


THE BONES OF YOUR MOTHER: UNCOVERING RUSKIN'S MYTHOPOEIC SCIENCE

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uskin, in choosing to name his later-life geological work after the Noah of the Greek tradition, emphasises the importance for him, at that time in his life, of a mythopoeically based view of science. *Deucalion*, his "Collected Studies of the Lapse of Waves and Life of Stones," is dedicated to its eponym, a son of Prometheus and husband of Pyrrha. Deucalion, on the advice of his father, built a ship in which he and his wife survived the attempt by Zeus to destroy humankind by flood. Following the inundation of Hellas this came to rest on a high mountain—Mount Parnassus and others, according to different versions of the myth. Deucalion and Pyrrha were told by the oracle at the Sanctuary of Themis that to repeople the world they must, as they left the *temenos*, throw behind them the bones of their mother—the stones of the earth. This they did, and from the stones thrown by Deucalion grew men, and from those thrown by Pyrrha, women. From then on, Deucalion was both father of Hellen, the mythical ancestor of the Hellenic race and later, for Ruskin, giver of life to the stones of the earth in the latter's mythopoeic exposition of natural science. The stones of the earth having been given new life, Demeter, the earth mother representative of its fertility, rather than Gæa, personification of the earth itself, becomes, together with her daughter Proserpina, the chief protagonist in *Deucalion's* botanical parallel, *Proserpina*. The inherited wisdom of the world which Ruskin finds in Greek myth, and which he conflates with both Christian and literary traditions, lies at the very heart of his alternative scientific view of the world. This paper sets out to uncover the mythological basis of Ruskin's natural science.

Towards the end of *Deucalion* Ruskin looks back and reminds his reader that the work was originally intended to be a collection of his earlier writings on geology, both systematised and elaborated. Perhaps he does this because by then he had realised that this goal had not only not been achieved, but had become largely irrelevant: *Deucalion* had taken on a life of its own. Similarly, *Proserpina* was to be a similar collection of his earlier excursions into botany. "I am minded to collect," he had said, "what I have done in geology and botany . . . which fragmentary work—trusting that among the flowers or stones let fall by other hands it may yet find service and life—I have ventured to dedicate to Proserpina and Deucalion" (26: 97-98). These works, together with the ornithological *Love's Meinie*, comprise Ruskin's later-life consolidation of his life's interest in natural science. They were written between 1873, when *Love's Meinie* was commenced, and 1886, which saw the last contribution to *Proserpina*.

Ruskin's interest in natural science goes back to his earliest writings. These were published in Loudon's "Magazine of Natural History" in 1834 when he was fifteen years old and were titled "Enquiries on the Causes of the Colour of the Water of the

Rhine." As Ruskin (not without a certain sense of irony) says at the outset of *Deucalion*:

My natural disposition or these [natural] sciences would certainly long ago have made me a leading member of the British Association for the Advancement of Science; or . . . even raised me to the position which it was always the summit of my earthly ambition to attain, that of the President of the Geological Society. For . . . I began when I was only twelve years old a *Mineralogical Dictionary*, intended to supersede everything done by Werner and Mohs. (26: 97)

This was written, he says, in a crystallographic shorthand which he later found unintelligible.

In later years Ruskin was to regard the part of *Modern Painters* which included detailed analysis and description of mountain structure as "the most valuable and least faultful part of the book" (26: xxiv), and he began a republication of those sections of the work in 1884 under the title of *Montibus Sanctis*. This was mainly because they had received the approbation of the geologists. In his obituary notice of Ruskin the President of the Geological Society noted that "we must not forget his services to our science, in directing the attention of artists and others to the effect of geological structure, and of the characters of rocks, on scenery" (qtd Ruskin 26: xxiv), adding that **geologists might with advantage read these works**. It is interesting to contrast this attitude with that of the architectural world. For instance, in his obituary of Ruskin, the editor of the *Builder*, H.H. Statham, claimed that Ruskin did "not really appear to have had any fixed principles in regard to art; his only principle was that of saying the most effective and picturesque thing that occurred to him at the moment." Statham elsewhere said, in reference to a new edition of the *Stones of Venice*, that "if there are second-hand booksellers in the twentieth century, they will probably have a good many copies on sale of an aesthetic treatise in three volumes, which will be 'bad stock' only saleable for the beautiful execution of many of the illustrations" (qtd Brooks 327).

