The Proteus Within: Thoreau's Practice of Goethe's Phenomenology

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The essay examines passages from Henry David Thoreau's journal and Walden as illustrations of Goethe's phenomenological approach to nature, focusing on the influence on Thoreau of Goethe's discovery of metamorphosis as the generative principle of plants, and his proclamation that "first to last the plant is nothing but leaf." The essay shows how Goethe and Thoreau bring a poet's heightened awareness of language to their scientific observation of nature, and argues that their attention to figurative language, its limits as well as its possibilities, helps them and their readers to develop the needed flexibility to think along with rather than merely about nature.

In the nineteenth century the borders between disciplines of study were still passable enough for Johann Wolfgang von Goethe to range freely over the terrain of what are now highly specialized fields, making contributions to science as well as to literature and philosophy. But he wasn't doing conventional science even for that more open time, trying instead to bridge the already widening chasms between disciplines with a method that would reunite science and art and illuminate the living principles within both. He regarded science and art as complementary means of coming to understand ideas residing in nature itself.¹ Years later, Henry David Thoreau continued Goethe's work by showing how to apply Goethe's morphological thinking in his own studies of nature.

Goethe shared the desire for a unity of knowledge with many of his contemporaries in the German, British and American Romantic movements and with the phenomenological thinkers who have followed in his footsteps.² His work embodies his friend Friedrich Schlegel's ideal "that all art should become science and all science art; poetry and philosophy should be made one."³ Despite the best efforts of the Romantics, however, the goal of unifying knowledge from different branches of study was increasingly abandoned as the century progressed. More and more, people accepted the truism Goethe fought so hard to resist: that poetry tells us how to feel about the world, but science, with its objective method, describes the world as it actually is. The rise of environmental movements in the twentieth century, however, with their interest in cultivating more ecological ways of thinking and living, have helped contribute to a new consciousness that takes the Goethean ideal seriously. There is now a widely shared desire to foster a relationship with nature that will take us beyond a mechanical understanding of its parts. Goethe's method, conceived in the past, belongs to the future as well.

Learning to practice Goethe's phenomenological approach involves developing a poet's awareness of the power of language to shape experience. It involves becoming consistently conscious of the figurative dimension of language and of the power of metaphor and analogy to enrich as well as distort our vision and understanding. Practicing what Goethe called "exact sensorial imagination" means developing language that can match itself to rather than impose itself on the dynamic processes of nature. This attitude toward language can be regarded as part of the larger requirements of the Goethean method of "not rudely insisting on one explanation" of phenomena and learning to be "inwardly as flexible and mobile as nature itself." It involves "the metamorphosis of the scientist" that is at the core of Goethe's work.⁴

In the section of his *Theory of Color*, entitled "Language and Terminology," Goethe warns against the tendency of the languages of different disciplines to render the object of study static:

We are insufficiently aware that a language is, in fact, merely symbolic, merely figurative, never a direct expression of the objective world, but only a reflection of it. This is especially so when we speak of things which only touch lightly upon our empirical observation, things we might call activities rather than objects. In the realm of natural philosophy such things are in constant motion. They cannot be held fast, and yet we must speak of them; hence, we look for all sorts of formulas to get at them at least metaphorically...The scientist might make conscious use of [different] modes of thought and expression to convey his views on natural phenomena in a multifold language. If he could avoid becoming one-sided and give living expression to living thought, it might be possible to communicate much that would be welcome (*GS* 277).

To give "living expression to living thought," we need "a multifold language." Goethe outlines some of the difficulties posed by particular languages: "Mathematical formulas are useful and convenient, but they always have a certain stiffness and awkwardness." Similarly mechanical formulas, though more accessible to common sense, "transform living things into dead ones; they kill the inner life in order to apply an inadequate substitute from without" (GS 277). The key to overcoming the problems of the various languages available lies in the idea of relationship instead of substitution. In mathematics and mechanics, in particular, as we've seen, Goethe saw the temptation to assume that a given formula *expresses* what it is in fact replacing with an abstraction. However, words as well as formulae pose dangers to the poet-scientist—"how difficult it is to refrain from replacing the thing with its sign, to keep the object alive before us instead of killing it with the word" (GS 277).

