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## Voyages in the Verbal Universe: The Role of Speculation in Darwinian Literary Criticism

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By the end of the eighteenth century, the achievements of the Enlightenment had led to a perception that science and the literary arts were competing modes of endeavor, and a moment's reflection shows us that this sense of disciplinary competition dies hard. Indeed, one of the chief occupations of literary studies today is in still sorting out the relationship between itself and other disciplines. It is not that earlier eras were blissfully void of feelings of interdisciplinary rivalry—for two thousand years, literary critics from Aristotle to the Renaissance humanist Sir Philip Sidney had pitted literature against such humanistic disciplines as philosophy and history, claiming that these fields are, respectively, too abstract and too tied to facts to provide the moral and spiritual enlightenment available through literature—but that the threat to literature now emanated from a different sphere (Aristotle 32-33; Sidney 105-07). So it is that, at the turn of the nineteenth century, Wordsworth echoes Sidney's remarks on philosophy, but his target is now science: scientific knowledge is difficult and learned, whereas poetic knowledge is coterminous with our own existence. Later English romantic and Victorian poet-critics, also opposing poetry to science, followed Wordsworth in asserting the emotional and consequently moral effectiveness of literature. Thus, some two decades after Wordsworth penned the Preface to the *Lyrical Ballads*, Shelley insists that, in contrast to scientifically conceived moral systems ("ethical science," in Shelley's phrase), poetry activates the imagination and, in so doing, facilitates sympathetic responsiveness to others (487-88). And again, toward the end of the century, attuned to the intellectual trends of his time and influenced deeply by Wordsworth, Matthew Arnold claims that feeling is linked to conduct and that literature, which addresses our feelings, is therefore necessary in promoting our impulse toward moral behavior. In short, the competition between science and literature is no doubt a phenomenon of the past several hundred years; nonetheless, it is worth remembering that literary study has always defended itself against and defined itself in relation to some other discipline, whose threat may be accordingly actual or illusory.

If, then, a marked pattern of nineteenth-century literary criticism was to elevate literature above science in the process of defending its viability, a contrary tendency to assimilate scientific and pseudo-scientific research and models to

literary studies emerged simultaneously toward the end of that century, and especially marks twentieth-century approaches to literature. Shklovskian defamiliarization, anthropological and linguistic structuralism, psychoanalytic and Marxist criticism, to name a few—all are influenced and many inspired by work in nonhumanistic disciplines. Not surprisingly, with the emergence of an evolutionary and cognitive approach to criticism today, both enthusiasts and skeptics are eager to learn what the implications of these disciplines are for literary studies.

Today, we are all—enthusiasts, skeptics, and those in between—participating in the larger historical drama of the relationship of literature to science, experiencing its sometimes destructively competitive, sometimes intellectually productive, dimensions. This essay will argue that the objectives of the sciences and literature are in some ways fundamentally different, and that, if we keep these differences in mind while pursuing interdisciplinary literary criticism, evolutionary and cognitive literary criticism will be the more enduring for it. In particular, I claim that speculative thinking has a role within literary studies and the academy at large, and I attempt to demonstrate, in an analysis of a short passage from *The Prelude*, how empirically grounded research from behavioral ecology and related fields can enhance the speculative activity of literary interpretation.

Understandably, the disappointing results of a century's worth of scientific attitudes and approaches to literature fuels a good deal of current skepticism. In a recent *Poetics Today* essay, Tony Jackson expresses ambivalence about the interpretive potential of evolutionarily informed criticism, and he forwards two interrelated criticisms of recent books touting the value of evolutionary theory for literary scholarship. Discussions of aesthetic processing, affective response, and the like in books by Robert Storey and Joseph Carroll, Jackson asserts, misunderstand poststructuralism, conflating relativism with nihilism; furthermore, because these scholars do not see that poststructuralists would agree with their fundamental assumptions, they offer nothing new to literary criticism. Jackson thus raises two quite different issues, that of the *epistemological foundations* of poststructuralism and that of the *interpretive possibilities* of an evolutionary and cognitive criticism. Regarding the first issue, since in this essay Jackson does not engage with the epistemological arguments of poststructuralism's critics in any detail, he does not establish that there is a legitimate distinction between relativism and nihilism, or that, more pertinently, whatever labels we may wish to affix to them, the truth claims of poststructuralists have been mischaracterized by those who argue their irrationalism or incoherence (Carroll, *Evolution*; East-erlin, "Bioepistemology"; Livingston; Storey). I suspect, however, that debates about poststructuralist epistemology may go on forever, never sharing a precise terminology (e.g., is there only *one* relativism?) and never producing convergent interpretations of passages from prominent theorists. Leaving epistemology