Just as the ideas explored in *Deucalion* have their origins in Ruskin's earliest prose writings, particularly in his "Considerations on the Strata of Mont Blanc" (also published by Loudon in 1834), so do those entertained in *Proserpina* find their genesis among the earliest of his writings. His "own interest . . . excited, very early in life, by the forms of fractures in the mountain groups of Savoy," (26: 275) and later expressed in "the outlines . . . given in *Modern Painters* of the Cervin, and aiguilles of Chamouni . . . demonstrable [he said in 1875] by photography as the trustworthiest then in existence," (26: 98) has its botanical parallel in a note to the *Poetry of Architecture* published in 1838. Here he advises those having an interest in flowers to "study, first Shelley, and next Shakespeare," for "in both writers we find the wild flower possessing soul as well as life, and mingling its influence . . . with the deepest and most secret streams of human emotion." Shakespeare "uses the symbolical effect of the flower . . . etherealising an impression which the mind naturally receives from the flower"; while in Shelley can be found the "natural influence" that allows flowers to "address the mind through the eye" (1: 157-58). This, it may be argued, is the earliest expression of what was to become Ruskin's "science of aspects." The concept finds expression in *Modern*

Painters where he claims that it is not appropriate to speak of the love of beauty as unscientific, "for there is a science of the aspects of things as well as of their nature"; it being important to note "that they produce such and such an effect upon the eye or heart as that they are made up of certain atoms or vibrations of matter" (5: 387).

Ruskin's science (with its references to the certainties of the previous century—of Linnaeus, de Saussure and von Humboldt) has been portrayed as no more than a hopeless rearguard action against Darwinism. Yet his personal dealings with Darwin were cordial, as noted by Cook and Wedderburn in the introductions to various of the volumes of the Library Edition where meetings between the two are described (Ruskin 19: xliv; 25: xlvi). And while he did not agree with much of Darwin, Ruskin accepted the inevitable truth of "aspects" of it. In his chapter titled "Athena Keramitis" ("Athena in the Earth") from the *Queen of the Air*, Ruskin proposes that "whatever the origin of species may be," the groups into which they fall "have distinct relationship to the spirit of man." They show "delightful evidence of having been produced by the power of the same spirit as our own" (19: 358). These facts are, he says, "in nowise antagonistic to the theories which Mr Darwin's unwearied and unerring investigations are every day rendering more probable. The aesthetic relations of species are independent of their origins" (19: 358n). Nor was he alone in the nineteenth century in rejecting at once both orthodox Christianity and scientific naturalism. As Dinah Birch has pointed out, there was a reaction in the second half of the century against science's seeming triumph in the hands of such men as Darwin, Huxley and Tyndall—a reaction which proposed a more spiritual, but not necessarily more Christian, interpretation of nature (Birch 182).

The later-life works of natural science have their basis in Ruskin's earlier "science of aspects," while their order and expression draw on the mythopoeic developments of some of his intermediate works, and it is from the outlook expressed in these that he draws the titles for his ventures in natural history. Why the dedications to Proserpina and Deucalion? "Why not rather to Eve . . . and to Noah?" Because, he says, "the myths of betrayal and redemption" are just as truly expressed in the pagan Proserpine and Deucalion as they are in the Judeo-Christian Eve and Noah, while "all four are together incomparably truer than the Darwinian theory." For, he continues, it may be taken as a basic principle of both science and literature that the feeblest myth outweighs the strongest theory because of its capacity for "recording a natural impression on the imaginations [alike] of great men, and of unpretending multitudes" (26: 98-99).

