigrum granum' given in the anatomical treatise are that it is black, that it is in the heart, and that from it proceed either two large arteries (according to the earliest extant manuscript copies), or all of the arteries. Chaucer included none of these qualities in his description of the Virgin's grain. Finally, since Hill did not demonstrate a connection between Chaucer and the *Fünfbilderserie*, there is no reason to suppose that one existed.

If Hill's thesis falls short of its goal, certainly his attempt to solve the mystery of Chaucer's miraculous grain by looking into scientific literature is worthy of that highest praise, imitation. That Chaucer, like most educated men of the fourteenth century, knew the principles of classical medicine is indisputable, and his knowledge of the prevailing medical thought of his day was convincingly established in Lowes's definitive study of Arcite's erotic malady.[11] Moreover, Chaucer was a master at putting old wine in new bottles, at finding new ways of making old stories interesting to his audience. It would not be surprising to find then, that while reflecting on how best to describe the treatment and cure of an injury, Chaucer drew from not only traditional Mariology, but also contemporary medical works.

To test this hypothesis, let us consider several passages in such works. Richard, a physician of the late twelfth or early thirteenth century,[12] reported that a child, who had suddenly lost the use of his tongue, was brought to a certain Master Salernitanus. The practitioner placed a castoreum under his patient's tongue, and the child was cured before a night had passed. Richard added that a woman suffering from the same malady was cured in the same manner.[13]

Castoreum or castor fibre, used until recently as an antispasmodic,[14] was a pill made from the viscous, fetid, yellow liquid found in two of the perineal glands of the beaver. This substance, highly prized by classical and medieval physicians,[15] was prescribed as treatment for a variety of complaints. The thirteenth-century Franciscan encyclopedist, Bartholomew Anglicus, observed, 'It is effective against many illnesses, for it is useful in treating epilepsy, and relieves cold maladies of the head, it frees the tongue in cases of lingual paralysis, and restores speech suddenly lost, if only placed

[11] John Livingston Lowes, 'The Loveres Maladye of Hereos', *Modern Philology*, 1914, **11**, 495–528.

[12] The exact dates of this author's life, as well as other data concerning him, are unknown. Conforming to the hypothesis set forth by Littré, Wickersheimer, and Talbot and Hammond identified him provisionally with Richardus Anglicus, see Emile Littré, 'Richard, médecin', in *Histoire littéraire de la France*, XXI, Paris, 1847, pp. 383–93 (hereafter this series will be cited as *H.L.*), Ernest Wickersheimer, *Dictionnaire biographique des médecins en France au moyen âge*, Paris, 1936, pp. 696–97, and C. H. Talbot and E. A. Hammond, *The Medical Practitioners in Medieval England*, London, 1965, pp. 270–71.

[13] *Practica, sive medicamenta Richardi, Cap. de Apoplexia*, in *MS. 73, Bibliotheque de l'Arsenal*, as cited by Littré, loc. cit., p. 390. A list of other manuscripts of this work is in Wickersheimer, op. cit., p. 697.

[14] Joannes Marius, *Castorologia explicans castoris animalis naturam et usum medico-chemicum . . .*, Augsburg, 1685, James Thacher, *The American New Dispensatory*, Boston, 1821, p. 171, and W. A. Newman Dorland, *The American Illustrated Medical Dictionary*, 21st ed., Philadelphia, 1947, p. 280.

[15] The beaver was hunted often purely to secure castoreum. The value of this sebaceous material combined with the difficulty of determining the beaver's sex externally seems to have given rise to the legend that the beaver, to elude capture, gelded himself by biting off these pear shaped glands, thus providing his hunters with their prizes and discouraging them from further pursuit. Pliny, in *Natural History*, Book XXXII, Chap. 12, ed. and trans. W. H. S. Jones, VIII, London, 1943, pp. 480–83, denied this story, but Isidore of Seville based his explanation of the word beaver on it, 'Castores a castrando dicti sunt. Nam testiculi eorum apti sunt medicaminibus, propter quod cum praesenserint venatorem, ipsi se castrant, et morsibus vires suas amputant', *Etymologiae*, Book XII, Chap. II in *Patrologiae cursus completus*, Series latina, ed. J. P. Migne, LXXXII, col. 437.

under the tongue, and allowed to dissolve there. It is effective in cases of general corporeal paralysis if cooked in wine with rue and sage, and if often imbibed, it excites, moves, and comforts the brain.'[16]

Lanfranc, the Milanese surgeon, who introduced Italian surgery to France toward the end of the thirteenth century, recorded his experience with a case similar to those described by Richard. In the Middle English translation of his work, Lanfranc's account reads, 'þan do þerto þis medicyn: ℞, grana[17]. vij. numero, recentis & lucidi euforbij, & take vij. figis & pare awei þe ryndis þerof & grynde hem wel togidere, & do þerto as miche raw hony & medle hem togidere, & make hereof þe maner of a letuarie; & hereof he schal take as miche as a bene, & leie it vndir his tonge, whanne he were fastynge/Wiþ þis medicyn þe abbot of seint victor was maad hool; for he miȝte not speke, & herwiþ his speche come aȝen.'[18]

A therapeutic agent comparable to the grain in the *Prioress's Tale* is found in each of these writings. The castoreum described by Richard and Bartholomew, and the bean-sized euphorbiaceous electuary Lanfranc compounded effected results similar to those achieved by the miraculous object in Chaucer's story. As no link between Chaucer and these writers can be demonstrated, however, their accounts serve only to direct our inquiry to other medical texts.

