The Industrial Revolution
and the Romantic Imagination

*Turner and the Art of Modern Life*

In a long series of watercolors begun immediately after the Napoleonic Wars, in numerous graphic works, and in a group of significant oil paintings executed between 1832 and 1844, Turner examined a wide range of steam subjects with such commitment and insight as to deserve recognition as the premier artist of the early Industrial Revolution. Given his pronounced interest in the principal events and changes of his tumultuous time—the wars with republican and imperial France, royal progresses, the destruction of Parliament by fire—it is hardly surprising that he incorporated images of the Industrial Revolution in his work.

Moreover, he had firsthand experience of his subject: A regular passenger of steamboats and trains, he made recurrent tours of Britain that took him to the new manufacturing districts, where he breathed the foul air of crowded cities and observed barges laden with goods making their languid way along a labyrinth of recently excavated canals. He enjoyed the friendship of leaders of the scientific community, such as Charles Babbage and Mary Somerville, whose inquiries complemented and enhanced the period’s technological advances. His patrons included some of the more conspicuous entrepreneurs of the day—men such as the ironmaster Edwin Bullock, the coachmaker Benjamin Windus, the clothier John Sheepshanks, and the textile manufacturer Henry McConnel. And he adopted technological advances in printmaking, notably steel engraving, in his publishing projects, especially in books aimed at an increasingly large and influential bourgeois audience.

Still, Turner’s embrace of industrial subject matter was measured, becoming meaningful only in the two decades prior to the Great Exhibition. In this respect it mirrored the Industrial Revolution’s own gradual yet deliberate course. Despite numerous technological advances, Britain in the 1830s still relied on
animals or the wind for transport, with the horse as the preferred source of power. Although certain industries, such as cotton manufacture, made an impressive and dramatic impact, giant enterprises had yet to consolidate and dominate the economy.

By 1837, "only a small proportion of British workers had ever seen a steam engine," according to one author. By 1851, however, the population soared, and the majority of Britons no longer lived on the land. The percentage of the population dwelling in towns of over 10,000 was higher than anywhere else in Europe. Manufactured goods formed almost the entire bulk of the country's exports. Despite the continued dominance of a host of modest enterprisers, most areas of the economy had come to depend on the factories.

Turner surely considered contemporary views of industry when he decided to introduce modern machine technology into his art. For many of his contemporaries, the Industrial Revolution fueled the belief that recent accomplishments heralded a future of unlimited human development. Thomas Babineau Macaulay, in his famous 1837 essay on Francis Bacon, equated the age with the era's confident scientific spirit. Babbage shared these sentiments: "There exists, perhaps, no single circumstance which distinguishes our country more remarkably from all others, than the vast extent and perfection of the contrivance of tools and machines for forming those quantities of which so large a quantity is consumed by almost every class of the community."

Those living through this period of transformation were fascinated by the startling examples of technological progress—the advancing locomotive, the smoking steamer, the fiery forge. The physical presence of industry excited particular attention. Consider Andrew Ure's tribute to one recent industrial structure of the 1830s: "A magnificent factory... is beautifully situated in the vicinity of Stockport... In beauty of architectural design, it will yield an analogous edifice, and may indeed, bear a comparison in respect of grandeur, and simplicity, with many aristocratic mansions." For Ure, the attraction of such a building rested as much in its up-to-date, economical design as in its function as a new, energetic human venture providing work and for many. A chemist, writer, and lecturer on a host of scientific matters, Ure was an uncritical champion of the Industrial Revolution. His best-known book, *Philosophy of Manufactures* (1835), proclaimed the virtues of progress through the "blessings which physico-mechanical science has bestowed on society."

Almost ten years later, industry could still elicit admiration, as in Ben Disraeli's novel *Coningsby*. Although the future prime minister harbored reservations about the social consequences of industrialism, here he com...
icated the appeal of machine energy. The hero's voyage of discovery in Lancashire includes a telling picture of an immense mill rising out of a green valley:

a vast deep red brick pile, which though formal and monotonous in its general character, is not without a certain beauty of proportion and an artist-like finish in its occasional masonry. The front, which is of great extent, and covered with many tiers of small windows, is flanked by two projecting wings in the same style, which form a large court. . . . In the centre [stands] the principal entrance, a lofty portal of bold and beautiful design, surmounted by a statue of Commerce.