It was in a letter written in 1864 concerning the conformation of the Alps (reprinted in *Arrows of the Chace* [1880]) that Ruskin had first broached the legend of Deucalion. Speaking of the unvarying nature of denudation and deposition, everywhere and at all times, he notes that, in classical mythology, diluvial phenomena "gave weapons to the wars of Titans against Gods, and lifeless seed of life [that is the stones of the earth] into the hands of Deucalion" (26: 555). In their introduction to *Deucalion* Cook and Wedderburn point that in Ruskin's own copy of the book he had made notes for revision which would explain "the value of the myth of Deucalion as connected also with the story of Lycaon and of Philemon and Baucis"—other myths which have Zeus deluging the earth and invoking notions of betrayal, in the case of Lycaon, and redemption, in that of Philemon and Baucis (26: xlvi). From this, they surmise that for Ruskin the story of Deucalion, read by him in terms of natural theology, was "of the

Betrayal and the Redemption." The natural phenomena of denudation and deposition are read scientifically in terms of natural theology which gives life to the lifeless seed in the hands of Deucalion and Pyrrha. Ruskin conflates Greek and Judeo-Christian myth, natural theology and natural science in his mythopoeic elaboration of the science of aspects, which had been derived in the first instance from the studies of the aspects of nature as first discerned, according to him, by Turner.

Proserpina, subtitled "Studies of Wayside Flowers while the air was yet pure among the Alps and in the Scotland and England which my Father knew," was originally conceived in 1869 as "*Cora Nivalis*, 'Snowy Proserpine': an introduction for young people to the study of Alpine and Arctic wild flowers" (25: xxxiii). In Letter 88 of *Fors Clavigera*, published in 1880, Ruskin said: "I myself am in the habit of thinking of the Greek Persephone, the Latin Proserpine, and the Gothic St Ursula as of the same living spirit; and so far regulating my conduct by that idea as to dedicate my book on botany to Proserpina" (29: 385). The maiden Proserpina, Persephone, Kora, worshipped as *Kore*, was the daughter of Demeter and Zeus. She was captured by Hades while gathering flowers on the plains of Enna in Sicily. The reference which Ruskin chooses to use in his epigraph to the work is taken from *The Winter's Tale* of Shakespeare (4.4. 116-18): "Oh—Prosérpina! / For the flowers now, which frightened, thou let'st fall / From Dis's waggon" (25: 191). The intercession to Zeus by Demeter, the earth mother, led to Proserpina's returning from the underworld for part of every year, the well-known allegory of the seasons.

For Ruskin, "the rule of . . . Demeter, the earth mother, is over the earth, first, as the origin of all life—the dust whence we were taken: secondly, as the receiver of all things back at last into silence—'Dust thou art, and unto dust shalt thou return' [Genesis 3.19]." And, therefore, "as the most tender image of this appearing and fading life, in the birth and fall of flowers, her daughter Proserpine plays in the fields of Sicily, and thence is torn away into darkness, and becomes the Queen of Fate." She is the Queen, "not merely of death, but of the gloom which closes over and ends, not beauty only, but sin; and chiefly of sins, the sin against the life she gave: so that she is, in her highest power, Persephone, the avenger and purifier of blood,—'The voice of thy brother's blood cries to me *out of the ground*' [4.10]" (19: 304). As with *Deucalion*, there are shades of betrayal and redemption read in terms of a mythopoeic natural science.

Ruskin's *Proserpina* wonders first at the growth of plants, "at the first instinct of the stem . . . the instinct of seeking light, [and] of the root to seek darkness" (25: 318), and second at the beauty of flowers, not in terms of their functions, but of their aspects. But this work concerns itself above all with associating these aspects of growth and form and colour with humankind's associations with them. Ruskin's science is one which demands that objective examination be coupled with the imagination. It is an attempt to reconcile a disparity first addressed by him in the preface to the second edition the first volume of *Modern Painters*: "the difference between the mere botanist's knowledge of plants, and the great poet's or painter's knowledge of them." While "the one counts stamens, and affixes a name, and is content; the other observes every character of the plant's colour and form; considering each of its attributes as an element of expression" until "the flower is to him a living creature, with histories written on its leaves" (3: 36-37).