In his prologue sketch of the physician, Chaucer included a list of medical authors whose works were known by the model medical practitioner. The last names on this roll of some of the most significant figures in the history of medicine are those of three medieval medical encyclopedists, Bernard of Gordon, John of Gaddesden, and Gilbertus Anglicus.[19] Since Chaucer ranked these men among the greatest medical authorities, it is not unreasonable to suppose that he had read some of their writings. An examination of certain passages in their principal works tends to confirm this suggestion.

Although the last of the western medieval authors mentioned by Chaucer,[20] Gilbertus Anglicus was probably the senior member of the triumvirate, as his chief work, *Compendium medicinae*, is generally believed to have been completed around

[16] 'valet contra multa mala, nam epilepticis convenit, & subvenit contre capitis frigidas passiones, paralysim linguae solvit, & loquelam reddit subito ablatam, si tantum sub lingua ponatur & resolvatur, contra universalem corporis paralysim valet, si decoctum in vino cum ruta & salvia in potu saepius assumatur, excitat cerebrum, & commovet & confortat,' Bartholomaeus Anglicus, *De rerum proprietatibus*, Book XVIII, Chap. XXVIII, Frankfurt, 1601, p. 1044.

[17] Euphorbium is gum-resin obtained from the *Euphorbia resinifera*. 'Grana' in this context (exactly as in the Latin text, see below, n. 18), means not seed, but the smallest unit of weight. This definition for the word, and other examples of its use are in *The Middle English Dictionary*, ed. Hans Kurath and Sherman M. Kuhn, Ann. Arbor, Michigan, 1964, pt. G-3, p. 294.

[18] *Lanfrank's Science of Cirurgie*, Treatise III, Doctrine III, Chap. IV, ed. Robert von Fleischhacker, London, 1894, pp. 263–64. The Latin text reads, 'Et hec localis medicina. Rx grana. vi. numero recentis et lucidi euforbii; et vi. ficus siccas pingues inundas de corticibus: et stipite. pestentur peroptime: et addatur tantumdem mellis albi crudi: et omnia incorporentur: et fiat in forma electuarii de quo teneat sub lingua in ieiunio quantitatem fabe parve. Cum hac medicina fuit restaurata loquela domine abbatisse sancti Victoris ad ultimum: que propter lingue mollificationem non poterat verbum intelligible bene loqui. Addidi et hanc medicinam: et cito locuta est expedite'. Lanfranc, *Chirurgia magna*, III, iii, 4 in *Cyrurgia Guidonis Cauliaco et cyrurgia Bruni . . . Lanfranci*, Venice, 1498, f. 194*r*.

[19] Chaucer, *C.T.*, I(A), 429–34, in *Robinson*, p. 21.

[20] The three physicians whose names end Chaucer's list are often assumed to be of British origin, see *Robinson*, p. 662, but as Littré observed in his 'Bernard de Gordon', *H.L.*, XXV, p. 321, despite his cognomen, there is no evidence to show that Bernard was a Scot, and from all indications he was a native of France.

1240.[21] This work's great repute, especially among physicians,[22] was attributable, very likely, to the number and variety of remedies it contained. Illustrative of this characteristic was Gilbertus's discussion of paralysis of the tongue. Having divided his subject aetiologically, Gilbertus suggested the following treatment for lingual immobility caused by cold, 'Thereupon castoreum, balsam, and two parts each of anise, and theriac should be taken and formed into a chick-pea-like pill, and it should be held under tongue.'[23]

Some eighty years after Gilbertus finished his major work, John of Gaddesden composed perhaps the most popular of all medieval medical encyclopedias, the *Rosa medicinae*, generally known as the *Rosa Anglica*. Less scholarly than the *Compendium medicinae*, Gaddesden's treatise is believed to have been more widely read throughout the late Middle Ages.[24] In the *Rosa Anglica*, John maintained that loss of speech could be corrected by placing a castoreum under the patient's tongue and allowing it to dissolve. In the event that this remedy proved ineffective, the castoreum should be crushed, mixed with nasturtium juice, and rubbed on the tongue. Subsequently, speech would be restored either immediately, or within seven days.[25]