Inside, the young Coningsby "beheld in this great factory the last and the most refined inventions of mechanical genius." He had earlier found much to appreciate in the metropolis of Manchester, where some enterprises contained "chambers vaster than are told of in Arabian fable." Whereas Ure's apology epitomized the confidence in industrial progress, Disraeli's novel voiced the more complex viewpoint of England's Conservatives, who by the 1840s were uneasily broadening their customary agrarian base to include the ever more significant manufacturing districts.  

Steam, the key practical application of scientific inquiry in the first half of the nineteenth century, was at the center of these progressive achievements. When Turner attached "steam" to the titles of his paintings (Snow Storm—Steam-Boat off a Harbour's Mouth and Rain, Steam and Speed—The Great Western Railway), he underscored its significance. Ure called steam that "benignant power" to which were drawn "myriads of willing menials" in endlessly productive factories. The Quarterly Review reported that "science has, at last ended the quarrel which since the beginning had existed between fire and water, and by the union . . . of these two furious elements, she has created that gigantic power of steam." In 1848, Somervile wrote that the "history of former ages exhibits nothing to be compared with the mental activity of the present. Steam, which annihilates time and space, fills mankind with schemes for advantage or defence."  

During these years no nation embraced steam's potential so totally as Britain. In 1833 the Mechanics' Magazine listed this nation's steam accomplishments:

Most of the London presses are worked by steam; logs and marble are sawed, and chickens are hatched by steam; potatoes are boiled, money is coined, whiskey distilled, water is pumped, bullets are driven, gun-barrels bored, watch cases turned, foul clothes washed, tortoise shell combs mended, anchors hammered, ships' cables twisted, linen is bleached, sugar refined, jellies and soups are made, and houses warmed, by steam; in short, there is scarcely an object of human ne-
cessory, comfort or luxury, in the productions of which some use is not made of this universal and most accommodating of all agents.12

The pervasiveness of steam made such an impression on the visiting Ralph Waldo Emerson that he proclaimed it "almost an Englishman. I do not know but they will send him to Parliament, next, to make laws." By 1850 Britain had become the largest user of steam power in the world.13

Steam-generated industrial development, however, also had its detractors. Some felt it endangered the nation's traditional social order. The patrons of virtuous custom and rural paternalism, disdainful of the fashion for unbridled self-interest, found much to question in the new economic realities; trepidation grew as seismic shifts in population and wealth shattered social frameworks.14

Critics such as Friedrich Engels, Charles Dickens, Thomas Carlyle, and others deplored the human cost of the factory system, the crowding of towns and cities, and the callousness of laissez-faire economics. Carlyle's writings in particular offer insights into the complexity of the industrial phenomenon. While admiring technology's accomplishments and finding "aesthetic pleasure in the industrial landscape,"15 he nevertheless felt uneasy about the implications of what he termed in 1843 the "Age of Machinery." The unrestrained materialism of the time and the disregard for suffering—an attitude he would further condemn in the 1843 Past and Present—troubled him, as did the absence of spiritual qualities so essential to humanity. "The truth is, men have lost their belief in the Invisible, and believe, and hope, and work only in the Visible."16 Profit and utility were now the order of the day.

The Industrial Revolution met with aesthetic censure as well. Revulsion at the dirt, smell, and noise became a constant complaint. Already in the late eighteenth century, the physical appearance of industry's first utilitarian forms drew reproach. Critics then and later thought such stark construction impinging on the integrity of the natural landscape,17 often ruining scenic locales. Chief among this opposition stood the theorists of the picturesque. One awarded the "palm of ugliness" to several large, brutally functional industrial buildings in Derbyshire:

