BOOK REVIEW





Elizabeth A. Athens, William Bartram's Visual Wonders: The Drawings of an American Naturalist

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It all began in a garden. John and William Bartram's Garden in Philadelphia, founded in the eighteenth century as a private space for botanical research, is now a public park. After a visit, art historian and curator Elizabeth Athens was intrigued to know more about the Bartrams - these eighteenth-century botanists, a father and son who grew, collected and exchanged specimens with Royal Society fellows in London such as Peter Collinson and John Fothergill. Most scholarship on the son, William Bartram, has concentrated on his texts, such as his Travels though North and South Carolina ... (1791–2), but there has been little scholarship concerning his illustrations, the subject of Athens's book. William Bartram's compelling and strange drawings of the flora and fauna he collected and grew, idiosyncratic landscape tableaux, that shifted perspectival viewpoints in intriguing ways suggested that here was a naturalist who 'figured' differently. Long dismissed as an American provincial whose unique renderings betrayed ignorance of developing standards in natural illustration, Bartram, Athens realized, was informed instead by a sophisticated aesthetic. This aesthetic drew from microscopy, a theoretical treatise by William Hogarth concerning the beauty of line and contour, vitalist materialism, and a keen understanding of the interconnectedness of the natural world. Via her analysis in her first monograph, Athens also helps us understand Bartram's place in the intellectual geographies of botanical exchange in the transatlantic world.

Athens first analyzes the use of perspective and scale in William Bartram's drawings. The use of the microscope in biological illustration by investigators such as Robert Hooke in the seventeenth century unhinged typical ideas of scale and perspective. Bartram utilized similar techniques in his work, his panoramic landscapes of the Florida coast zooming in and out of different fields of view – from a broad vista to a detailed drawing of a spider hunting a bumblebee, 'evoking microscopy's shifts between the expansive and the circumscribed' (p. 88). The complexity of nature's gardens and their creatures was never more evident.

William Bartram played not only with scale to convey a sense of the natural world, but also with a simultaneous multiplicity of perspectival views to re-create the vitalist flux in nature and show the salient characteristics of the specimen. His illustration of the great yellow bream (*Chaenobryttus glossus* or *Lepomis glossus*, known as the warmouth) presents a side view of the fish, but he also tipped the underbelly of the animal to offer a fuller view of its body (p. 160). His use of perspective construction was thus not 'strictly correct', but opportunistic. Bartram's artistic judgement went beyond a standardized empirical copy, to featuring fish not only as a taxonomic specimen of use in identification but as a shifting

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form, its shimmering surface emblematic of the variability of sensory experience. As I have shown, seventeenth-century illustrators such as Susanna and Anna Lister used similar strategies with their images of shells, tracing around them for the contours, yet in the same drawing tipping them up to reveal bumps or protuberances important to their taxonomic classification. Bartram, however, was also interested in the specimen's vital quality, which reflected more eighteenth-century sensibilities.

In utilizing these techniques, Athens convincingly shows that Bartram was influenced by Hogarth, particularly *Analysis of Beauty* (1753). Hogarth posited that an image representing no particular scene but composed of 'lights and shades only, properly disposed ... might still have the pleasing effect of a picture' (p. 74). A single-point perspective was not as important, as the picturesque did not necessarily have to cohere into a 'legible representation of three-dimensional space' (p. 74). Hogarth also directed artists to divide their compositions into three or five parts to please the eye, a precept that Bartram also followed in his illustrations. In her analysis, Athens adds to scholarship which shows that Hogarth's *Analysis of Beauty* was influential in British North America, shaping its aesthetic sense from art schools to the use of ornament on colonial trading cards.

Not only was Bartram more sophisticated artistically than scholars have previously acknowledged, but also he was aware of the debates concerning vitalism (creatures have inherent natural perception and an immaterial vital force or soul) versus materialism (creatures operate merely by principles of physics). He was particularly interested in vegetable sensibility, doing some of the first illustrations of the Venus flytrap and providing detailed descriptions of the morphology of the *Sarracenia* or pitcher plant. These animal-like plants, along with the discovery of cnidarians or hydra by Abraham Trembley, which could regenerate, challenged the chain of being and argued for vegetable sensibility – a vital materialism of living animate matter – as did Bartram himself in both his texts and his drawings.

At the end of his life, beset by diminished vision and limited mobility, Bartram retreated to his garden, where he continued to correspond with other naturalists, having gatherings that became known as the 'Botanical Academy of Pennsylvania' (p. 187). Visitors included George Washington. The garden was not standardized or manicured in the English style but rather was a series of ecological niches, the pond water murky to provide a habitat for amphibians. Just as Bartram's drawings uniquely reflected a vision of living nature, so did his garden. It all began (and ended) in a garden.

This beautifully designed book published by University of Pittsburgh Press is itself a garden of delights, of creatures and teeming life, of art, close seeing and sharp perspectives. Athens's work reflects the best of interdisciplinary scholarship exploring the interconnectedness of art and science in the early modern period. Its prose lucid, it is accessible to audiences from advanced undergraduates to more senior scholars. I highly recommend it.