In a short essay entitled, "Symbolism," Goethe asserts that linguistic metaphors can come close to expressing the phenomenon under study. He begins with his usual caution, saying "neither things nor ourselves find full expression in our words" (GS 26). With metaphors, he warns, we must guard against cleverly relating things that are in fact unrelated instead of finding "true relationships." Poets, working consciously with words, ideally develop the capacity to use figurative language with the necessary care and precision to discover true relationships; their metaphors potentially approach being "aesthetically and really identical with the object." Although "we get by in life with our everyday language, for we describe only superficial relationships, the instant we speak of deeper relationships, another language springs up: poetic language." Nevertheless, he adds, "in speaking of nature's inner relationships, we need many modes of description" (GS 26). The observer most aware of the framing effects of different languages, and of the work involved in remaining conscious of the constant process of interpretation that takes place in all acts of perception stands the best chance of "giving living expression to living thought" and of not "replacing the thing with its sign."

To Goethe, the physical character of words, in addition to their meaning, can become the vehicle for discovering connections. He cites as examples both onomatopoeia and the phenomenon of "related words having similar sounds (like mine and thine)" (GS 27). But most important to him personally was the experience of a particular word's opening up a new way of thinking. He describes a Dr. Heinroth's complimenting his thinking as "objective." Struck by Heinroth's unusual usage of the term—to mean uniting and merging with objects rather than remaining detached from them—Goethe says, "Dr. Heinroth speaks favorably of my work; in fact, he calls my approach unique, for he says my thinking works objectively. Here he means that my thinking is not separate from objects; that the elements of the object, the perceptions of the object, flow into my thinking and are

fully permeated by it; that my perception itself is a thinking and my thinking a perception" (*GS*, 39). In Dr. Heinroth's "ingenious turn of phrase," Goethe felt that the word itself gave him "significant help." He found lurking within the term "objectivity" the means of overcoming the dichotomy that the conventional use of the word had helped to reinforce between self and world, object and subject. This different figuration of objectivity—the rediscovery of the "object" within it—helped Goethe orient himself toward a thinking that emphasized inside/outside rather than self/other.

Despite his qualified view of the capacity of language to express nature, Goethe continued to believe that language, properly schooled by sensitive users, could become the vehicle by which the true meaning of phenomena might emerge into being. A realist rather than a nominalist, Goethe understood language as potentially disclosing "the word-like character of the world" rather than as labeling what is assumed to exist independently of language.⁵

Thinking along with poets becomes a training in flexibility, learning to take up and let go of a metaphor, and following the lead of a figure of speech without allowing it to go beyond its usefulness to the subject at hand. Watching, for example, great poets like Shakespeare and Keats move through a series of tropes in a sonnet, as they allow their language to help them discover the meaning of an experience, is itself an exercise in Goethean practice.

Examining Goethe's own metaphors helps discover the "significant help" in "an ingenious turn of phrase." It can also help show the crucial role language plays in the larger project of refinement and self-development that Goethe advocated for the scientist. However, hearing the crucial nuances in Goethe's language presents difficulties to readers for whom German is a second language. In the words of Robert Frost, "poetry is what gets lost in translation." Fortunately, Goethe inspired many followers who took up the charge of coming to know the word-like character of nature, who in turn can become the English speaker's guide to Goethe's method. None was as devoted to the phenomenological study of nature as Henry David Thoreau.⁶

In what follows, I would like to look at a passage from Thoreau's *Walden* as offering a model of a Goethean phenomenological training, focusing particularly on Thoreau's language and on his taking up of the metaphorical possibilities and implications of Goethe's axiom "all is leaf." I hope to show that pairing Thoreau with Goethe in this way can expand the number of models of "morphological thinking" for students from different disciplines

who wish to learn to practice Goethe's phenomenological approach.

Like Goethe, Thoreau was both poet and scientist, utterly committed to the first-hand study of nature, and again like Goethe, he felt that the process of getting to know the natural world involved every faculty, intellectual, emotional, moral, spiritual, and physical. In 1837, he began a journal that he was to keep for the rest of his life in which he charts his observations of nature and his experiments with different ways of overcoming the habits and routines that prevented him from seeing and experiencing nature afresh. In it, he records his practice of walking at night, for example, and his conclusions that the only superior thing about walking by day is that one can "see small objects better" (13:272). He focuses often on what one can see once those "small objects" blur, and other aspects of the landscape become primary, such as fogs, mists, light, and wind. He experiments with looking first at the surface of the pond and then through it, registering how the mind, rather than the eye, refocuses. In Walden he stresses these experiments in observation as a training in consciousness, remarking that he knows "of no more encouraging fact than the unquestionable ability of man to elevate his life by conscious endeavor."7

