

Robert Sharrock and the *History of the Propagation & Improvement of Vegetables*

In an earlier Note, 'Early Science in New College III: John Tayler, College Gardener, d. 1686, and a Library of Botanical Books', William Poole gives several fascinating glimpses into gardening activities in New College during the seventeenth century.¹ We learn that Warden Pincke dug in the garden every morning, that the college employed a weeding woman, and that a bequest

This would not have been possible without numbered tallies which enabled the identification of the roots in question.¹² Numbered roots are a step towards making the world below ground knowable, which would otherwise be hidden from sight.

Seeking to observe the hidden world of plants is a recurring concern for Sharrock, for whom form was always linked to a providential function. He discusses the mystery of the sprouting seed, 'being beyond any ocular discovery of the most acute Searchers.'¹³ Windows in beehives are a measure to overcome such obstacles, also encountered when studying roots. In order to observe roots as they develop, he grows cuttings in glass vials: 'for prevention of the same hindrance the use of beds of a Diaphanous soyl, in as Diaphanous bounds, or plainly of water in a glasse, I have found a proper remedy'.¹⁴ He describes the orderly development of the roots, 'in very handsome order and proportions'. This is one of the experiments conducted indoors, bringing his activities closer to those of the laboratory.¹⁵

On different scales, a thorough understanding of location and place were important both for transplantation/propagation through seed and for grafting. The former requires knowledge of microclimates, a plant's natural habitat, as it were, and the latter requires an intimate knowledge of plant physiology. For an inoculation to be successful, the scion and the stock must be compatible with each other, particularly in terms of species and size. Following Hugh Plat, Sharrock suggests adapting a desk tool—a pair of sharpened compasses—and using it as 'an apt Instrument to cut away Bark for Inoculation, both for a true breadth and distance all at once; and so likewise with the same you may take off the bud truly to fit the same place again in the stock.'¹⁶ The different ways of propagation through grafting are collected on a single stock in the only figure in the book. As grafting required cutting, revealing the inner structure of a plant or tree, the effect was not unlike the dissections carried out in the anatomy theatre, with the significant difference that he worked with living organisms.

Plate from Sharrock,

, facing p. 60.

¹² Stephen Harris has recently discovered such a metal tally in a drawer at the Botanic Garden.

¹³ Sharrock, , p. 40.

¹⁴ *ibid.*, p. 55.

¹⁵ Sharrock conducted the experiment 'in a Room over my Laboratory'. Gardens often had 'elaboratories' attached to them. For an overview of seventeenth-century (e)laboratories, see Steven Shapin and Simon Schaffer,

Working in a garden stocked with plants collected from far and wide would necessarily foster an understanding of the relationship between a plant and its environment. Referring to Virgil, Sharrock states: 'For divers states of ground, and various Fermentations are required to different Plants, nor can any one Soyl indifferently and equally agree with all.'¹⁷ Plants requiring wet or damp conditions call for 'an artificial bog' like the one in the Physick Garden, 'artificially made by Mr. , for the preservation of Boggy Plants, where being sometimes watered, they thrive as well as in their natural places.' For other plants, their growing conditions can be adapted by either changing the environment , or by planting in pots which can be moved into the hot house or into the shade.

The best shades are made by thin well pruned Hedges drawn through the Garden or Nursery, or by Mats laid over them, and underpropt by a frame of light poles: But all Seedlings, Flowers, or other Plants that are kept in Pots, are readily removed into convenient shade at pleasure.¹⁸

The garden was thus not a static space, but was like the field a combination of movement and rootedness in a particular place. Interestingly, the walls and neatly trimmed box hedges which are so associated with the formal, decorative garden, themselves can become tools. For instance, a

