

# THE POET AS BOTANIST

M. M. MAHOOD

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### THE POET AS BOTANIST

For centuries, poets have been ensnared – as one of their number, Andrew Marvell, put it – by the beauty of flowers. Then, from the middle of the eighteenth century onward, that enjoyment was enriched by a surge of popular interest in botany. Besides exploring the relationship between poetic and scientific responses to the green world within the context of humanity's changing concepts of its own place in the ecosphere, Molly Mahood considers the part that flowering plants played in the daily lives, and therefore in the literary work, of a number of writers who could all be called poet–botanists: Erasmus Darwin, George Crabbe, John Clare, John Ruskin and D. H. Lawrence. A concluding chapter looks closely at the meanings, old or new, that plants retained or obtained in the violent twentieth century.

M. M. MAHOOD is Emeritus Professor of English Literature, University of Kent, Canterbury. Her main areas of interest are Shakespeare and Third World literature, and, after her retirement, she pursued her interest in biology by completing an Open University degree course. Her books include *Bit Parts in Shakespeare's Plays* (Cambridge, 1992), *Shakespeare's Wordplay* (1957) and *Poetry and Humanism* (1950), and she is the editor of *The Merchant of Venice* in the New Cambridge Shakespeare series (new edition 2003).

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While my footnotes acknowledge my debt to a variety of printed sources, they make little or no mention of a small number of reference works to which I have had recourse so often that I want to put on record here my gratitude to their authors: A. G. Morton, for *History of Botanical Science* (1981); Geoffrey Grigson for *The Englishman's Flora* (1958) and Richard Mabey for its successor, *Flora Britannica* (1996); A. R. Clapham, T. G. Tutin and D. M. Moore for their *Flora of the British Isles* (1989 edition) together with Marjorie Blamey and Christopher Grey-Wilson for their *Illustrated Flora of Britain and Northern Europe* (1989); the contributors to *Flowering Plants of the World* (edited by Vernon Heywood, 1993); Franklyn Perring and Max Walters for their *Atlas of the British Flora* (1962); and John van Wyhe for the *Complete Works of Charles Darwin Online*.

Finally, a special word of thanks to Sarah Stanton of Cambridge University Press for her unfailing patience and encouragement while this book was in the making.

# A note on quotations

In quotations from works written before 1850, spelling, use of capital letters and italics, and to a lesser degree punctuation, have all been brought into conformity with modern practice. The few quotations taken directly from manuscripts are, however, given in their original form. Two writers have presented special problems. Erasmus Darwin distinguishes the topic words of his verse paragraphs by small capitals, and these I have kept. John Clare's idiosyncrasies of spelling and punctuation are preserved by his Oxford editors, but since I share Jonathan Bate's belief that Clare expected his publishers to normalise his spelling and punctuation, I have done the same with what I hope has been a light hand, and without any interference with the poet's grammar or wording.

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### Introduction

This is a book about the ways in which poets see plants. More exactly it is an attempt to record something of poets' perceptions of the richness and intricacy and life-giving importance of the plant world as these have been revealed in the generations since Linnaeus made botany big science. At least, that is its field, or scope. But like a plant, a book requires a supply of energy, a driving force; and to define that force I have to have recourse to a fragment of autobiography.

Many years ago, I came round from an emergency operation to find myself in a tropical hospital. Around me were all the mysterious comings and goings that belong to such an occasion. Then, as the bustle died down, one stranger more (the matron, I was later to discover) placed a small bowl of white flowers by my bed. 'Just watch those', she said before she, too, disappeared. So I lay and watched as the flowers changed — for they were Hibiscus mutabilis, blushing hibiscus — from white to shell pink, thence to a deeper pink, and finally, as night fell, to red. I meanwhile, transfused with fresh blood as they with pigment, came off the danger list. Next morning the bowl had gone, leaving my mind, now re-activated, busy with two questions. What was this empathy that during those fragile hours had caused me to feel I was being brought back to life by the flowers? And what made the blushing hibiscus blush?

The second of these questions, which implies both a 'how?' and a 'why?', was to prove the less difficult to answer. Although at the time molecular biologists had only just begun to explore the inner processes involved in this kind of colour change, it had been known for over a century that the hibiscus's blushing was triggered by a rise in temperature. Moreover I soon realised, since the year was 1960 and neo-Darwinism in its heyday, that the change was part of the plant's strategy for survival. The flowers which at daybreak still had the pallor that had attracted nocturnal moths and so enabled them to become pollinated had, by evening, become so inconspicuous as to merge into the darkness: the plant's struggle to reproduce

could now be taken up by those expanding flowers that were still unfertilised.