The beginnings of Ruskin's later-life investigations into natural science are to be found in the series of lectures which he delivered at Oxford in 1872 and which were published later that year as *The Eagle's Nest*. Here Ruskin finds Athena as the embodiment of the Greek Sophia—wisdom—governing the proper functions of both art and science. He finds "a far nobler Sophia" in an apprehension of an acquaintance with "the religions of dead nations" when brought to bear on natural phenomena, than in "the analysis of matter, or the measurement of space" in "abstract Science" (22: 119). The former he brings to bear in the ninth lecture of *The Eagle's Nest* titled "The Story of the Halcyon." According to Ruskin, "the natural history of anything, or any creature" divides itself properly into three branches. The first involves collecting and examining "the traditions respecting the thing, so that we may know what the effect of its existence has hitherto been on the minds of men." We should "secondly . . . examine and describe the thing . . . in its actual state, with utmost . . . veracity," and thirdly, "examine under [the] laws of chemistry and physics the matter of which the thing is made" (22: 245). It is the first, the mythological branch of natural history, which Ruskin finds of greatest significance, and which he uses to tell the story of the Halcyon, drawing from sources which range from Apollodorus to Plutarch.

The story of the Halcyon was to lead to further ornithological study. This was published in parts between 1873 and 1881 as *Love's Meinie*. "Meinie," as Ruskin explains in the Preface to the work, "is the old English word for 'Many'" when used in the sense of attendant persons (25: 13). He refers to Chaucer's translation of the *Romance of the Rose* and, more particularly, the affection for birds shown in the original French as well as in the sermons of St Francis and St Bernard and the similitudes from the birds in Juliet's orchard. Like *Deucalion* and *Proserpina*, this work is incomplete. It began life as a course of lectures on "Greek and English Birds," afterwards becoming "a handbook of English birds." In fact it is neither, but is rather a precursor and parallel of the conflationary method of *Deucalion* and *Proserpina*.

As has already been seen, Ruskin's earliest explorations were in geology and mineralogy (rather than in painting or literature), and his continued pursuit of these interests throughout his life, renders his contributions to study in this area the most conventionally acceptable of his scientific endeavours. In this context the tribute paid him on his death by the President of the Geological Society has already been noted. His method even in this work was that of the scientist of aspects whose concern is "to show . . . in what strength and beauty of form [a geomorphological feature] has actually stood since man was man, and what subtle modifications of aspect, or majesties of contour, it still suffers from the rains . . . or snows " (26: 113). Elsewhere he says that "while you may always obtain [from geologists] the most satisfactory information . . . respecting the congelation of the whole globe out of gas, or the direction of it in space," they cannot explain "the making of a pebble, or the running of a rivulet" (26: 244).

Thus, while Ruskin found all the work in *Proserpina* "merely tentative," he contrasted it with *Deucalion* which he described as "authoritative as far as it reaches, [it] will stand out like a quartz dyke, as the sandy speculations of modern gossiping geologists get washed away" (25: 413). In *Deucalion* he says that his "own studies of rock structure, with reference to landscape have led [him] to see the necessity of retreating to, and securing, the very bases of knowledge in this infinitely difficult science" (26: 197). Despite this, at the heart of these later-life studies in natural history

was that conflation with the inherited wisdom of the world which has already been noted. In this context, the incorporation in *Deucalion* of a lecture given at the London Institution in 1876 is significant: "The Iris of the Earth" in which Ruskin, in illustrating "the symbolic use of the colours of precious stones in heraldry," blends ideas and interpretations drawn from etymology, mineralogy, Christian and pagan mythology, literature, history and the theory of colour (26: 165). The epigraph of "The Iris of the Earth" is taken from Genesis: "And the gold of that land is good: there is bdellium and the onyx stone [Genesis 2.12]" (26: 165).

On one hand, Ruskin presents to his audience, a "'pebble,' or rolled flint, presumably out of Kensington gravel-pits" (26: 167) and on the other, a "flat bit of yellow mineral matter . . . bearing the image of Caesar" (26: 168)—a sovereign. One is in mineralogical terms separable, the other inseparable. A proper knowledge of the first will show "that in its noblest forms it is still imperfect and in the meanest still honourable" (26: 168), whereas the second "has been much beloved, righteously or iniquitously." However, despite the separable imperfection of the inferior pebble, he finds that "in its past history . . . in its pure and loyal forms, of amethyst, opal, crystal, jasper, and onyx, *it* also has been much beloved of men" (26: 169). By means of a typically Ruskinian exegesis, the epigraph is then rendered thus: "The gold of that land is good: there also is the crystal, and the onyx stone" (26: 169).