Early on in this process of educating his senses and his inner eye, Thoreau read Goethe in the original German and spent a winter carefully working his way through *The Italian Journey*.⁸ First in his journal and then in an account of a journey of his own, *A Week on the Concord and the Merrimack Rivers*, Thoreau reflects on Goethe's "excellencies as a writer," saying "[Goethe] was satisfied with giving an exact description of things as they appeared to him and their effect upon him...His object is to describe what he sees and for the most part in the order in which he sees it" (262-63). Thoreau admires Goethe's restraint in schooling his language to his perceptions, and in not attempting an objectivity that would leave the observer out. He was convinced, as Goethe was, that "the manifestation of a phenomenon is not detached from the observer—it is caught up and entangled in his individuality" (*GS* 307).

Thoreau emulated Goethe's exactness and sought to convey the natural world as precisely as he could. That precision did not consist in rejecting the connotative for the purely denotative, but rather in finding generative figures of speech that would lead on to new discoveries while staying close to the phenomenon. Thoreau found such a figure in Goethe's description of the archetypal plant. Thoreau studied the monograph, *The Metamorphosis of Plants*, where Goethe describes metamorphosis simply as the process "by which nature produces one part through another, creating a great variety of forms through the modification of a single organ" (*GS* 76). But it was Goethe's description in *Italian Journey* of his discovery of the principle of metamorphosis that truly captured Thoreau's imagination. Goethe writes:

While walking in the Public Gardens of Palermo it came to me in a flash that in the organ of the plant which we are accustomed to call the leaf lies the true Proteus who can hide or reveal himself in all vegetal forms. From first to last the plant is nothing but leaf. (366).

By referring to the leaf as "the organ of the plant which we are accustomed to call leaf," Goethe treats the word as provisional and the organ as open to a new, more expressive, name. He finds a more suitable term in the metaphor of "Proteus"—the Greek god of the sea, whose chief attribute is that he can appear in various forms. Picturing the leaf in this way has a number of different effects, all of which Thoreau took to heart. Goethe argues that leaves undergo transformation, and what are called stamens or calyxes can usefully be seen as transformed leaves, a process that the image of Proteus helps language to reflect. In addition to shape-shifting, the figure of Proteus includes the fluid dimension of the god's origins in water and the leaf as a "being." The ancient conception of nature as animated by beings becomes part of the picture of metamorphosis through metaphor. The image of Proteus encourages us to see the plant as alive in a new way—not constructed as a machine is, but as something manifesting inner principles.

In *The Metamorphosis of Plants*, Goethe calls on his reader to see the fruitfulness hidden in the leaf. He says, "...we will not fail to recognize the leaf form in seed vessels—regardless of their manifold formations, their particular purpose and context. Thus, for example, the pod may be viewed as a single folded leaf with its edges grown together, husks as consisting of leaves grown more over one another, and compound capsules may be understood as several leaves united round a central point with their inner sides open toward one another and their edges joined..." (GS 88). Seeing the Protean leaf hidden in the other shapes a plant takes is partly an empirical process, examining the plant closely in a particular sequence, and partly the cognitive process of recognizing each stage as transformed leaf despite its literal leaf-ness' being hidden. Seeing the protean shape-shifter becomes the primary focus, allowing the inner principle at work to emerge into visibility.

The leaf became for Thoreau "the pregnant point," "the instance worth a thousand," and literal and metaphorical leaves show up everywhere in his writing. He was interested not only in how the leaf might provide the key to plant growth; but also in how all of nature seemed concerned with the leaf shape, thus its perhaps expressing wider laws pertaining to all living things. He wrote in his journal that "all perception of truth is the detection of an analogy" (J 4: 46). Detecting analogies is part of the process by which we learn to see relationships and movement rather than separate entities.

Thoreau wanted to learn Goethe's way of thinking "morphologically," of emphasizing concepts as pictures and images rather than as abstractions. Thinking through the images as Thoreau presents them can begin, in Keats' phrase, to "prove on our pulses" the ways in which nature is best described and understood in organic rather than mechanical metaphors, and how certain figures of speech can reveal what is hidden, helping us recognize the being or idea manifesting. Morphological thinking involves understanding things as events in time. Rudolf Steiner describes this kind of thinking in connection with Goethe's work: "it must be so inwardly mobile—living in the medium of time and not space—that it elicits one form (*Gestalt*) out of the other. This thinking differentiates in an organic way; it continually grows" (10).