But there was a contradiction here. The colour change that had seemed to power my renewed hold on life turned out to be a sign of senescence; it heralded the death of the flower. This prompted more questions. Who was I to impose my feelings so imperiously on another organism? Was not my empathy just an instance, bred of rather dramatic circumstances, of the pathetic fallacy? On the other hand: was my curiosity about the evolutionary advantage to a flower of changing colour in its short life anything more than the intrusion of what Wordsworth called the meddling intellect into the recall of an experience that, at the time, had had about it an aura of the transcendent?

In short, my emotional response to this episode, and the intellectual curiosity it aroused, appeared to belong to what Kipling's character Kim called 'separate sides of my head'. So I should perhaps have been content, with Kim, to praise Allah for the gift of this duality. But we now know that what was a metaphor to Kipling has a basis in neurological fact, and that good, even great, things can be achieved when the separate sides of the head work together. Poetry is one of these things. A literary critic by trade, I flattered myself that the interplay of mental forces induced by my hibiscus was close to the nexus of thought and feeling poet—critics such as Coleridge and Eliot believed to be the fundamental poetic experience. But I was no poet; so there the matter had to rest.

What reactivated it, nearly three decades later, was a reading of Keith Thomas's Man and the Natural World. This richly documented study of the changes that, in the early modern period, overtook the ways in which human beings thought about other species fired me with the ambition to trace the effect of such changes upon literature and on poetry in particular: a project, I soon realised, to which further limits would have to be set. Writers' explorations of one of Nature's two major kingdoms would give me more than enough scope, and for two reasons I chose what poets had once called the realm of Flora. One was the realisation that the distance between the plant and the animal world gives definition and a measure of detachment to our experience of the former. However complex our perception of a plant may be, it is clear-cut in contrast with our perception of an animal, apt as that is to be mixed up with the hope (or fear) of a response and with a readiness to anthropomorphise such response if it is made. Plants do not wag their tails - even if scientists in earlier times, and pseudoscientists in our own, have sometimes entertained the notion that they are sentient beings. But though they pay us no attention, they deserve all of ours – and this was the second reason for my choice – because we owe to them our very existence. The Book of Genesis gets the order right: some group of organisms had to evolve a way of making the atmosphere oxygenrich, as plants can do, before animal life could radiate into its uncounted forms. And whereas it is possible to conceive of a world without animals – though there would be no place in it for Flora, since its flowers would be unremarkable – there could be no life for us and our sister-species in a world without plants.

Because these reflections brought back the questions raised long before by Hibiscus mutabilis I decided, though with many regrets at having to pass over such lifelong favourites as Coleridge, Hardy and Hopkins, to focus upon writers who also had some claim to be called botanists. Erasmus Darwin, typical savant of the Enlightenment, became the versifier of Linnaeus almost by accident, but he was also the author of a substantial work on plant physiology. George Crabbe, an enthusiast for the flowers of shore and salt marsh, devised his own classification of the plant kingdom a venture not wholly lost, as I hope to show, when he put the manuscript on his garden bonfire. John Clare, whose knowledge of wild flowers earned him a place of his own in George Druce's Flora of Northamptonshire (1930), at one time himself aspired to write a local flora, despite his mistrust of Linnaeus's 'dark system'. John Ruskin, after years of testing painters' fidelity to nature against his own observations of trees and their foliage, wrote and illustrated a book about alpine and Arctic plants. D. H. Lawrence, whose exactitude in observing flowers shows itself as clearly in his last poems as in the first one he wrote, studied botany at university level. Chapters on these five poets (using the word in the wide sense that allows Ruskin to be included) form the core of the book, and are unabashedly biographical: for each I have constructed a biographia botanica in the belief that this, in as much as it is built from some of the subject's best and happiest moments, is an aspect of his personal history that surely deserves to go on record. And with specialist students of one or other of these poets in mind, I have also, at the risk of some repetition, tried to make each chapter a self-contained whole.

My first and last chapters attempt to give a framework to these five studies, partly by exploring the relationship between biological thought and the poetic process, partly by carrying the story of our perception of the green kingdom beyond the centuries covered by Thomas's book, and initially into a period when, as he writes, 'to understand that the natural world was autonomous, only to be understood in non-human terms, was still an almost impossible lesson to grasp'. Though the replacement of

herbals – traditionally written for physicians – by detached and objective floras culminated in Linnaeus's *Species plantarum* of 1753, the 'natural' order that the Swedish naturalist believed to exist, and which such immediate successors as the Jussieus were soon to attempt to reveal, was almost universally understood to have been the part of the divine plan that had been put into effect on the third day of Creation and dedicated to human use on the sixth. In the next century, this confident certainty that all creatures great and small had been placed on earth for the benefit of mankind was sustained by Paley's argument from design, by the subjectivism of much Romantic poetry, and by the revivalist movements of both High and Low Church. Even in the 1920s, a child who asked why grass was green could be told, in all seriousness, that green was the most restful colour for human eyes.