aside for the moment, therefore, it is sufficient to point out that, because post-structuralist critics have followed the lead of theorists who claim that cultural beliefs and artifacts are culturally constructed manifestations of ideology, an emphasis on evolutionary and biopsychological factors importantly enlarges our current picture of literary production and reception. What recent critics actually *believe*, as opposed to what their practice has been, is in an important sense beside the point. It may well be that poststructuralists have not recognized the epistemological implications of their truth claims, but those implications are nonetheless embedded in the strong constructionist emphasis of poststructuralist practice. In sum, Jackson is trying to dismiss an important corrective to extreme constructionism.

However, Jackson's second concern—that we do not yet know much about the implications for criticism of an evolutionary approach—is shared by many who already practice evolutionary and cognitive criticism, and deserves serious consideration. We need to step back and consider for a moment whether science has any actual value for literary studies. After all, so many of this century's attempts at scientific approaches have proved disappointing, producing not only repetitive readings but also (I think of Freud and Marx here) fallacious ones. Is this simply because literary studies has failed to be adequately subservient to science, and has therefore chosen the wrong paradigms—the anti-empirical and pseudo-scientific rather than genuinely scientific—upon which to base its interpretations? As Richard Levin points out, contemporary critics who choose interpretive models without confirming their currently perceived truth-value within the parent discipline (the Oedipus complex within psychology, for example) are in many respects responsible for the poor state of interdisciplinary knowledge within literary studies. On the other hand, scientists like Paul R. Gross and Norman Levitt, because they find *no* examples of scientific theories applied accurately to literary criticism, suggest that humanists just shouldn't meddle with science, fated as they are to get it all wrong. So should we just give up, each go his separate way and never the twain shall meet—methodological dualism triumphant to the last? What is the proper relation of literature to science, anyway?

To answer such questions about interdisciplinary literary studies, we need first to define the discipline and then to determine how its goals and objectives compare to scientific disciplines. However, because the academic study of literature has a fairly short history, and because the perceived purpose of literary study has varied considerably within that short history, the objectives of the field are not self-evident. According to Gerald Graff, there never has been a coherent professional tradition within English studies, which was in its earliest form based on opposed impulses toward Arnoldian humanism on the one hand and a drive toward professionalization influenced by science on the other. Indeed, both Graff and Terry Eagleton note that nineteenth-century education in England and America was tied to a patrician class leadership ideal, in which the study of phi-

logy and literature were important components of the socializing function of the university, serving as arenas of cultivation and spiritualization in a society in which the explanatory (and therefore social) power of organized religion was on the wane.

Few, if any, literary scholars today would envision the cultivation of a social elite and the indoctrination into spiritual values as the goals of their discipline, even if, unfortunately, the first of these is in many ways supported by the dynamics of higher education and the second remained an overt goal at least through the New Criticism. To be sure, most poststructuralists would point out at this juncture that their endeavors aimed precisely at correcting the institutional reinforcement of social hierarchy embedded in literary studies and, notwithstanding the many questionable epistemological and theoretical *foundations* of most poststructuralist interpretation, these critics have raised awareness of the ideological considerations underpinning attitudes towards literature. Should literary studies, then, in eschewing the pseudo-religiosity and social elitism of the nineteenth and early twentieth centuries, pursue the course of cultural studies, endorsing the merger of its fields with humanities and social sciences such as philosophy, sociology, and history? If such a reorganization were vigorously pursued, one likely practical outcome would be a scholarly and pedagogical method in which literary works were valued for their capacity to exemplify general cultural trends and ideas. Cultural studies, over the long term, might return us to a critical approach similar to that of old-fashioned literary history before the New Criticism introduced close textual analysis. Notably, however, this is not just a potentially undesirable result of constructionism: since the sciences, like the social sciences, investigate normative phenomena and patterns, scientifically oriented literary critics, like advocates of cultural studies, should be attuned to the tendency of other disciplines to assimilate literature to their own epistemic prerogatives.