When I consider the striking natural beauties of such a river as that at Matlock, and the effect of the seven-story buildings that have been raised there, and on other beautiful streams, for cotton manufactories, I am inclined to think that nothing can equal them for the purpose of dis-beautifying an enchanting piece of scenery. . . . They are so placed, that they contaminate the most interesting views.18
This objection had its roots in a doctrine that exalted "anachronistic or disappearing industries" while eschewing evidence of productivity, direct economic activity, and anything that was not "underutilized." 19 Steam-driven industry's large-scale, regimented structures, built for a single purpose, were disruptive and intrusive to the picturesque temperament, which instead favored art as "a form of disengagement from the real world." 20

Pleasing prospects were not the only casualties of industry. An American visitor to Britain in the late 1840s described how "in the manufacturing town, the fine soot or blacks darken the day, give white sheep the color of black sheep, discolor the human saliva, contaminate the air, poison many plants, and corrode the monuments and buildings." 21 In 1830 the poet Chauncey H. Townsend declared it a "pity that our recent improvements upon old inventions should all most universally be unpleasing to the eye." He found the traditional lumbering horse-drawn road carriage "more glorious to behold than a steam-coach with its boiler." For the steamboat he reserved special odium:

Amongst the modern deformities that disfigure the pure element of water, the steam-boat claims pre-eminence. Every variety of ship, boat, or vessel, is beautiful except this. . . . What beauty, what gladness, is there in yonder shapeless hulk that carries the smoke, together with the vulgarity of the metropolis, into the dominion of the awful ocean? 22

Such views eventually lost much of their resonance as practical and beneficial technologies became more familiar and appreciated. Despite pockets of resistance, Britain seemed unusually receptive to the new changes. During the eighteenth century there emerged a "greater respectability attaching to an interest in economic issues," especially when it was realized that the nation's well-being gained thereby. 23 The early nineteenth century saw the great learned journals fully engage the modern realities. The Edinburgh Review combined its commitment to governmental reform with a devotion to issues of political economy as well as scientific innovation. The rival Quarterly Review, conspicuous for its veneration of the established order, also considered questions involving technological advancements and factory conditions. 24

Furthermore, industrialism was highly compatible with native English practicality. This quality, extolled for giving rise to "the architecture of the spinning-mill, that most matter-of-fact, most utilitarian, most workaday architecture," led logically to the Great Exhibition at the Crystal Palace. 25 By that time the most influential elements in early nineteenth-century society, beneficiaries of "the
bourg’s 1801 Coalbrookdale, a classic painting of industrial activity so new, dynamic, and remarkable as to defy specific analysis.

Even the machines held their own special enchantment, as Somerville remembered when she toured the Watt and Boulton works near Birmingham: “The engines, some in action, although beautifully smooth, showed a power that was almost fearful.”31 Disraeli, speaking through his protagonist Coningsby, described how industrialism, when contemplated on a much larger and more advanced scale, also could captivate. As Coningsby passed through Lancashire, he found his “mind excited by strange sights . . . the plains where iron and coal supersede turf and corn, dingy as the entrance of Hades, and flaming with furnaces.” Manchester stirred him with “illumined factories, with more windows than Italian palaces, and smoking chimneys taller than Egyptian obelisks.” Here stood the matrix of modern enterprise, “the great metropolis of machinery itself.”32

Like others of his generation, Turner considered the rise of industry against a crucial aspect of contemporary romanticism: a deeply felt relationship with nature. What could be said, for example, to those who boasted that humanity had finally acquired the means to realize an ancient dream of taming unruly nature with machine technology?33 Carlyle, with a touch of derision, summed up the prevailing enthusiasm this way: “We remove mountains, and make seas our smooth highway; nothing can resist us. We war with rude Nature; and, by our restless engines, come off always victorious, and loaded with spoils.” The romantics, on the other hand, considered nature “a live vessel of spirit, a translucent source of mystery and revelation”; their early ambivalence toward innovative science soon developed into antagonism.34 For an artist like Turner, imbued with thoughts of nature as the ultimate source of creativity, as splendidly and fearfully omnipotent, the simplistic optimism embodied in Carlyle’s words would have appeared misguided. Nature, appreciated and evaluated with new insight, offered to his mind a timely alternative to being subsumed in the increasingly dominant industrial ethos.

At a time when the sterile regularity of machines and the pretentious claims of science seemed to affirm victory on all fronts, the grandeur and mystery of nature inspired Turner and his contemporaries, stimulated their subjective consciousness, and recalled their humility. The English-born painter Thomas Cole, an admirer of Turner’s, dedicated his intellect and art to exploring alternatives in nature. In his 1836 “Essay on American Scenery,” he voiced a common complaint of his day: “In this age . . . a meager utilitarianism seems ready to absorb every feeling and sentiment, and what is sometimes called improvement in its march makes us fear that the bright and tender flowers of the imagination shall all be crushed beneath its iron tramp.” Cole, who found his personal solace in
marvelous inventions of science and technology, the increasing mass and variety of material goods, the growing speed of movement and convenience of everyday activities," fully espoused the "new religion of progress."

Despite its eventual triumph, the Industrial Revolution engendered a debate that made artists wary. Artistic renderings of forges, kilns, and mill towns were not uncommon in the late eighteenth and early nineteenth centuries, but such images did not befit the realm of higher aesthetics—the collections of the great connoisseurs or the annual exhibitions at the Royal Academy—in which major artists like Turner made their reputations. There were exceptions, to be sure, such as Joseph Wright’s paintings of Arkwright’s Derbyshire mill and Philip James de Loutherbourg’s Coalbrookdale by Night (discussed in Chapter 4), depicting Reynolds’s Shropshire ironworks. But these had a limited bearing on the thought and taste of the time. Wright’s works were specific commissions for a successful manufacturer and were not widely exhibited; Loutherbourg’s startling oil was his only industry-inspired work on so grand a scale.

The situation began to change in the early decades of the nineteenth century, with steamers and mills making their tentative way into the watercolors and prints of artists like John Sell Cotman, David Cox, and Clarkson Stanfield. Although artists of nascent industrialism could have taken encouragement from Stendhal, who in an 1825 issue of London Magazine enjoined the painter to be "the historian of the physical world before him" and art to "keep pace with the progress of society," most still would not accord industrial technology serious treatment—particularly in exhibited oil painting, the chief mark of visual expression during the Regency and Victorian periods.

Turner proved a singular exception. He waited, however, for the popularity of the new technology to take firm hold of Britain’s consciousness before exhibiting his earliest steam works, first as watercolors and later as oil paintings. Although he was susceptible to the romantic urge to engage the grotesque—a quality that many believed industrial forms possessed in ample measure—his success with machine subjects rested more on an appreciation of their inherent merit, especially their emotive qualities.

Turner’s ability to convey this last attribute was important, for industry’s steam and fires appealed to the romantic emotions of the age. Already in the late eighteenth century, Richard Reynolds of Coalbrookdale—perhaps the most famous of the early industrial sites, because of its innovations in coke-fired smelting and its proximity to the Ironbridge spanning the Severn—betrayed an almost naive exhilaration when writing of the “roaring of the blast furnaces," the spectacle of “long beds of glowing coke, the jets of flame and showers of sparks” that held him spellbound. Comparable sentiments characterize Louther-
the vast landscapes of his adopted America, advocated cultivating “that oasis that yet remains to us,” namely the world of unspoiled “Rural nature,” which stirred and overwhelmed the soul through “the loveliness of verdant fields, the sublimity of lofty mountains, or the varied magnificence of the sky.” Painters and poets could find here “the exhaustless mine” from which might “be awakened . . . a deeper feeling of the works of genius, and a keener perception of the beauty of our existence.”³⁵ Nature provided essential inspiration for the human spirit while cautioning people to recognize their limitations.

Although Turner knew Cole only from the latter’s brief visit to his studio in 1829,³⁶ he would certainly have shared his reverence for nature. When one of Turner’s traveling companions remarked on the artist’s “intense regard for nature,”³⁷ he barely hinted at a quality so pervasive it influenced all his work, including his industrial art. Favorite lines of James Thomson offered sentiments to match Turner’s thoughts:

He looked and Nature sparkled in his eyes
He caught the truth of Nature and her dyes[,]³⁸

In 1832 a writer in the Athenæum lauded Turner’s ability to awaken the energy of the natural environment through art, declaring that “the whole kingdom of inanimate nature is his: his whirlwinds have words, his tempests speak, and the air which he breathes over his matchless landscapes has something of the creator in it.”³⁹ The paintings suggest a “craving for what was most extreme in nature”—catastrophic avalanches and devastating storms, on land and at sea—by which Turner exposed “the pathetic inadequacy of human beings in an ineffably beautiful and terrible universe.”⁴⁰

Indeed Turner went beyond the modest homage to nature voiced by contemporaries such as Cole, presenting instead a “pessimistic and catastrophic” outlook that left humanity little hope.⁴¹ In canvases evoking nature’s ferocity, human beings paled into chaotic insignificance, becoming diminutive figures struggling for their lives. To the 1830 painting The Fall of an Avalanche in the Grisons (Tate Gallery, London), a depiction of a humble hut crushed by an enormous boulder, Turner appended several revealing lines of his own verse:

The downward sun a parting sadness gleams,
Portentous lurid thro’ the gathering storm;
Thick drifting snow, on snow,
Till the vast weight burst thro’ the rocky barrier;
... Down at once, its pine clad forests,
And towering glaciers fall, the work of ages
Crashing through all! extinction follows,
And the toil, the hope of man—o'erwhelms.\textsuperscript{42}

This belief in the superiority of nature did not recede with the apparent miracle of mechanization. Turner would not have agreed with the horticulturist Thomas Whately, who earlier observed that the "stupendous" power of machinery stood comparison with the "extravagances of nature," or a modern critic who, in writing of Cotman's watercolor of \textit{Bedlam Furnace}, sees how "industry overpowers nature."\textsuperscript{43} While enthralled with the novel vitality of machines, he came to depict them in the same light as so many other human endeavors—restricted in their capabilities and vulnerable to natural forces. In so doing, he achieved "the apotheosis of the Romantic view of industry," portraying steam "amidst the atmosphere and light of nature"—and at the same time, one might add, dominated by nature.\textsuperscript{44}

Machine power, with its optimistic promise, made human interaction with nature more acute for Turner. He relished the interplay between timeless and recent forces and would have understood his fellow painter Benjamin Robert Haydon, who, in watching a steamer negotiate rough weather, admitted to enjoying the "tremendous idea of the power of Science, contesting as it were with the defying contempt, the Elements of God." Yet his sympathies coincided even more with those of George Head, the inquisitive traveler who, reflecting on the "noble sight" of machines viewed during his tour of England in the 1830s, concluded that "science will never, probably, wholly avert those catastrophes which, either by combustion or explosion, in the melancholy reverse of fortune, serve to remind man of the finitude of his wisdom."\textsuperscript{45}

Turner's romantic response to nature owed a partial debt to the concept of the sublime, much discussed in the Georgian and Regency periods. Cole used the word to describe Niagara Falls: "In its volume we conceive immensity; in its course, everlasting duration; in its impetuosity, uncontrollable power. These are the elements of its sublimity." Terror was another such element, for as Edmund Burke had written almost eighty years earlier in the most thorough examination of the term, "whatever is in any sort terrible... is a source of the sublime, that is, it is productive of the strongest emotion."\textsuperscript{46} Turner was influenced by various theories of the sublime; he used the term in writing and expressed it in his art.\textsuperscript{47} But at the same time his art went beyond such theories, which were somewhat dated when the young artist began to make his mark.

By the second decade of the nineteenth century, the sublime had become an increasingly imprecise idea, suffering repeated dissections and expansions at the
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hands of a multitude of intellectuals. Finally, by the mid-nineteenth century it received scant attention. John Ruskin confirmed its obsolescence in a mere three pages in the first volume of Modern Painters. By suggesting that “anything which elevates the mind is sublime” and that “sublimity is . . . only another word for the effect of greatness upon the feelings,” he acknowledged how the word had, by the 1840s, become little more than a cliché. For Turner, romanticism proved a far more useful concept, especially in the face of the unprecedented forces produced by the Industrial Revolution.

Turner's quest for insight into the dominance, beauty, and destructiveness of nature, his interest in scientifically conceived forces, and his program of expressing in art the root potency of such phenomena all became salient features of his romanticism. He allied to this a propensity to view the world not in objective terms but as a stimulus for personal, intuitive understanding. His ideas coincided with the romantic movement's focus on individual feeling, human susceptibility, and reverence for nature. This last trait contrasted with the Enlightenment era's goals of human control and standardization — concepts also central to the Industrial Revolution. Never content to depict bare facts, Turner delved beneath the surface to express the source of the energy he sensed in the thing observed. At the same time he sought to communicate the experience, if not the exhilaration, of encountering natural or mechanical power.

With intuition and the senses thus demanding expression, Turner learned to deftly enhance what he saw with what he felt, bringing subjective awareness and deep personal involvement to pictures of readily identifiable objects. The naturalism that won him early acclaim in a painting like the 1815 Crossing the Brook (Tate Gallery, London) gave way eventually to a freer style, with less attention to detail and more concern with underlying character, as in the 1844 Rain, Steam, and Speed. Verisimilitude receded before loose brushwork and dynamic color to suggest deeper meaning and greater complexity.

Turner's romanticism, while a highly personal way of looking at the world, shared much with other intellectual currents then developing in art, thought, music, and letters in Europe and America. In 1846 Charles Baudelaire described romanticism as something "situated . . . in a mode of feeling," encompassing "intimacy, spirituality, color, aspiration towards the infinite." Northern Europe seemed most attuned to this outlook, according to the French poet, shrouded as it was in a gray atmosphere, longing for liberation in color, and open to the insights of subjective understanding. Perhaps with Turner in mind, because of his affinity for a bright palette, he placed England in this group, as "that home of fanatical colourists." A similar trend can be seen in romantic music, where
color, rather than being "applied like a veneer to form," instead brought "new forms into being."52

Application of intense visual color was one way, along with freedom of line, that Turner transformed objective reality so as to reveal the essential, hidden dynamic of the thing observed. What hostile critics identified as Turner's exaggerations, in color or drawing, were often results of his probing for the defining force that ultimately manifested itself in outward appearance. In landscapes, for example, the golden color of blazing bursts of sunlight transform an entire canvas; thickly painted arcs and circles representing clouds and whirlwinds suck everything toward a focal point of energy. Industrial scenes presented similar possibilities. Turner could suggest the power source of a locomotive or a steamer by applying rich color to intimate the light of hot, smoking engines.

This central trait in Turner's art, revealing with broad areas of color an integral yet elusive transforming power, enhanced his industrial paintings. In his search for essence he betrayed a further affinity with the romanticism of his age, as found in the writings of several early nineteenth-century German philosophers. August Wilhelm von Schlegel spoke in his 1808 lectures of the "contemplative" and "inward" tendency of modern art; Friedrich Wilhelm Joseph von Schelling, around the same time, wrote of the artist's "intuitive" characteristics that could unlock "the spirit of nature working at the core of things."53 G. W. F. Hegel further scrutinized the issue in his Lectures on Aesthetics (1816). Speaking of what he called the romantic tendency, the emphasis on the power of the soul that emerged with early Christianity, Hegel investigated qualities of "absolute internality." Romantic art, he believed, addressed itself "to the subjective inwardness, to the heart, the feeling, which . . . seeks and finds its reconciliation only in the spirit within. It is this inner world that forms the content of the romantic, and must therefore find its representation as such inward feeling."54 Hegel believed that especially painters enjoyed unique gifts in evoking these essentials and in capturing, with the aid of imagination, insights that reached beyond the artist's immediate social and political existence.55 Heinrich Heine voiced like sentiments in his Romantic School (1836) when he praised the artist's ability to see past the surface to "a special significance . . . concealed beneath."56

Many of Turner's literary compatriots pressed similar claims for probing introspection as a means to understand fully the true nature of phenomena. To some extent German thinkers aided British romantics in this quest. Although the former had a limited audience before the 1840s, their effect can be seen in a number of British writings. Thomas Love Peacock's Nightmare Abbey (1818) boasted a hero who evoked Immanuel Kant in his romantic musings. Turner

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ination, which taught him that “behind nature’s appearances there existed some Platonic or archetypal truth.” Turner’s capacity to sense such truth in things observed has been noted in his mature landscapes, which reveal a “grasp not only of the forms of transient phenomena... but also... the energy activating them.”

In his own verse, Turner wrote:

What is imagination when its seats unknown
That lights the souls resource to soar beyond
The powers of perception yet by knowledge
Of nature’s forms and qualities feebly strong
To pursue the unknown force that urges all...]

Strong imaginative insight in painting enjoyed much in common with poetry, as Turner realized. In the 1821 Defence of Poetry, Percy Bysshe Shelley extolled the poet’s role in voicing the imaginative qualities that could reveal the essential truth of reality. “A single word... a spark of inextinguishable thought” could hold the most profound insights. Poetry actualized the internal nature of things, stripping “the veil of familiarity from the world,... [to] lay bare the naked and sleeping beauty which is the spirit of its forms.” Like a sculptor intent on realizing from a piece of rough stone an image of loveliness, so too the poet evokes the vital spirit that molds outward appearance. Going beyond Hegelian inwardsness, Shelley best articulated the internal energy that defines outward reality: “The beauty of the internal nature cannot be so far concealed by its accidental vesture, but that the spirit of its form shall communicate itself to the very disguise, and indicate the shape it hides from the manner in which it is worn.”

Recognition and realization of this underlying power, present even in the routine, was the means by which the poet “adds beauty to that which is most deformed.” In a telling phrase, Shelley applauded poetry because “it compels us to feel that which we perceive, and to imagine that which we know.” He believed his argument had special relevance for his own increasingly industrial time, an era whose accelerated scientific and economic development left things like poetry “concealed by the accumulation of facts and calculating processes.” The intuitive and imaginative solution offered by poetry could easily apply to painting, and the poet’s unique insights could be shared by an artist also possessed of “a most delicate sensibility and the most enlarged imagination.”

There is no evidence that Turner knew this perceptive essay, which was not published until 1840. But certainly he knew Shelley’s poems, which reflected much of the essay’s argument and influenced Turner’s own humble verse. One
and other readers of the *Edinburgh Review* were exposed to more recent trends in German literature through the articles of Carlyle, first published in 1827. This critic saw in German poetry, especially, a way of coming to terms with the peculiar, pressing problems of modern life. Distressed to think that “the Nineteenth Century stands before us, in all its contradiction and perplexity; barren, mean and baleful,” he looked to the “poet’s spirit” to reveal “its secret significance,” to expose the “life-giving fire” within. Many of Carlyle’s contemporaries, most notably Samuel Taylor Coleridge, found in German intellectual life an influential stimulus; so too did Turner, whose German travels inspired several works and who deeply admired Johann Wolfgang von Goethe’s *Theory of Colors*.59

British artists and intellectuals also attained their own insights into subjective understanding, armed with words such as “instinct” and “intuition,” as well as a more popular term, “imagination”—one that became particularly relevant to Turner. Many Britons would have undoubtedly concurred that “imagination was in some sense the whole of existence” for romantics.60 The Scottish thinker Dugald Stewart, in his *Philosophical Essays* of 1810, lauded imagination for its “power of representing to ourselves the absent objects of our perceptions.” This facility accented and enlarged perception: “Imagination, by her powers of selection and of combination, can render her [nature’s] productions more perfect than those which are exhibited in the natural world.”61 Wordsworth too recognized its force, which he identifies in the *Prelude* (I.4.189-95) as the defining characteristic:

... Imagination, which, in truth,
Is but another name for absolute power[.] 

In *Modern Painters* Ruskin credited imagination with achieving “a more essential truth than is seen at the surface of things” and, echoing the Germans, viewed it as “the heart and inner nature, [which] makes them felt.”62

Turner too placed great stress on imagination in the creative process. Not long ago a major Turner exhibition was mounted under the title *Imagination and Reality*, affirming the painter’s link to a concept applied often to his art during his lifetime and later. In his *Discourse XIII* (1786), Sir Joshua Reynolds, the founding president of Turner’s beloved Royal Academy and doyen of British aesthetic theory, had praised imagination in the visual arts as “the residence of truth” that could, when applied with sufficient taste and judgment, complement and transcend reason. The idea that painting could evoke this kind of insight undoubtedly inspired Turner.63 Also important to Turner’s thinking in this regard was Mark Akenside’s mid-eighteenth-century poem *The Pleasures of Imag-
writer, sensing an affinity between the poet and the painter in Turner, called him the “Shelley of English Painting.” His extensive yet scattered writing spoke to a love of poetic sensibility, especially that crucial relationship between painting and poetry embodied in the concept of *ut pictura poesis*. It is thus reasonable to suppose that Turner would have been in sympathy with Shelley’s argument for literary imagination as a key to understanding.

