Early Science in New College I: Robert Plot on New College (1677)

ground because he included within his remit many scientific matters, and correspondingly played down the interests traditional to that genre, especially matters genealogical and heraldic. What interested Plot were rather springs, earths, fossils, fauna and flora, and indeed Oxford men who had made an effort to understand their environment or who had otherwise contributed towards natural philosophy. In the course of his book he mentions New College several times, and his anecdotes prove surprisingly interesting. I excerpt them below, organised into three groups. The first concerns the fabric of the college itself, namely the echo in the cloisters caused by their design; the erosion visible in 1677 in the stone used to build the chapel; and the original engineering feat that is the Long Room cistern. The second group concerns natural and artificial rarities in the gardens: a spring, some intertwined trees, and the elegance of the garden design itself. Finally, I include two tangential mentions, one of Sharrock's own experiments with grafting plants, probably conducted in the Botanic Gardens but possibly in the college too; and secondly an unusual use of the college archives to speculate about the original name of the Oxfordshire town Adderbury, against John Ray's belief that the town was named for the adder-shaped fossils, that is to say ammonites, commonly found there.

1. Echoes:

'At *New College* in the Cloysters, there are others of this kind [of echoes], to be heard indeed on all sides, but best on the *South* and *West*, because on those there are no doors either to interrupt or wast the sound: These return a stamp or voice, seven, eight, or nine times, which so plainly is occasion'd by the *Peers* between the windows, that on the *West* and shorter side (being but 38 yards long) the returns are more quick and thicker by much than on the *South*, where the primary object being above fifty yards removed from the *corpus sonorum* ['sounding body'], and the secondary ones proportionably further; the returns are much slower and more distinct, in so much that on that side the *Echo* will return a *dissyllable*, whereas on the *West* side you can have but a *monosyllable* only. If it be objected, that according to the rule, 38 yards are not enough for the return of a *monosyllable*; I answer, that though it may

where he claimed to have heard 56 reiterations after firing a pistol for the purpose.² Oxonian anecdotes about echoes often preferred to measure an echo in terms of how many feet of Latin verse it could repeat back clearly to the speaker.

2. Building stone:

'Beside the fire, it endures the weather, for of this mixed with another sort dug near *Whately*, on the *Worcester* road side, as it passes betwixt *Holton* and Sir *Timothy Tyrrills*, are all the oldest *Colleges* in *Oxford* built; as

pulchra meanti / Quod subtus terram caeca caverna capit.' – 'A fair portico has been constructed for the urinator, which a dark cesspit underground receives.' The antiquary

wood it self: which I have observed to have been done but very lately in *New College* Gardens, where the boughs of two different *Sycomores* are thus grown together, only by bearing hard on one another, and interchangably fretting away each others *bark*, and then closing up again at the rising of the *sap*.' (p. 170)

6. The art of the planter and gardener:

'As to the *Arts* relating to *Trees*, the chiefest are those of the *Planter* and *Gardener* making curious *Walks*, and *Topiary works* of them; such is the *Dial* cut in *Box* in *New College* Garden, the *Kings arms*, and the *College* coat of *arms* there, and at *Exeter College*; beside the other Garden *knots* of *Box* in both those *Colleges*, and in *Brasennose College* Quadrangle; to which add the *Guards*

'After the *Herbaceous Plants*, come we next to consider the *Shrubs* and *Subfrutices*, amongst which I met with one, perhaps I may say scarce heard of *curiosity*, though it have been an *Experiment* frequently performed many years since, not only by those excellent *Gardeners* and *Botanists*, the two *Bobarts*, Father and Son; but as I have heard also by the Reverend and Ingenious *Robert Sharrock* L L D, and Fellow of *New College*, who after many unsuccessful tryals of *grafting* one *Fruit* upon another, made at last a very pleasant *one*, and to good *advantage* too, upon different *Vines*, which in so great measure answer'd their hopes, that they have now signal proof in the *Physick Garden* of the *white Frontiniac* grafted upon the *Parsly Vine*, growing and bear|ing very well; and to this *advantage*, that they think the early ripening stock of the *Parsly Vine*, to conduce somwhat to the earlyer ripening of the *white Frontiniac*, naturally late.' (pp. 260-1)

Sharrock wrote about his experiments with grafting at greatest length in the second edition, dedicated to Robert Boyle, of his *History of the Propagation and Improvement of Vegetables* (Oxford, 1672), pp. 113-42; and see pp. 58-63 for a general discussion on the possibility of the transmutation of species. At one point (p. 139) Sharrock cites trials by date from 'my Diary'; it would be interesting to locate this diary of his experiments if it survives.

8. Use of the college archives to establish town names:

'There are also Orphiomorphit's [i.e. ammonites] found somtimes about Adderbury, about two miles from Banbury, but so very seldom, that though I were there often, I could meet with none of them; so that I cannot inform the Reader whether they are of any peculiar kind, different from what have been already describ'd, or no: However, that the Town has not its name from these stones (as Mr. Ray thinks) I dare confidently avouch, Adderbury being only the vulgar name: for in the Court Rolls of New College, (and other Instruments) to which the Lordship of the Town belongs, it is written Eabberbury, perhaps from St. Ebba the tutelar Saint of the Church.' (p. 110)

The college indeed holds early Court Rolls for Adderbury in the college archives, from 1386/7, with gaps in the earlier sequences.⁹

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⁹ Steer, Archives of New College, p. 347.