Darwin's Experimentalism

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Abstract

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It is well known that Darwin conducted experiments at his home in Down on earthworms and plants, and then published his results in "On the Movements and Habits of Climbing Plants" (1865), "The Power of Movement in Plants" (1880), and "The Formation of Vegetable Mould" (1881). But few seem to regard these experiments as significant to the development of Darwin's thinking, and for obvious reasons. The experiments occurred long after the first statements of his theory in 1842 and 1844, and its publication in the *Origin*. In reading his major works, the *Origin* in particular, there seem to be little significance placed on experiments like those he would later conduct. In many ways Darwin's experiments seem to be mere afterthoughts – trivial albeit informative exercises.

Darwin's experimentalism, however, extends beyond the experiments that he conducted. In the preface to his *Origin*, Darwin tells us that he cannot give the facts on which his conclusions are based. A decade later he gives these facts in his *Variation of Animals and Plants under Domestication* (1868), facts based on that "grand experiment," domestic breeding. Here Darwin gives experimental evidence for first for the existence and force of natural selection, and second the laws of organic nature. That Darwin did not perform these experiments himself does not diminish their significance to the experimental nature of his approach.

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