At the heart of the matter, then, is whether literature still merits an independent discipline and, if so, how one engages in interdisciplinary criticism while preserving the integrity of literary studies. Northrop Frye once maintained “that criticism has a great variety of neighbors, and that the critic must enter into relations with them in any way that guarantees his own independence”; although critics of nearly every stripe today do not endorse Frye’s dismissal of interdisciplinary approaches, they should nevertheless consider whether “literary values” exist distinct from the values of other disciplines (*Anatomy* 19). If such “literary values” no longer exist, then critics need no longer be concerned about their independence. As we have seen, we cannot turn to the history of literary studies within the academy to find a special rationale for our area, but it is nevertheless fairly easy to formulate one. As centers of learning, universities are devoted to the accumulation and dissemination of knowledge, and that knowledge is comprised not only of the accumulation and analysis of facts but also of various

kinds of reflection about why things and people are the way they are and why human knowledge is constituted as it is. Reflection is a vital part of intellectual endeavor because knowledge is constrained and shaped by the human brain, which predisposes us to attend to our environment in ways best adapted to survival. Even though our capacity to accumulate empirical knowledge is growing all the time, it still falls far short of comprehending the complex processes of our world, of ourselves, and of the cosmos, and our need to hypothesize, reflect, and speculate about phenomena in ways that are not amenable to empirical tests is not only vital to our survival but a crucial counterpart to objective research.

Literature has arisen during the course of modernization, so that in the past few thousand years, but especially in the last six hundred, developing cultures have produced a sizable quantity of written work in various genres and modes. Since this body of work is substantial, and since these cultural artifacts represent, reflect upon, and record human culture, they are worthy of study within universities. They enhance our capacity for reflection both through the reflections they themselves offer and through the reflections they inspire in the critical mind. Unlike biological organisms, literary works are the products of individual minds, and each is unique; furthermore, because of the pace of cultural evolution, styles, attitudes, forms, and other specific features of literature are in a constant process of change. Yet in spite of this overwhelming variety, literary works exhibit enough regularities to constitute what Frye calls a verbal universe, a coherent, dynamic, distinct yet integrated body of artifacts.

In contrast to literary scholarship and teaching, which combines the study of norms and patterns with that of individual works, the sciences and social sciences primarily seek to elucidate normative features of phenomena or systems, whether of biological organisms, psychological development, social systems, physical laws, or the like. Such an objective is especially compatible with empirical method, and works best, as E. O. Wilson himself points out, for the simplest kinds of phenomena (*Consilience*). Literary works can be studied empirically, and in a wide variety of ways—to determine reader response (Miall); to elucidate the relationship between character and writer psychology (David Sloan Wilson; Near; and Miller); to discover aggregates of information carried in narrative (Scalise Sugiyama)—and such studies stand to offer vital new information about how literature is created and received as well as what it conveys. But they should never be seen as superior to the necessarily speculative enterprise of interpreting individual literary texts. It is possible that someday we will have acquired so much factual information about literature that the speculative enterprise of interpretation will no longer be necessary, but from our current vantage point, it's impossible to imagine such a situation.

To endorse speculation as a valuable and even necessary activity within literary studies, however, is by no means to cast one's lot with the epistemic relativists who believe that ideas are self-legitimizing. The truth status of ideas with-

in their parent disciplines (regarding, for example, the function of mother-infant interaction; the relative biopsychological differences between the sexes; the aetiology of homosexuality; the law of gravity, etc.) should be of absolute concern to the literary critic. A literary interpretation is only as good as the critic who pens it, and these days the conscientious critic is well advised to bring broad knowledge to the interpretive task. Biography, history, linguistics, sociology, economics, biology, psychology—all can provide significant information about why one work became the thing it is and means as it does. Moreover, among this complex of factors that impinges on literary creation, none is self-evidently more significant than another, so that the attempt to establish the kind of methodological control available in science, beyond the close attention to the text, would be seriously disabling to the art of interpretation.

On the one hand, bioevolutionary critics should apply their literarily trained judgment to the interpretation of texts; on the other, they should exploit their available knowledge of evolution, psychology, and the like as well as follow the lead of intuition in exploring areas in social and natural science that might inform and enhance the speculative enterprise. Even if criticism is inevitably speculative, given the complexity of literary works, all critics are constrained to borrow from their neighbors in an informed and accurate fashion.

The lack of a rationally articulated model or set of directives for evolutionary and cognitive criticism, finally, while an apparent shortcoming to scholars like Jackson, is in my view the great advantage of this new approach. Returning to the history of literary theory, has it not been the late twentieth century's tendency to subdivide into various schools, each with its own mission statement and paradigm for interpretation, that has resulted in so many two-dimensional and suspiciously familiar readings? Evolutionary and cognitive criticism *could* become like this, but in so doing would betray not only our commitment to what Matthew Arnold calls humane letters, but to Darwinism itself.

A commitment to the theory that we have evolved through a process of natural selection and, further, to the conviction that our evolution has implications for our universal human psychology, does not entail a specific direction for literary research or require us to contemplate a narrower range of concerns. Darwinism, to the contrary, *broadens* the scope of literary inquiry and may offer something of a cure for the recent fragmentation and ensuing trivialization of the field. Whereas poststructuralism has limited all explanations to sociocultural phenomena and thus drastically curtailed causal explanation, a Darwinian perspective provides a grounding theory that is itself dynamic and that, therefore, invites consideration of causal processes and complex dynamics. Darwinism, like systems theory and chaos theory, which have served as fruitful models for the analysis of social systems in political science and of human ontogeny in psychology, encourages us to take a long-term view of complex processes while simultaneously offering us a plausible theory of the origin of human beings.

In the remainder of this essay, I will discuss the cultural and biological associations evoked by a single word in a famous passage from Wordsworth's *Prelude* to demonstrate the kind of empirically grounded speculation I believe an authentically evolutionary perspective invites. Two major concerns of this interpretation—first, how a very particular arrangement of words affects (many) readers emotionally, and second, how this emotional reaction impinges on our aesthetic judgment of the passage—are far too complex to be amenable to empirical constraints. At the same time, the emotional action of a poem and the resulting value judgments a culture makes of it seem to me to be among the most vital concerns of the literary critic.

Rather than working from theoretical presuppositions and social scientific findings down to the literary work, I proceeded from my longstanding interest in Wordsworth and in the force of this passage to literary criticism and to those fields—environmental aesthetics, environmental psychology, and behavioral ecology—that potentially offered insight into the likely response of a reader to this particular passage. Because this and other interpretive essays of mine synthesize cultural explanation with bioevolutionary explanation, I call my critical approach *biocultural* or Darwinian, and because any piece of scholarship bringing together such a range of analyses and attempting to suggest how they are relevant to the reader's experience cannot prove the legitimacy of its claims, its conclusions are necessarily speculative.

The lines I will focus on here appear in the now-famous passage in which Wordsworth apostrophizes the imagination in Book VI, "Cambridge and the Alps," which forms the textual, chronological, and dramatic center of the poem about the growth of the poet's mind. Wordsworth calls attention to this series of lines by juxtaposing his narrative of a disappointing past moment with a present epiphany and by the elevated, assured rhetoric he here adopts. During a walking tour of the Alps, as Wordsworth retells it, he and his companion Robert Jones, far from experiencing an influx of sublimity as they crossed the Alps, did not even realize that they had made the crossing and begun their descent until they questioned a peasant. At this point, the dramatically present writing poet, interrupting his chronological narrative, recognizes that such failure of insight attests to the working of imagination through the disruption of expectation: enlightenment is not a product of a well-made plan for perceiving the beautiful and sublime, but occurs at unanticipated moments, though it must also, paradoxically, be sought. Without warning, "when the light of sense/Goes out in flashes that have shewn to us/The invisible world," the imagination provides mystical access to the ultimate nature of things (VI.534-36). From the recognition of the awesome power of imagination, Wordsworth gleans this truth:

Our destiny, our nature, and our home,  
Is with infinitude—and only there;  
With hope it is, hope that can never die,

Effort, and expectation, and desire,  
And something evermore about to be. (VI.538-42)

Wordsworth makes both an eschatological and ontological claim, since both becoming (“destiny”) and being (“nature”) are contained within—or perhaps even constitutive of—infinity. The passage expresses a characteristically Wordsworthian paradox, asserting that goal-directed thought and behavior, forms of process, participate both physically and metaphysically in the apparently fixed and absolute (“nature” and “infinity”). Paradoxical expression, a predominance of abstract nouns, and the emphatic series of threes give this passage its religious resonance, and the juxtaposition of this language with the prosaically recounted Alps crossing contributes significantly to its impact (Easterlin, *Wordsworth*).

Taken in isolation, however, neither the passage’s language nor its import—that all things partake of the larger entity of infinity—is particularly remarkable, with the exception of the word “home.” In the triumvirate “our destiny, our nature, and our home,” a seemingly everyday term is not only transposed into the infinite and ultimate, but receives the greatest emphasis as the final term in the progression. More concrete and affectively charged than the words “destiny” or “nature,” “home” gives this passage a special resonance and meaning that cannot be fully accounted for by cultural explanations alone. In what follows, I will explain how the word “home” has both special cultural and biological significances that, in combination with the passage’s other aesthetic qualities (such as heightened rhetoric, the series of three, and numerous other factors) account for its perceived greatness.

Cultural history tells us this: home, homesickness, and related terms gain currency with the greater mobility that comes with the beginning of urbanization. Like religion a few centuries later, home is a thing that must be named when humans are threatened with its loss; it is taken for granted until one leaves and misses it. In a pre-poststructuralist era essay, Alan McKillop traces the first occurrences of the Swiss-German term *Heimweh*, denoting homesickness-in-exile, to 1596. Concurrent with this emerging yearning for home and its articulation, interestingly, was an Enlightenment tendency to disparage natural or local attachment, opposing it to cosmopolitanism and to true patriotism. However, the longer classical tradition *links* cosmopolitanism with local attachment, and it might be said that Wordsworth reasserts this link with renewed force, for, as McKillop points out, local attachment generates the poet’s entire understanding of nature and man. If Enlightenment rationalism equated one’s love of native place with folk ignorance and superstition, Wordsworth’s response was that the folk, in nurturing “what is really important to men,” understand the emotional center of human existence and its restorative power. In Wordsworth’s conception, then, the feeling for home is not opposed to cosmopolitan experience but rather supplies the sustaining basis of broad experience.

Both McKillop's history of ideas approach and the current cultural constructionist approach of literary criticism could be used to explain the poet's valorization of home as a product of influential ideas or of hegemonic ideology, and it would be foolish to suggest that cultural effects are irrelevant to the poem. But it is also foolish to suggest that cultural explanations are sufficient or in fact separable from naturalistic explanations, for they cannot adequately account for the feelings of loss (and hence of attachment) embodied in *Heimweh*, for the high value placed on the notion of home. To say that these values and feelings are a product of culture only involves us in a specious circularity, begging the question of why feelings and values would be constructed in this way, especially since these feelings and values are apt to hamper the general socioeconomic trend of the time toward industrialization and attendant resettlement into urban locations.

Research in environmental and social ecology on the concept of home indicates that Wordsworth, in his use of the word "home" in this passage, is not simply transposing the personal and domestic into the transcendent, but returning the concept to a pre-modern meaning in which intimate connections to place and person are coherently integrated into a way of being and set of beliefs. The tendency to oppose domestic existence and worldly success and to denigrate home in the process is a by-product of the intertwined phenomena of industrialization, rationalism, and increasing differentiation of the roles of men and women. In contrast to the foundation myths of all cultures, in which the home and homeland are indispensable units of a larger coherent cosmology, the removal of work from the home with industrialization and the replacement of concrete products (crops and cattle) with abstract payment (money) disturbs the psychic continuity between work, which results in resources, and home, a place of reproduction and security for which resources are provided but which until recent centuries was the base of industry for men and women alike. Industrialization furthermore eroded the communal realm to which the family home was connected and which provided the link to larger social and spiritual structures. Indeed, rationalism's bias toward the tangible likely provided the philosophical and ideological support for this diminished concept of home, whose complex web of feelings cannot be quantified, and was perhaps deemed nonexistent (Dovey). McKillop's analysis is certainly consistent with this observation, suggesting that the belittlement of local attachment resulted from rationalism, which cannot explain seemingly irrational attachments to place. Finally, the gradual dissociation of home from resource gathering and its exclusive reconceptualization as the domain of female nurture is a prime example of hypertrophy, the extreme extension of pre-existing structures, according to Wilson (*Human Nature*). If in hunter-gatherer culture women care for the young and seek resources near the home base while men venture farther afield to hunt, provision of resources for the family and larger group remains the clear goal. By contrast, industrialization

brought with it an alienation from the sense of shared goals and a denigration of home as the sphere of women and of sentimental feeling.

Cultural critics might reasonably claim at this point that “home,” because of these many historical changes, simply means less as culture progresses, so that Wordsworth’s deification of home merely reflects the sentimental philosophy of his day—in which case, in my judgment, we would have to find his deification of home *sentimental* in the contemporary and generally pejorative sense—that is, a display of emotion in excess of the object. Such an analysis, however, would beg the question of what motivates eighteenth-century sentimentalism in the first place. Contrarily, investigation into the bioevolutionary nature of our attachments indicates that we still share many of the predispositions of our hunter-gatherer ancestors, and that our tendency to attach to places and persons would make the home-concept resonant, sometimes even perhaps *in spite of* culture’s sentimentalized constructions.

Although “home” calls to mind many specific and concrete associations, it is a multivalent concept that evokes a broad and intangible array of connections to place, persons, past, present, and future. The phenomenological condition of being human, of being a physically discrete organism that must orient in adaptive ways, is facilitated by our emotional responsiveness to the environment (comprised of both our physical surroundings and other people) because those emotions are our primary motivators in our behavioral negotiation of our environment (Orians and Heerwagen). During the major period of species evolution, human beings developed a pattern of being far-ranging but home-based animals, the twin needs of survival and reproduction being best served by both available nesting place and foraging ground (Kaplan; Appleton).

In the nesting place, or what modern humans call the home, our emotions and interests first emerge, and their first object is the primary caregiver, usually the mother. As Yi-Fu Tuan puts it, “If we define place broadly as a focus of value, of nurture and support, then the mother is the child’s primary place. Mother may well be the first enduring and independent object in the infant’s world of fleeting impressions. Later she is recognized by the child as his essential shelter and dependable source of physical and psychological comfort” (29; also Ogden). Indeed, developmental research suggests that infants progress from an early interest in the eyes and face of the mother to a fascination with objects in the environment (at about four months), although all the while attachment to the mother is strengthening (Stern; Bowlby). Thus, while the initial bond to the mother is a precursor to interest in the physical environment, the tie to place, to home, has much to do with the strong association between the bond with the mother and the secure and familiar physical surroundings. This is to surmise that our feelings for home may not only be similar to our feelings for our mothers, but indistinguishable from them, and may even extend beyond the home/shelter to the landscape itself. In light of this, strong positive feelings for one’s mother and

childhood home, rather than being, as Freud theorizes, symptoms of regression to an undifferentiated union of primary narcissism, would attest to the early capacity to discriminate sources of care and places of security, and to comprehend emotionally their primary and indispensable role in the human individual's future growth and viability (Easterlin, "Psychoanalysis"). Since the proper orientation of the body in space means staying alive, the persons and places that have contributed to our survival at our most vulnerable stages should, adaptively speaking, be objects of strong attachment.

In addition to these insights from developmental psychology, evolutionary psychology and environmental aesthetics offers hypotheses about habit preference that reinforce our understanding of strong attachment to the first environment, in which mother, shelter, and locale are, in their emotional content, profoundly associated. As Elieser Hammerstein explains in a brief essay on the behavioral biology of migrants, the German word *Heimat*, connoting a spiritualized home, is "usually referred to as the place where one grew up and to which one is emotionally attached. This attachment is similar to habitat imprinting in animals, arising by way of continuous, emotionally loaded association learning" (3). Evolutionary biology theorizes that habitat imprinting, most especially through the triggering of emotions, assists creatures in habitat selection, and thus improves the likelihood of survival. A mechanism of this kind would have been adaptive for our hunter-gatherer ancestors who, much more than ourselves, needed to be sensitive to their physical environment to ensure survival. However, as Hammerstein points out, the development of intimate relationships in a new place often overrides feelings of homesickness, new feelings and associations supplanting the old to a significant degree. Whereas the imprinting theory suggests that we will become attached to our early habitat or environment no matter what its topography, studies in environmental aesthetics indicate that humans are predisposed to prefer savannah-type landscapes. While this observation seems to contradict Hammerstein's imprinting theory, neither theory assumes that learning patterns or preferences are hard-wired. We are, as Wilson explains, prepared to learn certain preferences and antipathies, but whether these predispositions become manifested in our psychology and behavior is a function of individual circumstance (*Consilience*). Obviously, the degree to which an imprinting mechanism for a city-dweller battles with a universal predisposition to love savannah landscapes requires further research; but for the purposes of this essay, it is notable that both the imprinting theory and the innate preference theory claim that the native place, *whatever its topography*, predictably elicits strong feelings.

In sum, bioevolutionary research on early emotional bonds, on habitat imprinting, and on visual preferences in landscape show that humans are highly prepared to develop a strong attachment to "home," whether this word means the proximate natural environment, the house or shelter, the family (especially

the mother), or all of these. Thus, McKillop's cultural explanation of the emergent value of "home" in the sixteenth century does not supercede but supplements these biological explanations, since the migrations and relocations that are a part of modern life, attended as they are by dislocations and loss, provoke consciousness of our deep and primary attachments. In *The Prelude*, Wordsworth exploits the biocultural relevance of the word "home," a word resonant for his culture and ours because the social changes that made the word so telling are even more a part of our lives today than they were two hundred years ago; yet at the same time, without a deep, biologically based connection to place, it is not likely that the word could have developed its profound cultural significance.

Of course, "home" will not carry these resonances for every reader for a variety of reasons, the most obvious of which is that for circumstantial reasons (life-threatening weather, poverty, parental abuse or neglect, for example) not everyone will have positive feelings for his place of birth, his house, or his mother. But that is not the point. It is reasonable to predict that, however cognitive connections are made between abstract linguistic signs and emotions, the word "home" is likely, on average, to evoke some of our earliest and most fundamental feelings, those on which our later social and emotional development are based. Not for all, but certainly for most readers trained to appreciate poetry, then, "home" will trigger a complex of positive emotional associations rather different than the associations of "destiny" and "nature," the two other terms in Wordsworth's triumvirate of nouns.

At the moment in the poem when he conjures up the imagination and acknowledges its (presumably rhetorical) divinity, Wordsworth simultaneously subverts metaphysical dualism and the attendant suggestion that life in this world accedes to a higher existence and order of phenomena. The passage weaves a sense of security and of last things into a celebration of dynamic process, and the emotionally laden term "home" is profoundly instrumental in the communication of holistic sensibility between writer and reader. The word asks the reader to reach back to his or her oldest experiences, and to think of humankind's final destiny, which is, after all, the act of participating in "something ever more about to be," as its home, its nesting place. In so doing, the poet returns to the implications of the infant Babe passage in Book II, which suggests (with substantial accuracy, it turns out) that mother-infant mutuality is not only the basis of all later competences but the source for *this* poet's abilities and, just as centrally, the reason the poem must be written (Easterlin, "Psychoanalysis"). Wordsworth's use of the word "home" is at once novel and philosophically progressive—I would argue, more progressive than readers have ever fully realized—and these things, along with its difficulty and religious resonance, contribute to the striking quality of the passage.

One could study the word "home" empirically by asking individuals what it means to them and, in a separate study, subjects could read the passage and re-

spond to questions about its meaning, but neither experiment would reveal anything about unconscious emotional associations. One could, as Miall has done, conduct MRI tests of brain activity during the reading process, and this would show us if people spend more time processing the term “home” than others in the passage, but it cannot reveal, again, the biopsychological or specific developmental substrate of the term. Even more to the point, perhaps, if I were to study this passage empirically, on what grounds would I justify my selection of these lines from a twelve-book poem as the focus of my experiment? If I were to model my method after the natural sciences, to aspire to the higher end of the scale of empirical constraint that Carroll has described, would I ever in my lifetime have enough reliable data to draw conclusions about the evocative resonance and meanings of the poet’s language? (“Theory”). Probably not. However, interpretation should be constrained and nurtured by the empirical findings of the scientists, social scientists, and humanists disposed to conduct such studies, so that our knowledge about what people are not only remains unified but develops through interdisciplinary exchange.

The history of literary criticism demonstrates that narrowly conceived models of critical activity do not last very long, unresponsive as they are to the complexities of literary works and to the dynamic place of those works in Frye’s ever-expanding verbal universe. That universe is our intellectual habitation and home, and so our voyages within it should be guided by our own charts and maps rather than by the route of a different kind of traveller whose office happens to be down the hall.

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