Thoreau expresses his most fully realized and extended appreciation of Goethe's vision of metamorphosis as the generative principle of living organisms in the chapter of *Walden* entitled "Spring." Goethe's discovery "first to last the plant is nothing but leaf" is clearly on Thoreau's mind as he contemplates a thawing sand bank in the deep cut made by the railroad near his cabin at Walden Pond. His experiment resembles Goethe's search for the archetypal plant in that he wants to understand how an idea, such as spring, that organizes phenomena in the human mind can be experienced directly, so that the *signs* of spring that he is "on the alert for" become secondary to an experience of spring itself.

Thoreau's description of the thawing sand bank is an experiment in what it would mean to see the idea of spring "with his own eyes," in the same way that Goethe, as he said in his "fortunate encounter" with Schiller, could see ideas (GS 20). The bank does in many ways become the epitome of spring for Thoreau, not as a thing but as an experience. The extended, seemingly free association on what the "sand foliage" makes him think of is, in fact, a *tour de force* of the fruits of the Goethean method. Just the qualities he praised Goethe for—careful description of what appeared, the

order in which it appeared, and its effect on him—keep Thoreau close to the phenomenon. He practices "exact sensorial imagination" by recreating in language the generative qualities in the scene before him:

Few phenomena gave me more delight than to observe the forms which thawing sand and clay assume in flowing down the sides of a deep cut on the railroad through which I passed on my way to the village... The material was sand of every degree of fineness and of various rich colors. When the frost comes out in the spring...the sand begins to flow down the slopes like lava, sometimes bursting out through the snow and overflowing it where no sand was to be seen before. Innumerable little streams overlap and interlace one with another, exhibiting a sort of hybrid product, which obeys half way the laws of currents, and half way that of vegetation. As it flows it takes the forms of sappy leaves or vines, making heaps of pulpy sprays a foot or more in depth, and resembling, as you look down on them, the laciniated lobed and imbricated thalluses of some lichens; or you are reminded of coral, of leopards' paws or birds' feet, of brains or lungs or bowels, and excrements of all kinds. It is a truly grotesque vegetation... The whole cut impressed me as if it were a cave with its stalactites laid open to the light.⁹

Thoreau plays with the idea of inner and outer here. Among the many analogies he uses to convey what the sand looks like, standing out is the element of seeing the insides of something that would normally remain hidden—the bank as a body laid open before him with its inner workings exposed. It is "grotesque" both in the excremental sense and in the sense of the word's etymological source: grotto—cave-like, a normally enclosed place. The series of analogies leads him on. The sand foliage looks like leaves, lichens, coral, birds' feet, leopards' paws, as well as internal organs; nature multiplies the same shapes in both plants and animals.

For a number of reasons, the sandbank is a good test case for what is possible through Goethe's method. The fact that such phenomena were highly unusual before the coming of the railroad gives the bank a new dimension, as if, like modern science, its revelations are partly the result of recent technological innovations. But, unlike many scientific treatments of such newly accessible phenomena, Thoreau focuses on the appearances themselves as meaningful rather than seeking causative explanations for them. In the same year Thoreau was writing *Walden*, the German scientist Hermann von Helmholtz accused Goethe in a lecture of being only a poet and not a scientist because he focused exclusively on "the beautiful show' which makes it possible to contemplate the ideal"; whereas the true scientist "tries to discover the levers, the cords and the pulleys which work behind the scenes and shift them." He goes on, "Of course, the sight of the machinery spoils the beautiful show, and therefore the poet would gladly talk it out of existence, and ignoring cords and pulleys as the chimeras of the pedant's brain, he would have us believe that the scenes shift themselves or are governed by the idea of the drama" (16).

Though Helmholtz is critical here, Goethe would agree that the processes of nature are governed by informing ideas, which he hoped his method could reveal. As Helmholtz claims, Goethe preferred not to go behind phenomena but instead to focus on the drama of the appearances-to see whether meaning could be discerned through contemplation rather than through analytical reduction. He rejected the idea put forward by Helmholtz that "we must familiarize ourselves with [the] levers and pulleys, fatal though it be to poetic contemplation, in order to be able to govern them after our own will, and therein lies the complete justification of physical investigation and its vast importance for the advance of human civilization" (17). Goethe and Thoreau both sought to understand natural processes on their own terms. Goethe asked "Who speaks here, the phenomenon or you?" To him, the phenomenon was itself the theory. Similarly, for Thoreau, the fact that the sand foliage looks like so many different things becomes an important aspect of its meaning. He participates in rather than intellectually dissecting the scene before him. In the process he comes to a deeper awareness of more and more levels of coherence, and the dynamic interplay of forces at work within and around him.

In the course of the extended contemplation that the above description initiates, Thoreau experiences the principle of metamorphosis at work primarily through the trope of analogy. Just as metamorphosis is the generative principle in plants, it emerges for Thoreau through analogy as an aspect of larger and even inorganic processes, leading him to conclude "there is nothing inorganic."

Thoreau discovers more to the idea of "inner" than merely innards. "Inner" suggests an animating idea, recalling Aristotle's distinction between things changed from within and those changed from without.¹⁰ Thoreau doesn't conclude that there is one fixed idea informing the phenomenon; depending on where he focuses his attention, different aspects of it light up in his thinking. What seems like an exuberant heaping up of analogies, employed to capture the sand-bank's proliferation of forms is, in fact, a charting of two seemingly contradictory but really complementary forces, one tending toward form, the other toward chaos.

The shapes the sand takes as the ice melts within it make it seem as if the bank were growing right before his eyes, allowing him a glimpse of what usually must be intuited. "The remarkable thing about this sand foliage," he says, "is its *springing* into existence thus suddenly." It seems to "obey half way the laws of currents and half way that of vegetation." The sandbank itself is a language using seemingly contradictory analogies and paradox to suggest widely manifesting principles.

In charting the ways the sandbank follows the laws of vegetation, Thoreau comes to a very Goethean *aperçu*. Looking behind the curtain of nature (or under its skin) to its secrets reveals not the absolute physical laws of the inorganic world, but the creative principle that manifests all through it. He says he was impressed as if he "stood in the laboratory of the artist who made the world and me, had come upon him at work sporting on the bank strewing his fresh designs about." In a moment, he will find the verb "labor" within laboratory, but at first the term seems an oxymoron, until we remember Goethe's conviction that, at heart, science and art are one. In an age dominated by positivist science, as Thoreau's was coming to be, he saw art as a more effective means than science of rendering the organic, creative impulse in nature intelligible without reducing it to an inorganic law.

Thoreau goes on to say, "you find thus in the very sands an anticipation of the vegetable leaf. No wonder that the earth expresses itself outwardly in leaves, it so labors with the idea inwardly." Here "inward" is an idea instead of merely the physical fact of insides. Goethe had learned how to see in the leaf the "hidden Proteus": here the pictured creator is just that kind of Protean figure, manifesting in leaves as one of the many diverse shapes he "strews about."

Thoreau experiments with the possibility that metamorphosis might be expressed in the words themselves, not only in their literal or figurative meanings but in their own physical make-up:

Internally, whether in the globe or animal body [the leaf] is a moist thick *lobe*, a word especially applicable to the liver and lungs and the *leaves* of fat ($\lambda \dot{\epsilon} \ddot{\imath} \beta \omega$, labor, lapsus, to flow or slip downward a lapsing; $\lambda \dot{\circ} \beta \dot{\circ} \xi$,

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globus, lobe globe; also lap, flap and many other words,) externally a dry thin leaf, even as the f and v are a pressed and dried b. The radicals of the lobe are lb, the soft mass of the b (single lobed, or B double lobed) with a liquid l behind it pressing it forward. In globe, glb, the guttural g adds to the meaning the capacity of the throat. The feathers and wings of birds are still dryer and thinner leaves (*W* 298).

Putting words in particular sequences can initiate the process by which they too exhibit metamorphosis. Choosing the words out of the welter of possible terms becomes part of thinking along with phenomena. Labor not only activates the fixed spatial term of laboratory, focusing on activity rather than thing, but, as he says, the word can be traced to the more fluid verb lapsus—to flow or slip downward. The earth—embodied in the word globe—includes within it the leaf's "moist thick lobe," just as the bank expresses itself in the lobes of leaves. He sees the movement from inner to outer in terms of the classic metamorphosis of "lumpish grub" to butterfly, a transformation from a moist state to a dry one, saying, "the very globe transcends and translates itself and becomes winged in its orbit."

But just as we might feel that Thoreau's metaphors are taking on a life of their own, he reminds us through his subsequent descriptions that the bank also follows "half way the laws of currents." He turns his attention to what foregrounding those laws allows him to see. Rather than charting a process of transcendence, the earth, as symbolized by the sandbank, follows the laws of currents, tending to flow and spread out. The flowing sand, from this perspective, embodies the laws of water rather than matter. Seen in this way, both the human form and leaves share water's tendency to flow and spread. Thoreau asks, "What is man but a mass of thawing clay?"

The ball of the human finger is but a drop congealed. The fingers and toes flow to their extent from the thawing mass of the body...is not the hand a spreading palm leaf with its lobes and veins?...The lip, labium, from labor (?) laps or lapses from the sides of the cavernous mouth. The nose is a manifest congealed drop or stalactite. The chin is a still larger drop, the confluent dripping of the face. The cheeks are a slide from the brows into the valley of the face...Each rounded lobe of the vegetable leaf, too, is a thick and now loitering drop, larger or smaller; the lobes are the fingers of the leaf; and as many lobes as it has in so many directions it tends to flow and more heat or other genial influences would have caused it to flow yet farther. (*W* 299)

The cave image reappears, but this time Thoreau focuses on it not as a place but as a process of becoming through the working of water. Stalactites, also called drip stone, are of course formed by water. Instead of moist lobes drying into wings, they are presented here as on the verge of expanding outward indefinitely. Similarly, Thoreau asks, "who knows what the human body would expand and flow out into under a more genial sun?" reminding us of Goethe, whose metaphorical expansion under the genial sun of the Mediterranean allowed him to discover the principle of metamorphosis.

The two impulses, one toward solidifying into forms and the other flowing away from them may both be guises of the "hidden Proteus in the leaf," the being of water. Thoreau says, "it is wonderful how rapidly yet perfectly the sand organizes itself as it flows...such are the sources of rivers." Water, while tending to expand, is not of course entirely chaotic. As the contemporary Goethean hydrologist Theodore Schwenk demonstrates, water itself embodies the polarities that Goethe saw in plant growth. Using Goethe's method of looking for patterns in movement and dynamic fluctuations between polarities, Schwenk examines the way water adopts a variety of forms while always remaining the same undifferentiated substance. Forms in water are highly unstable, appearing only fleetingly and then falling apart. Schwenk charts the tension between the two polar tendencies of water-to form a sphere (or drop) and to follow a directional flow. Following Goethe, he argues for seeing water as itself alive as well as being a precondition for life. He asks, "Do the forms of the living organisms merely betray the character of the watery phase through which they have passed or is it that the water itself, impressionable as it is, is subject to living, formative forces and creative ideas of which it is but the visible expression?" (102). From this perspective, water can be seen as having within it the living principle that manifests in the shapes that it takes. Thus, ultimately the law of vegetation may be subsumed within the primary law of currents. Though they are separate in so far as one or the other lights up as we focus our attention on it, in themselves they are one. Thoreau concludes that there is nothing inorganic perhaps because he has discovered a sense in which water is itself alive. Like the sandbank, water labors with the idea of leaves inwardly.

Thoreau ends his meditation on the sand bank with the words "this is the frost coming out of the ground. This is spring. It precedes the green and flowery spring as mythology precedes regular poetry." Again, like Goethe, he finds in mythology a way back to a vision of the earth itself as living: "the earth is not a mere fragment of dead history, stratum upon stratum, like the leaves of a book, to be studied by geologists and antiquaries chiefly, but living poetry like the leaves of a tree, which precede flowers and fruit, not a fossil earth but a living earth" (W300). He doesn't invoke Proteus; instead, he contrasts the "gentle persuasion" of "the god of Thaw" with Thor, the Norse god of thunder "who only breaks in pieces" (W301). He loved to find Thor's name within his own and felt that part of his kinship with Goethe lay in their shared Northern European ancestry. Taking on the method that Goethe developed, once he experienced "the genial sun" of Sicily, became part of Thoreau's own thawing into a more fluid kind of thinking.¹¹

Throughout the multitudinous and diverse processes Thoreau presents, images of leaves remain paramount. He says, "The maker of this earth but patented a leaf," playing with the expanded definition of "patented" as opening up or gaining access to. One shape becomes all others. "What Champollion will decipher this hieroglyphic that we may turn over a new leaf at last?" (W 300). His invoking of Champollion, who unlocked the secret of the Rosetta stone, suggests that phenomena in nature constitute a language that we might learn to read. His pun on our turning over a new leaf suggests that the most important aspect of this interpretation of hieroglyphics is that our behavior will change as a result—scientists will transform themselves in relation to what they observe. He seems also to be echoing Goethe's own paean to the principle of metamorphosis articulated in the poem "The Metamorphosis of Plants": "All forms are like in their structure, and none equates with the other; / And this common accord points to a mysterious law, / To a sacred enigma. O could I, my dearest companion, / Give you one happy word apt to resolve all at once!" (77). Perhaps the Champollion of nature won't be able to find the single word to unlock the sacred enigma of living laws, but the observer who approaches nature open to the possibility that it might have something to say may experience its living principles.

One might be tempted to say that Thoreau's poetic peroration doesn't constitute the careful and restrained observation that Goethe advocated. And he does seem to be having too much fun, exuberantly "strewing his fresh designs about." But in his "multifold language" he allows his thinking to flow along with the forms that he is examining. He achieves a high degree of consciousness of the channels carved by any one linguistic choice, and of the benefits of being as inclusive as possible.

Thoreau arrives at the ecological idea that the earth may itself be an organism very consciously through a series of analogies inspired by his close examination of a physical phenomenon. By wearing his metaphors lightly he remains aware of seemingly contradictory interpretations of what he is looking at, his views eventually coalescing at a higher level as complementary polarities rather than contradictions. His preference, as he says, for the "living poetry of leaves" on a tree over leaves in a book is countered for his readers by an appreciation of the way his own book has managed not to "replace the thing with its sign" (*GS* 277) but rather to keep the phenomenon, as complex and bizarre as it is, living before us.

Neither Goethe nor Thoreau assumed that thinking along with the processes of nature was simple or guaranteed of success. Both thought that language was not always up to the task of uniting objects with our perceptions of them. As well as the reservations mentioned earlier, Goethe famously proclaimed that "between idea and experience there inevitably yawns a chasm which we struggle to cross with all our might, but in vain. In spite of this we are forever in search of a way to overcome this gap with reason, intellect, imagination, faith, feeling, delusion and—when all else fails—folly" (*GS* 33). However, these moments of what he called "doubt and resignation" about *words*, as opposed to other discourses used to describe nature, occur mostly when he employs a spatial metaphor. In the essay expressing these misgivings he ends by taking solace in poetry's dynamic images, quoting one of his own works:

Thus view with unassuming eyes The Weaver Woman's masterpiece One pedal shifts a thousand strands, The shuttles back and forth flying, Each fluent strand with each complying One stroke a thousand links commands; Since time began she plots the matter, So may the Master, very deft, Insert with confidence the weft (*GS* 34).

The picture of a Weaver Woman and Master comments indirectly on the problem he has posed himself. The metaphor of dynamic weaving done by "beings" comes much closer to his intuition of how the world works than the spatial metaphor of the chasm he used earlier.

Similarly, Thoreau doesn't always display the confidence so palpable in the *Walden* passage. Sometimes what he sees cannot be captured as easily as he would like, as a brief illustration from his journal shows. In an entry on February 14th, 1851, he meditates on what the right physical relationship to nature might be—saying that farmers are tough but not necessarily healthy, having through endless hard work lost their elasticity, and that real health means "being sensible to the finest influence—to more or less of electricity in the air." Next, he says, "we shall see but little way if we require to understand what we see—How few things can a man measure with the tape of his understanding—how many greater things might he be seeing in the meanwhile" (*J* 3:192). This entry sets up a Goethean investigation, saying we need healthy and sensitized senses, and we need more faculties than the understanding—i.e. reason. Emerson said of Goethe that he saw through "every pore" (275), and here Thoreau seems to be wishing for similarly subtle powers with which to sense the world. He then recounts a memory:

One afternoon in the fall Nov 21st I saw Fair Haven Pond with its island and meadow between the island and the shore, a strip of perfectly smooth water in the lee of the island and two hawks sailing over it—(and something more I saw which cannot easily be described which made me say to myself that it the landscape could not be improved.) I did not see how it could be improved. Yet I do not know what these things can be; (for) I begin to see such objects only when I leave off understanding them—and afterward remember that I did not appreciate them before. But I get no further than this. How adapted these forms and colors to our eyes, a meadow and its islands. What are these things? Yet the hawks and the ducks keep so aloof and nature is so reserved! We are made to love the river and the meadow as the wind (is made) to ripple the water." (*J* 3:192-93)