Neither as erudite as the *Compendium medicinae*, on which it was modelled, nor as popular as the *Rosa Anglica*, in which it is cited, Bernard of Gordon's *Lilium medicinae* also may be placed between the two chronologically. Begun at Montpellier in 1303, the *Lilium* was designed as a medical handbook for the laity,[26] and in consequence perhaps, Bernard's prescriptions seem more detailed than those cited previously. To remedy the same symptoms described by Gilbertus and John, Bernard specified that a small pill formed of wax and various medicaments should be placed on or under the tongue. For other ailments, such as blacktongue and disorders of the lingual nerves, Bernard recommended the preparation of assorted troches, all of which were to be held in the mouth until they dissolved.[27]

The inevitable conclusion arising from this survey of medical writings is that the deposition of a grain-like object on or under the tongue was commonly prescribed during the later Middle Ages for relief of various complaints, including deprivation of speech. The hero in the *Prioress's Tale* very likely manifested similar symptoms, and the therapeutic agent employed in this instance may well have resembled the castorea concocted by the medieval practitioners. If, as has been suggested, the

[21] Talbot and Hammond, op. cit., p. 59.
[22] Ibid., p. 60.
[23] 'deinde accipiatur castorei. balsamite, anis ii, tyriace ii, preficiantur et formentur pilule in modium ciceris. et sub lingua teneantur,' Gilbertus Anglicus, *Compendium medicinae*, Lyons, 1510, f. 165*r*.
[24] Talbot and Hammond, op. cit., pp. 148–49.
[25] 'Item pulverem casto, sub lingua teneat pa. quousque per se dissolvatur et prosumater et simstatium non loquatur tere castoreum. cum succo nasturcii et inde frica linguam et loquetur tunc vel infra septem dies,' John of Gaddesden, *Rosa Anglica*, Pavia, 1492, f. 155*r*.
[26] 'ideo confidens de domino scientiarum quedam conia facilia et utilia intendo ad utilitatem humilium pertractare: librum scilicet de practica compliare,' Bernard of Gordon, *Practica sive lilium medicinae*, Venice, 1496/7, f. 2*r*. In this, as well as in most of the printed editions, the date Bernard began to write the *Lilium* is incorrectly set forth. The proper date, July 1303, is preserved in many manuscript copies of the work. On this topic see Karl Sudhoff's 'Zur Schriftstellerei Bernhards von Gordon und deren zeitlicher Folge', *Arch. Ges. Med.*, 1917, **10**, 163–65, and my 'Dates in the printed editions of the *Lilium medicinae*', *Sudhoffs Archiv.*, 1965, **49**, 86–89.
[27] Bernard of Gordon, op. cit., f. 106*r*–107*r*.

Virgin's role in the story is that of a mother who uses medicine to treat her child,[28] her selection of a remedy recommended by the most prominent medical authorities could scarcely have been more appropriate. The cure would still have been considered a miracle, although based on medical principles. Moreover, by using this device, Chaucer would have appealed to the intellectual capacities of his audience, and thus would have attracted new interest into his retelling of a familiar legend.

In any event, an alternative answer to the problem posed by Chaucer's use of the word grain may be found in medieval medical writings. A scholarly consensus re-regarding the meaning of this object may never be achieved, and it has even been proposed that Chaucer made his references to the grain intentionally vague in order to accomplish diverse literary and aesthetic goals.[29] Whatever his purpose, the ambiguity of this term has resulted in the study of materials hitherto ignored. Therefore, it may be hoped that the grain and other puzzling elements in Chaucer's works, like the perturbations of a known planet, will continue luring scholars to explore the unknown.

[28] Beichner, loc. cit., p. 307.
[29] Steadman, loc. cit., pp. 389–91.

YNEZ VIOLÉ O'NEILL

THOMSEN AND MYOTONIA CONGENITA

ASMUS Julius Thomas Thomsen (1815–1896) is a unique figure in medical history in that he made the first definitive description of a disease entity, myotonia congenita, from which he suffered and which could be traced through five generations of his family. Thomsen himself believed that the first description of myotonia had been made by Charles Bell in 1830 in his work *The Nervous System of the Human Body*. Neurologists now seriously doubt whether Bell was referring to the same condition, since his account is more applicable to narcolepsy (Bell and Purdon Martin 1947).

Thomsen was born in Brunsholm in Denmark which has since become part of Germany. He studied medicine at Kiel, Copenhagen and Berlin and qualified in 1839 after presenting his thesis on dipsomania. He finally settled in practice in Kappeln where he was also a member of the Board of Health. He was a gifted lyric poet and several of his poems were set to music by Marschner. Some of these contain references to his affliction which is disguised under the terms 'gout' and 'rheumatism' (Hirsch 1934). In Casper's *Quarterly Journal* (1865–66) he wrote a short contribution on abortion and upon the toxic effects of camphor. In an earlier paper in Oppenheim's *Medical Journal* (vol 47) he wrote an article on 'Cinchonium Sulphuricum'. This was a strange coincidence in that quinine was to become one of the specific therapeutic agents in the myotonic disorder which he was later to describe.

He was, however, 61 years old before he published his original description of the 'deep rooted' hereditary muscular disorder which affected him and some of his ancestors (Thomsen 1876). He says of his myotonia: