John Ruskin, ‘Of Truth of Vegetation’ from *Modern Painters I* (1843).

**Key themes: environment, botany, trees, science, art.**

**Key locations: forests.**

**Possible activities: walking in forests; drawing or painting trees, twigs, boughs, leaves; visiting galleries to look at tree art (all best done with Ruskinian eyes).**

**Some notes to assist your reading**

This extract is one of a number taken from *Modern Painters I*, and it’s typical of that work’s desire to test the exponents of landscape art against the truths of environment. In that task, Titian, J.M.W. Turner, J. D. Harding, and a few other modern British artists are deemed capable of representing the ‘truth of vegetation’, whilst the Old Masters (Claude, Poussin, Rosa) are found not only wanting, but incapable of that feeling for nature that Ruskin believed inspired artists to go to nature and to reverently and accurately record what they find there. This extract will be particularly appealing to anyone with a particular interest in trees, botany, and natural history.

 ‘Of Truth of Vegetation’ is the final section of *Modern Painters*, and follows the pattern set in its earlier studies of the truth of skies, earth, and water. Ruskin uses his grounding in observation and science to provide a clear account of tree appearance (in a series of ‘laws’ governing the form of typical European species) and then judges whether a landscape art follow these realities. The chapter is therefore appealing in two separate ways – in its compelling and wonderfully precise descriptions of trees, and in his often hilariously violent denunciations of error in the tree art of various artists. What makes Ruskin unique is his ability to conjoin two realms that are normally ruled by separate specialists with little knowledge of the other field – and to make of them more than the sum of the parts.

 Where does this first volume of *Modern Painters* fit within Ruskin’s career? Before its publication, Ruskin had, from the age of 13, published poetry and scientific articles in magazines and periodicals, but his only significant prior work was *The Poetry of Architecture* (1837). Publishing *Modern Painters* under the pen-name, ‘A Graduate of Oxford’, Ruskin had only recently left those hallowed halls, but despite his deliberate anonymity, his name and reputation were rapidly established. A publishing sensation and a celebrity, he became the most important art critic of his day, despite the fact that he had no technical schooling in art history or art criticism. His experiences of art came from accompanying his father, a sherry merchant, around the country estates of Britain, visiting the National and Dulwich Galleries in London and some continental galleries during family holidays, but his knowledge of art would be transformed as it expanded in the decade that followed. By 1843, his engagements with natural landscapes were even more intensive and formative. *Modern Painters* is, therefore, not simply a staunch defence of Ruskin’s beloved J.M.W. Turner against hostile reviews in *Blackwood’s Magazine*, but also the conjunction of Ruskin’s greatest loves – art and environment. All of the [reading group] selections from *Modern Painters* exemplify the urgency with which Ruskin communicates his ideas, and the importance he places on observing, adoring, and protecting nature. Ruskin blends art, science, spirituality, and a passionate desire to educate in a work that shows why so many Victorian readers valued this most talented of ‘word painters’.

 The selection covers only the beginning of the chapter. If you wish to read on, you can access the whole chapter in [Volume 3](file:///C%3A%5CUsers%5Cfrostm%5CDocuments%5CRuskin%5CCW%5CCW%2003.pdf) of the *Library Edition of John Ruskin’s Works* (just type 646 into the number box at the top to get straight to the start). If you are inspired to read more of Ruskin’s uniquely inspiring work on trees, we would recommend the lengthy ‘Of Leaf Beauty’ section from [*Modern Painters V*](../../../CW/CW%2007.pdf)(1860), essentially a continuation of the theme begun seventeen years earlier in ‘Of Truth of Vegetation’, and developed into a thorough attempt to answer what Ruskin calls ‘the child’s question’: ‘Mamma, how does [a tree] grow its trunk?’ For those of an artistic bent, [*The Elements of Drawing*](../../../CW/CW%2015.pdf)(1859) is full of tree drawing exercises. The [Reading Groups] webpages contain lots of other links and suggestions for further reading if we have whetted your interest, but for now, settle down to be surprised and informed by what Ruskin is able to show you of the life of trees.

**Section VI, Of Truth of Vegetation – Conclusion**

**Chapter I, Of Truth of Vegetation**

**§ 1. *Frequent occurrence of foliage in the works of the old masters.***

We have now arrived at the consideration of what was, with the old masters, the subject of most serious and perpetual study. If they do not give us truth here, they cannot have the faculty of truth in them: for foliage is the chief component part of all their pictures, and is finished by them with a care and labour which, if bestowed without attaining truth, must prove either their total bluntness of perception, or total powerlessness of hand. With the Italian school, I can scarcely recollect a single instance in which foliage does not form the greater part of the picture; in fact, they

are rather painters of tree-portrait than landscape painters; for rocks, and sky, and architecture are usually mere accessories and backgrounds to the dark masses of laborious foliage, of which the composition principally consists. Yet we shall be less

detained by the examination of foliage than by our former subjects; since where specific form is organized and complete, and the occurrence of the object universal, it is easy, without requiring any laborious attention in the reader, to demonstrate to him quite as much of the truth or falsehood of various representations of it, as may serve to determine the character and rank of the painter.

**§ 2. *Laws common to all forest trees. Their branches do not taper, but only divide*.**

It will be best to begin as nature does, with the stems and branches, and then to put the leaves on. And in speaking of trees generally, be it observed, when I say *all* trees, I mean only those ordinary forest or copse trees of Europe, which are the chief subjects of the landscape painter. I do not mean to include every kind of foliage which by any accident can find its way into a picture, but the ordinary trees of Europe: oak, elm, ash, hazel, willow, birch, beech, poplar, chestnut, pine, mulberry, olive, ilex, carob, and such others. I do not purpose to examine the characteristics of each tree; it will be enough to observe the laws common to all. First, then, neither the stems nor the boughs of any of the above trees *taper*, except where they fork. Wherever a stem sends off a branch, or a branch a lesser bough, or a lesser bough a bud, the stem of the branch is, on the instant, less in diameter by the exact quantity of the branch or the bough they have sent off, and they remain of the same diameter; or if there be any change, rather increase than diminish until they send off another branch or bough. This law is imperative and without exception; no bough, nor stem, nor twig, ever tapering or becoming narrower towards its extremity by a hair’s-breadth, save where it parts with some portion of its substance at a fork or bud, so that if all the twigs and sprays at the top and sides of the tree, which are, and *have been*, could be united without loss of space, they would form a round log of at least the diameter of the trunk from which they spring.

**§ 3. *Appearance of tapering caused by frequent buds*.**

But as the trunks of most trees send off twigs and sprays of light under-foliage, of which every individual fibre takes precisely its own thickness of wood from the

parent stem, and as many of these drop off, leaving nothing but a small excrescence to record their existence, there is frequently a slight and delicate appearance of tapering caused in the trunk itself; while the same operation takes place much more extensively in the branches; it being natural to almost all trees to send out from their young limbs more wood than they can support; which, as the stem increases, gets contracted at the point of insertion, so as to check the flow of the sap, and then dies and drops off, leaving all along the bough, first on one side, then on another, a series of small excrescences sufficient to account for a degree of tapering, which is yet so very slight that if we select a portion of a branch with no real fork or living bough to divide it or diminish it, the tapering is scarcely to be detected by the eye; and if we select a portion without such evidences of past ramification, there will be found none whatsoever.

**§ 4. *And care of nature to conceal the parallelism*.**

But nature takes great care and pains to conceal this uniformity in her boughs. They are perpetually parting with little sprays here and there, which steal away their substance cautiously and where the eye does not perceive the theft, until, a little way above, it feels the loss; and in the upper parts of the tree, the ramifications take place so constantly and delicately, that the effect upon the eye is precisely the same as if the boughs actually tapered, except here and there, where some avaricious one, greedy of substance, runs on for two or three yards without parting with anything, and becomes ungraceful in so doing.

**§ 5. *The degree of tapering which may be represented as continuous*.**

Hence we see that although boughs may and must be represented as actually tapering, they must only be so when they are sending off foliage and sprays, and when they are at such a distance that the particular forks and divisions cannot be evident to the eye; and farther, even in such circumstances, the tapering never can be sudden or rapid. No bough ever, with appearance of smooth tapering, loses more than one tenth of its diameter in a length of ten diameters. Any greater diminution than this must be accounted for by visible ramification, and must take place by steps, at each fork.