Ruskin goes on to present the three substances named in the creation story "as types—the GOLD of all precious metals; the CRYSTAL [into which the bdellium has been transmuted] of all clear precious stones prized for *lustre*; the ONYX of all opaque precious stones prized for *colour*" (26: 171). Having described the significance in his eyes of this grouping, he poses "two scientific questions . . . how the stones came to be what *they* are—or the law of Crystallization; and how the jewellers came to be what *they* are—or the law of Inspiration" (26: 173). From the latter, and having reference to the epigraph of the "Iris," he proposes the principle that only under Divine guidance can the use of "the richness of the earth in gold and jewels" be achieved. "The [modern] *scientific* mind," [my italics] will scorn such an idea; "but then, the [modern] scientific mind can neither design . . . nor perceive the power of design in others" (26: 174). Returning to the law of Crystallization—"how do stones come to be jewels? (26: 174)—which he qualifies in terms of natural formation, he uses various analogies and references which have to do with his "legitimate" geological studies. From seemingly conventional scientific inquiry, he returns to the question of "the symbolic use of the colours of precious stones in heraldry" (26: 165).

There will be cause to return to this example of what Ruskin would have considered as part of the inherited wisdom of the world, notwithstanding its origins in his more conventional scientific inquiries. This is because the themes of redemption and betrayal, ironically inimical to the earth's received wisdom, appear in the "Iris," the most illegitimate of Ruskin's scientific analyses in *Deucalion*. In this work lies the essential character of his very real attempt to realise an alternative science based on the mythopoeic forming power which is the antithesis of the modern scientific mind incapable of perceiving the power of design in others. This is found in the "words of the forming power" which both underpin and express the inherited wisdom of the world, but which Ruskin finds confused with the æther by his contemporaries.

However, this same forming power must admit not only the reason for the capability of design in humankind, but also its capacity for betrayal and redemption.

Deucalion is bringer of life to the "lifeless seed of life"; he brings redemption for the betrayal of Lycaon and his sons, a redemption already granted to Philemon and Baucis. Ruskin, in a note of revision to Deucalion which was not realised, makes a Biblical connection with the mythological interpretation of denudation and deposition as betrayal and redemption, a connection which inspired his choice of Deucalion as symbol of "The Lapse of Waves and Life of Stones." Lapse, which he describes in *Munera Pulveris* as "loss, or failure of human life, caused by an effort," labour, being the "suffering in effort . . . 'that quantity of our toil which we die in'" (17: 183). In making this Biblical connection with stones, he quotes from the Gospels. First "'God is able of these stones to raise up children upon Abraham' [Matthew 3.9]. Second 'If these should hold their peace, the very stones would immediately cry out' [Luke 19.40]" (26: xlvii). In the story of Deucalion, a story of betrayal and redemption, Ruskin finds "sermons in stones." In the study of nature he finds the evidence for a natural, not necessarily Christian, theology.

Ruskin also finds this evidence in *Proserpina* where he attempts to reconcile "the mere botanist's knowledge of plants, and the great poet's or painter's knowledge of them" (previously noted as first being discussed by him in *Modern Painters*). But while Deucalion is bringer of life and redemption to a lifeless earth, Proserpina, daughter of the earth mother, is "'the bringer of death.' She plays for a little while gathering flowers in the Sicilian fields, then snatched away by Pluto, receives her chief power as she vanishes from our sight, and is crowned in the grave" (7: 478). "Snowy Proserpine" also carries with her connotations of betrayal and redemption. Demeter is betrayed by Zeus who in Homeric legend awarded Kore to Hades that she might be called his flowering bride. Kore, renamed Persephone, achieves apparent redemption when Hades promises to return her to mother earth but is in turn betrayed when she is persuaded to eat the fateful pomegranate seeds. Finally she achieves only partial redemption. "Snowy Proserpine" is found by Ruskin in his study of the hawthorn blossom which is "white . . . and pure . . . but not at all dazzling in the white, . . . nor pure . . . as snow would be; yet pure somehow, certainly; and while, absolutely, in spite of what might be thought failure,—imperfection" (25: 301). In its apparent purity the blossom stands, like Proserpina, only partially redeemed with its "faded, yellowish, glutinous, unaccomplished green [centre] . . . strewn [with] the dark points of the dead stamens" (25: 301). Natural theology provides sermons not only in stones but in stamens that tell of the battles between good and evil which are expressed in the inherited wisdom of the world. One such sermon is to be found in the various associations of the poppy, symbol of Demeter and closely associated with Proserpina. This will be examined as a final example of Ruskin's mythopoeic science but placed in a broader context which shows the breadth and interconnectedness of Ruskin's alternative scientific views. This will be done by first returning to just one of the correspondences Ruskin makes between "the symbolic use of the colours of precious stones in heraldry" in "The Iris of the Earth," that most idiosyncratic of the chapters in *Deucalion*.

The correspondence is between the heraldic colour "vert" and the emerald. "Vert," Ruskin says, is "the colour of the green rod in budding spring; the noble life of youth. . . . It is seen most perfectly in clear air after the sun has set,—the blue of the

upper sky brightening down into it. It is the true colour of the eyes of Athena,—Athena [Glaukopis], looking from the west" (26: 184-85). Its correspondence with the Emerald belongs also to Athena, the association being of her rending of the Earth in her war with the Giants. In his *Queen of the Air* (1869), Athena is the spiritual power representative of the elemental force of the air, just as Demeter is the spiritual representative of the elemental earth. Athena Glaukopis is both the "owl-eyed" deity having "prudence or sight in darkness" (19: 306) and Athena, "with eyes full of light" (19: 379). Showing his attempts to embrace aspects of modern science within his mythopoeic interpretation, Ruskin claims that modern science, in the person of Tyndall through his treatise on the light of the sky, has justified the "instinctive truth" of the Greek perception of the æther so that "the bright blue of the eyes of Athena and the deep blue of her ægis" are proved as "accurate mythic expressions of natural phenomena" (19: 292). "With eyes full of light," Athena signifies the foundation of the colour perception of the Greeks on "the degree of connection between colour and light" (19: 379).

Pursuing this connection between colour and light, Ruskin claims that he was long puzzled by Homer calling the sea "purple" until coming to the realisation that the reference is to "the gleaming blaze of the waves under wide light." Purple may be "light subdued" or, as in the case of Homer's description, "shade kindled with fire, and thus sand of the lighted sea." Yet through etymological misinterpretation, he says, "the crimson and purple of the poppy, and fruit of the palm—and the association of these with the hue of blood . . . mingle . . . and renew the whole nature of the old word," coming to mean "a different colour, or emotion of colour, in almost every place where it occurs" (19: 379-80). The colour of the poppy mingled with that of blood stands for the betrayal and partial redemption of Demeter and Persephone, Queen of Death and "avenger and purifier of blood."

The poppy, *Papaver rhoeas*, thus referred to is also the first flower subject to a detailed analysis in *Proserpina*. It is chosen "on account of its simplicity of form and splendour of colour" (25: 277), but perhaps, more importantly, for its significance in the story of Proserpine since it is the flower sacred to Demeter, growing as it does in her cornfields. *Papaver rhoeas* is first introduced in the preceding chapter on "The Flower" as "an intensely simple, intensely floral, flower. All silk and flame: a scarlet cup, perfect-edged all round, seen among the wild grass far away, like a burning coal fallen from Heaven's altars . . . and robed in the purple of the Caesars" (25: 253-54). It is used to correctly describe the essential morphology of a flower, being ideal for the purpose because it casts away what Ruskin calls its tutorial leaves, being as it is "the finished picture of impatient and luxury-loving youth,—at first too severely restrained, then casting all restraint away" (25: 260). The poppy, "robed in the purple of the Caesars' . . . looks dyed through and through, like glass . . . and not merely painted . . . that the splendour of it is proud,—almost insolently so"—the splendour of Augustus but not of Solomon (25: 267). The poppy is described both in conventional botanical terms and in moral terms. Its colour stands as an example of insolent pride, its growth as an example of the impetuosity of a youth who, in casting away restraint, retains always the sense of once being subject to laws of pain but not of instruction—the "swiftly ruinous" poppy (25: 277).