That was some seventy years after The Origin of Species (1859), the work in which Charles Darwin was generally held to have effected the dethronement of man as lord of creation. With the famous Oxford debate in mind, we tend to think of that dethronement in terms of Homo sapiens' relegation to the animal kingdom. But even The Descent of Man (1871), in which Darwin squarely faced the human implications of his theory of descent by natural selection, was less incipiently subversive than the botanical studies by which he had already substantiated that theory. In the former, man was in the centre of the picture, so that unconvinced readers could always address an appeal to his unique powers of mind and perhaps of spirit too. But in the latter, man had been airbrushed out by the revelation that the 'beauty' he imputed to a plant, and most notably to the colour, form and scent of its flowers, was for the plant itself no more – or rather no less – than the means whereby its species might survive. It could be argued that, of all Darwin's writings, his six books of botany were the most effective prelude to a century in which evolutionary biology dominated the life sciences, in succession to the 100 years of collection and classification initiated by Linnaeus.

Plant studies in laboratory and field at first flourished in this changed context. But by the middle of the twentieth century, traditional, whole-plant botany was losing its prestige and appeal. Advances in molecular biology, which it has now become customary to symbolise by the discovery, just 200 years after *Species plantarum* had been published, of DNA's helical structure, were indeed epoch-making. But they also spelt the end of an epoch in which botany had steadily held its own, first in a systematical and later in an evolutionary context, as a science to which the man in the country lane could contribute; whereas molecular biology's exploration of

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organic processes, with its basis in atomic physics, was and in large part has remained a closed book to the non-scientist. Groups of field botanists may still be observed of an evening in corners of Swiss hotels, recording the names – many of them first bestowed by Linnaeus – of their day's finds; but every year they appear older and fewer. Where are their successors?

Up the mountainside, camping out to guard some clump of an endangered species, is one possible answer. Many more are poised over quadrats, sampling the diversity of plant communities. Many more again are at their computers, putting on national records the year's first unfolding of, say, oak or ash buds. Others are in the garden, planting whatever will allure bees and butterflies. For as I suggest in my closing chapter, the decline of both professional and amateur support for botany has been fully compensated for by the rise in prestige of ecology at all levels.

Here a clarification is called for. When 'ecology' is used in the following pages, it stands for the branch of biology concerned with the relationship of organisms to one another and with their physical setting. It does not mean what is sometimes distinguished as 'ethical' rather than 'scientific' ecology, namely, a concern over, or attempt to counter, man's damage to the natural world. This latter is, properly speaking, environmentalism: also a powerful force in modern poetry, as my final chapter illustrates. Of course the relationship between the two activities is close. Concern over vanishing species fuels much ecological research, and the findings of professional ecologists can lend power to the conservationist's elbow. But at the risk of seeming to cry over lexical spilt milk, I have tried on two counts to keep ecology and environmentalism distinct. One is regard for a discipline that in the last century had a hard fight for recognition from practitioners of the 'exact' sciences, because the dynamic changes to which the interrelationships of organisms are subject make quantification difficult. 'Ecology's not real science', I was once told, by the then editor of Nature. Ecologists were not helped in this struggle when the word was employed for an ethical or political stance that was rooted in New Age ideas about the 'unnaturalness' of scientific procedures - with the odd result that the name of one branch of biology was invoked to attack the life sciences in general.

My other reservation about the use of 'ecology', for a moral or political stance is prompted by the prominence now given to the term in literary studies. One of the first to make use of it in this context was Jonathan Bate in a book on Wordsworth called *Romantic Ecology* (1991), though this in fact turned out to be less about the poet's environmentalism than about the power of his poetry to restore us to the home in nature that we have lost: an idea that Bate has more recently, in *The Song of the Earth* (2000), developed

very subtly and persuasively into an entire 'ecopoetics' - an etymologically sound term. But he has not entirely abandoned the less justifiable 'ecocriticism', and this is to be regretted, in view of the fact that there has been produced in the meantime a whole body of writing that goes by this name and that I find alarmingly prescriptive. An ecocritic, runs a definition by one of the abler claimants to the title, is 'a person who judges the merits and faults of writings that depict the effects of culture upon nature, with a view towards celebrating nature, berating its despoilers, and reversing their harm through political action'. Although, as a committed Green, I hope I can berate Nature's despoilers with the best, I am appalled at the idea of political correctness being made the standard of literary judgement, because this can only result in an overvaluing of writing that has little merit beyond worthy sentiments, in this case about the harm man is doing to his home planet. A fair number of modern anthologies are made up of poems chosen on these grounds, and I suspect that by the turn of the next century some of them will have the faint charm of Victorian flower books which, in their day, reassured their readers that they had the right attitudes towards the natural world - even though those attitudes were very differently conceived.

This is not to deny that there are Green anthologies that reveal unexpected treasures. And I feel nothing but admiration for the way that leading poets such as Ted Hughes have been ready to write on request for environmental causes, despite realising that in the process their poetry itself was bound to suffer — or have even abandoned poetry altogether in favour of campaigning on environmental issues, as Judith Wright chose to do in later life. Nor have I engaged in this book with ecocriticism as a critical method, because criticism of criticism strikes me as a narcissistic and barren pursuit. Literary studies inhabit an environment that, unlike real ecosystems, has an infinite number of niches, from none of which there is competitive exclusion. I have only sought to add a little to its diversity, and diversity, all ecologists agree, is a very desirable thing.

### CHAPTER I

# Primroses at Dove Cottage and Down House

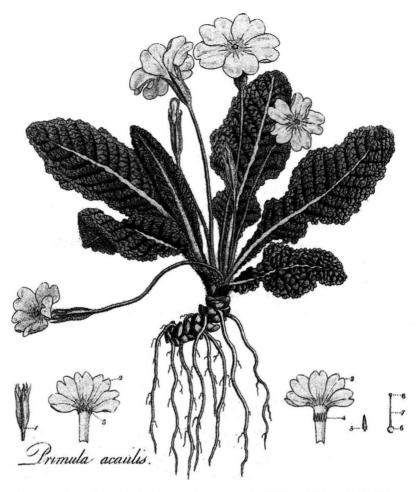
Primroses grow in some surprising places, thanks to the mice and ants that pick up and then drop their seeds. Soon after Wordsworth and his sister settled in Grasmere, they noticed one on top of a boulder where it (or its progeny) was to remain safely out of human reach for the next thirty years. And as in life, so in literature. In the third part of *Modern Painters* (1856) a primrose makes a sudden appearance that is inexplicable till we realise where it has come from. The passage affords a good starting point for this study because in it Ruskin is trying to distinguish between the ways in which poets see plants.

So then, we have the three ranks: the man who perceives rightly, because he does not feel, and to whom the primrose is very accurately the primrose, because he does not love it. Then, secondly, the man who perceives wrongly, because he feels, and to whom the primrose is anything else than a primrose: a star, or a sun, or a fairy's shield, or a forsaken maiden. And then, lastly, there is the man who perceives rightly in spite of his feelings, and to whom the primrose is for ever nothing else than itself – a little flower, apprehended in the very plain and leafy fact of it, whatever and how many soever the associations and passions may be that crowd around it. And, in general, these three classes may be rated in comparative order, as the men who are not poets at all, and the poets of the second order, and the poets of the first. (Modern Painters III, 'Of Many Things', chapter 12, § 8')

The primrose so casually introduced here is of course another Wordsworthian one. Less than forty years after the publication of 'Peter Bell: A Tale', Ruskin could count on his readers recognising a flower made famous by its insignificance: the primrose by a river's brim that, to Peter Bell, was a yellow primrose 'and it was nothing more'.

The allusion works well, but in other ways Ruskin's argument, which forms part of his discussion of the pathetic fallacy, strikes the modern reader as itself weakened by fallacies about the nature of perception. First

<sup>&</sup>lt;sup>1</sup> For an explanation of references to Ruskin's writings see p. 149.



I Primrose, *Primula vulgaris*, drawn and engraved by William Kilburn for William Curtis's *Flora Londinensis* (1777–8). In showing the two forms of flower and the bending back of the stalk once the flower fades it closely follows Curtis's text, which goes on to question Linnaeus's belief that primroses and cowslips are a single species, and to discuss the portrayal of both in English poetry. (Reproduced from the copy in the Victoria and Albert Museum.)

and foremost among them is the assumption that the primrose can ever be apprehended 'in the very plain and leafy fact of it', unaffected by the associations it carries and the emotions it arouses: that it is possible to see an object, as Ruskin's contemporary Matthew Arnold believed it could be seen, 'as in itself it really is', so that, in the words of the early computer slogan, 'what you see is what you get'; whereas our modern alertness to