Thoreau intuits the wholeness of the scene and ends with a sense of belonging to it as well, yet he remains full of questions and doubts. That the scene lights up in memory suggests that he is following the Goethean procedure of "exact sensorial imagination" and recreating the images of what he has seen as part of the process of coming to know it. But his language acts as a barrier to the experience's being fully comprehensible. Because he uses the language of juxtaposition and addition rather than relationship, things remain separate and aloof from him despite his intuition of the landscape's wholeness and perfection. He confines himself to spatial terms, and as a result the scene, although it includes water and birds, remains static. Also, he uses the verb "to see" only in a literal sense, even when he is describing a non-sensory element of the scene: "and I saw something more not easily described which made me say to myself that the scene could not be improved." He also confines himself to the language of objects—"what are these *things*? I saw some*thing* more...such *objects*." Here, Thoreau describes how intuition remains inchoate when he doesn't have the language to bring relationships to the fore. In recreating the memory, he uses very little figurative language, in favor of listing what he had seen. Finally, however, Thoreau ends with an analogy, which suddenly frees him into the language of relationships.

The passage simultaneously conveys connection and separation, by enacting how hard it is to move from isolation to unity even when he has the experience of it. Certainly, a difference between this and the passage in *Walden* is that one is an entry in a private journal, and the other is from a work Thoreau extensively revised for publication. The difference suggests that the kinds of knowledge that we ultimately want to build up about nature require constant work on language itself—finding the right words is part of the process of thinking morphologically. The experience needs to find expression in terms that propel it onward, as Steiner says, so that the thinking itself grows. The sensitivity Thoreau advocates—to be able to feel "more or less of the electricity in the air"—requires that we strive to articulate the dynamic qualities of even the stillest scenes.

Students of Goethe's delicate empiricism can follow Thoreau and Goethe's lead in sensitizing themselves to language by writing and studying literary evocations of nature. Developing an awareness of the provisional character of most expressions in language can be counterbalanced by the faith that some forms of expression come closer than others to allowing thinking and perception to merge. The more fluid the language the more likely it will be to reveal true relationships and allow the hidden Proteus who lurks within words as well as within nature to manifest in the multifold language of the poet-scientist.

Endnotes

¹For excellent introductions to Goethe's scientific method and to the contemporary significance of his work, see Bortoft, Steuer, Stephenson, Amrine, Seamon and Zajonc and Richards.

² For the rich history of Goethe's connections to such thinkers in the phenomenological tradition as Whitehead, Husserl and Heidegger, see Bortoft and Seamon.

 3 Richards uses this famous axiom as the epigraph to his book discussing Goethe's scientific method.

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⁴ The particular essay this comes from, in Goethe, *Scientific Studies*. Henceforth *GS* in the text. For the transformation the scientist must undergo as part of the training in Goethe's method, see Amrine's essay, "The Metamorphosis of the Scientist," in *Goethe's Way of Science*.

⁵ Influenced by Goethe, the philosopher Georg Kuhlewind puts the coming to consciousness of the world's word-like character this way: "When we have heightened the intensity of attention, we realize that this attention is identical with the picture it weaves. It leads to a monistic experience in pure perception. What is at work here is not human subjectivity; rather, it is the structuring, universal activity of word-like attention—received from language, trained through conceptual thinking, and heightened by the schooling of consciousness. The new structuring of the given and the lighting up of higher concepts are one and the same act of consciousness. In and by such conscious activity, we realize the ideal of Goethe's contemplative perception (*Anschauung*) (38).

⁶ Goethe's influence on Thoreau has long been acknowledged and appreciated. See, especially, Richardson, Tauber, Walls and Wilson.

⁷ Variorum Walden, 204.

⁸ See Richardson, 28-30 and Sattelmeyer, 26-27.

⁹ This and the following paragraphs are among the most studied in *Walden* and Thoreau's work generally. I am indebted to the rich and varied commentaries these passages have inspired. See Gura (132-137); Boudreau (105-134); McIntosh (244-246); Burbick (75-78), West (468-480) and Wilson (141-148).

¹⁰ See Brady's essay for an extended discussion of this distinction in relation to Goethe's method.

¹¹ See Richardson, 28-30.

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