Ruskin next asks the reader to remember the poppy "in connection with . . . the cause of Proserpine's eternal captivity—her having tasted a pomegranate seed—the

pomegranate being in Greek mythology what the apple is in the Mosaic legend"; further, in the worship of Demeter which is associated with the poppy, there lies "a multitude of ideas which are not definitely expressed, but can only be gathered out of Greek art and literature as we learn their symbolism"—the wisdom of the Greeks handed down to later generations (25: 277-78). Ruskin bases these ideas on the fullness of seed in both poppy and pomegranate being "an image of life" which was used "for beads and bosses in ornamental art" (25: 278). While the pomegranate remains essentially a Judeo-Christian symbol, the Byzantine Greeks come to confuse the poppy with grapes, then both with palm fruit. The palm is stylised into "a symmetrical branched ornament," having pendant bosses on either side which becomes confused with the Greek iris of Homer and Pindar. The Florentines who adopt the Byzantine ornament equate it with their fleur-de-lys "but insert two poppy heads on each side of the entire foil" (25: 278). In the meantime, the poppy leaf modifies that of the acanthus until the northern sculptor of the twelfth century equates the head of the thistle with the poppy and its leaf with the acanthus. His southern counterpart retains the poppy-head, progressively confusing it with grapes until, as "any kind of boss full of seed," (25: 279) it becomes the bean-pod used by Brunelleschi in decoration of the lantern of the Florentine Duomo. Demeter's poppy, *Papaver rhoeas*, growing in her fields of corn, symbolises the growth of the acanthus around the harvest basket, sacred at the feasts of Demeter, Bacchus and Athena; this is progenitor of the twelfth-century basket-work column capitals of the Byzantine Italians whose offspring were "all [the] capitals in" the great schools of Gothic architecture and also "the capitals of the pure and noble Renaissance architecture of Angelico and Perugino" (25: 280-81).

The essential truth of the Greeks is transmitted through the poppy as "the type at once of power, or pride, and of its loss" (25: 277). The truth of the betrayal and partial redemption at the heart of the legend of Demeter and Persephone is retained in the art of Europe as the inherited wisdom of the world. Ruskin's alternative view of the world finds scientific truth in the moral values found in the inherited mythology of the world and its expression in that world's great art and literature, great art being that which remains true to its Greek roots.

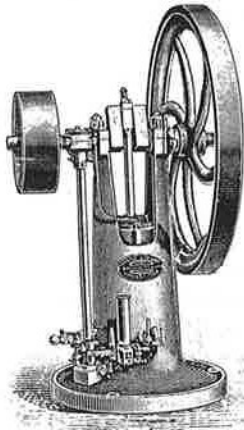
Ultimately for Ruskin, "over the entire surface of the earth and its waters, as influenced by the power of the air under solar light," [that is, within the realms of Demeter, Poseidon, Apollo and Athena] there is developed a series of changing forms, in clouds, plants and animals, all of which have reference in their action, or nature, to the human intelligence that perceives them." These have engraved upon them "in their aspects of horror and beauty, and their qualities of good and evil . . . a series of myths, or words of the forming power." This "forming power has been partly confused with the breath or air through which it acts, and partly understood as a creative wisdom." The modern tendency to regard "this effluence only as a motion or vibration" and "whatever [the] intellectual results" arising from this notwithstanding "every formative human art hitherto . . . [has] depended on the apprehension of its mystery" (19: 378). In the true apprehension of this "forming power" and its role in the transmission of the inherited wisdom of the world throughout history, there lay for Ruskin an alternative to the pragmatic empiricism which is commonly associated with nineteenth-century science.

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