**§ 6. *The trees of Gaspar Poussin*,**

And therefore we see at once that the stem of Gaspar Poussin’s tall tree, on the right of the La Riccia, in the National Gallery, is a painting of a carrot or a parsnip, not of the trunk of a tree. For, being so near that every individual leaf is visible, we should not have seen, in nature, one branch or stem actually tapering. We should have

received an *impression* of graceful diminution; but we should have been able, on examination, to trace it joint by joint, fork by fork, into the thousand minor supports of the leaves. Gaspar Poussin’s stem, on the contrary, only sends off four or five minor branches altogether, and both it and they taper violently, and without showing why or wherefore; without parting with a single twig, without showing one vestige of roughness or excrescence; and leaving, therefore, their unfortunate leaves to hold on as best they may. The latter, however, are clever leaves, and support themselves as swarming bees do, hanging on by each other.

**§ 7. *And of the Italian school generally, defy this law*.**

But even this piece of work is a jest to the perpetration of the bough at the left-hand upper corner of the picture opposite to it, the View near Albano. This latter is a

representation of an ornamental group of elephants’ tusks, with feathers tied to the ends of them. Not the wildest imagination could ever conjure up in it the remotest resemblance to the bough of a tree. It might be the claws of a witch, the talons of an eagle, the horns of a fiend; but it is a full assemblage of every conceivable falsehood which can be told respecting foliage, a piece of work so barbarous in every way, that one glance at it ought to prove the complete charlatanism and trickery of the whole system of the old landscape painters. For I will depart for once from my usual plan, of abstaining from all assertion of a thing’s being beautiful or otherwise; I will say here, at once, that such drawing as this is as ugly as it is childish, and as painful as it is false; and that the man who could tolerate, much more, who could deliberately set down such a thing on his canvas, had neither eye nor feeling for one single attribute or excellence of God’s works. […] Again, take the stem of the chief tree in Claude’s Narcissus. It is a very faithful portrait of a large boa constrictor, with a handsome tail; the kind of trunk which young ladies at fashionable boarding-schools represent with nosegays at the top of them by way of forest scenery.

**§ 8. *The truth, as it is given by J. D. Harding*.**

Let us refresh ourselves for a moment, by looking at the truth. We need not go to Turner, we will go to the man who next to him is unquestionably the greatest master of foliage in Europe, J. D. Harding. Take the trunk of the largest stone-pine, plate 25 in “The Park and the Forest.” For the first nine or ten feet from the ground it does not

lose one hair’s-breadth of its diameter. But the shoot broken off just under the crossing part of the distant tree is followed by an instant diminution of the trunk, perfectly appreciable both by the eye and the compasses. Again, the stem maintains undiminished thickness up to the two shoots on the left, from the loss of which it suffers again perceptibly. On the right, immediately above, is the stump of a very large bough, whose loss reduces the trunk suddenly to about two thirds of what it was at the root. Diminished again, less considerably, by the minor branch close to this stump, it now retains its diameter up to the three branches broken off just under the head, where it once more loses in diameter; and finally branches into the multitude of head-boughs, of which not one will be found tapering in any part, but losing itself gradually by division among its off-shoots and spray. This is nature, and beauty too.

**§ 9. *Boughs, in consequence of this law, must diminish where they divide. Those***

***of the old masters often do not*.**

But the old masters are not satisfied with drawing carrots for boughs. Nature can be violated in more ways than one, and the industry with which they seek out and

adopt every conceivable mode of contradicting her is matter of no small interest. It is evident from what we have above stated of the structure of all trees, that as no boughs diminish where they do not fork, so they cannot fork without diminishing. It is impossible that the smallest shoot can be sent out of the bough without a diminution of the diameter above it; and wherever a branch goes off it must not only be less in diameter than the bough from which it springs, but the bough beyond the fork must be less by precisely the quantity of the branch it has sent off. Now observe the bough underneath the first bend of the great stem in Claude’s Narcissus; it sends off four branches like the ribs of a leaf. The two lowest of these are both quite as thick as the parent stem, and the stem itself is much thicker after it has sent off the first one

than it was before. […]

**§ 10. *Boughs must multiply as they diminish. Those of the old masters do not*.**

But there are farther conclusions to be drawn from this great principle in trees. As they only diminish where they divide, their increase of number is in precise proportion to their diminution of size; so that whenever we come to the extremities of boughs, we must have a multitude of sprays sufficient to make up, if they were united, the bulk of that from which they spring. Precision in representing this is neither desirable nor possible. All that is required is just so much observance of the general principle as may make the eye feel satisfied that there is something like the same quantity of wood in the sprays which there is in the stem. But to do this there must be, what there always is in nature, an exceeding complexity of the outer sprays. This complexity gradually increases towards their extremities, of course exactly in proportion to the slenderness of the twigs. The slenderer they become, the more there are of them, until at last, at the extremities of the tree, they form a mass of intricacy, which in winter, when it can be seen, is scarcely distinguishable from fine

herbage, and is beyond all power of definite representation; it can only be expressed by a mass of involved strokes. Also, as they shoot out in every direction, some are nearer, some more distant; some distinct, some faint; and their intersections and relations of distance are marked with the most exquisite gradations of aërial

perspective. Now it will be found universally, in the works of Claude, Gaspar, and Salvator, that the boughs do *not* get in the least complex or multiplied towards the extremities; that each large limb forks only into two or three smaller ones, each of

which vanishes into the air without any cause or reason for such unaccountable conduct, unless that the mass of leaves transfixed upon it or tied to it, entirely dependent on its single strength, have been too much, as well they may be, for its powers of solitary endurance.

**§ 11. *Bough drawing of Salvator*.**

This total ignorance of tree-structure is shown throughout their works. The Sinon before Priam is an instance of it in a really fine work of Claude’s, but the most gross examples are in the works of Salvator. It appears that this latter artist was hardly in the habit of studying from nature at all, after his boyish ramble among the Calabrian hills; and I do not recollect any instance of a piece of his bough-drawing which is not palpably and demonstrably a made up phantasm of the studio, the proof derivable from this illegitimate tapering being one of the most convincing. The painter is always visibly embarrassed to reduce the thick boughs to spray, and *feeling* (for Salvator naturally had acute feeling for truth) that the bough was wrong when it tapered suddenly, he accomplishes its diminution by an impossible protraction; throwing out shoot after shoot until his branches straggle all across the picture, and at last disappear unwillingly where there is no room for them to stretch any farther. The consequence is, that whatever leaves are put upon such boughs have evidently no adequate support, their power of leverage is enough to uproot the tree; or, if the boughs are left bare, they have the look of the long tentacula of some complicated marine monster, or of the waving endless threads of bunchy sea-weed, instead of the firm, upholding, braced, and bending grace of natural boughs. I grant that this is in a measure done by Salvator from a love of ghastliness, and is […] in a sort allowable: but it is in a far greater degree done from pure ignorance of tree-structure, as is sufficiently proved by the landscape of the Pitti Palace, Peace burning the arms of War; where the spirit of the scene is intended to be quite other than ghastly, and yet the tree branches show the usual errors in an extraordinary degree; every one of their arrangements is impossible, and the trunk of the tree could not for a moment support the foliage it is loaded with. So also in the pictures of the Guadagni Palace. And even where the skeleton look of branches is justifiable or desirable, there is no occasion for any violation of natural laws. I have seen more spectral character in the real limbs of a blasted oak, than ever in Salvator’s best monstrosities; more horror is to be obtained by right combination of inventive line, than by drawing tree branches as if they were wing-bones of a pterodactyle. All departure from natural forms to give fearfulness is mere Germanism; it is the work of fancy, not of imagination, and instantly degrades

whatever it affects to a third-rate level. There is nothing more marked in truly great

men, than their power of being dreadful without being false or licentious.

 […]

 These laws respecting vegetation are so far more imperative than those which were stated respecting water, that the greatest artist cannot violate them without

danger, because they are laws resulting from organic structure which it is always painful to see interrupted; on the other hand, they have this in common with all laws, that they may be observed with mathematical precision, yet with no right result; the disciplined eye and the life in the woods are worth more than all botanical knowledge. For there is that about the growing of the tree trunk, and that grace in its

upper ramification, which cannot be taught, and which cannot even be seen but by eager watchfulness. There is not an exhibition passes, but there appear in it hundreds of elaborate paintings of trees, many of them executed from nature. For three hundred years back, trees have been drawn with affection by all the civilized nations of Europe, and yet I repeat boldly, what I before asserted, that no men but Titian and Turner ever drew the stem of a tree.