So conceived, imagination, along with feeling, also enhanced the senescent idea of the sublime, which was then grafted to the more up-to-date and complex concept of romanticism. Alison realized the need for this elaboration when he argued in *Principles of Taste* that “unless this exercise of imagination is excited, the emotions of beauty and sublimity are unfelt.” Stewart, in his *Philosophical Essays*, saw imagination enabling humans to conceive of greater sublimity than existed in nature, to see beyond the natural and “imagine Rocks and Mountains more sublime, . . . than the eye has ever beheld.”

Turner built on his love of the sublime by adding crucial elements of his imagination, so that, in his *Snow Storm—Steam-Boat off a Harbour’s Mouth*, for example, he not only painted what a terrible storm at sea appeared to be but, more significantly, “what such a scene was like”—thus communicating the almost incommunicable fear of the artist who claims to have experienced it. Invention of this sort had already outraged one critic in 1832, who accused Turner of posing as “a manufacturer of the Sublime by leaving out the details,” requiring his viewers to emulate his creative process, “to finish his pictures by the force of imagination.” But this was precisely Turner’s point, since it allowed him to mystify sublimity by linking it to “the sense of not knowing where the information—where the power of the vision—comes from.”

In this way Turner refuted those who, like Macaulay, believed that poetry alone could speak to the “heart of man” and that painting was merely imitative, limited to “only form and color.” A Turner canvas could more than equal poetry in arriving at probing insight into every aspect of reality. This romantic feature became particularly meaningful in Turner’s industrial paintings, where ordinary, functional objects became arresting and mysterious as their underlying character was revealed in the hands of the artist.

Industrial subjects vied with nature in stimulating Turner’s romantic imagination. Yet while steam technology drew from Turner ever more daring painterly approaches, it also worked to discipline his imagination. Although occasionally he would experiment with taking his technique to its logical extension of pure abstractionism, his best and most important work remained consistent with that “central Romantic paradox that liberty requires to be curtailed,” giving the viewer sufficient recognizable form to share in the artist’s inspiration and
receive his desired message. Like other romantics, he pursued what one critic saw as a salient characteristic of this movement, “subjectivity” grounded in “objectivity,”78 retaining “a firmly perceived framework of human reference.”79 Industrial machines, because of their novelty, required identification, and they came to be defined either as precise, straight-edged products of manufacture or as assemblages of black-colored metal. The result was a body of art that embodied a romantic vision of the Industrial Revolution in its totality—part recognizable articles of the early nineteenth century, part sensed realizations of those energetic objects that spoke to the expectations and anxieties of the age.
Rain, Steam,

and Speed

The Railroad and the Victorian Consciousness

Turner’s uncompromisingly modern view of busy Thames-side London leads logically to his seminal industrial painting, *Rain, Steam, and Speed—The Great Western Railway*, of 1844 (Plate 8). This daring portrayal of a railway train cutting across the golden English countryside affirmed the railroad’s central place in early nineteenth-century life, its relationship to the human and natural environments, and Turner’s acute understanding of its powerful mechanical character.

Turner painted *Rain, Steam, and Speed* with the freedom and richness characteristic of his mature style, features also evident in the six other paintings he had on display in the 1844 Royal Academy exhibition. Regarding one of this group, *Ostend*, the critic of the Art-Union confessed annoyance with the artist’s penchant for haze and indistinctness: “Turner has long forsaken the world of forms.” In *Rain, Steam, and Speed*, blurred sections, often intense in color, alternate with identifiable subjects to produce a sense of the artist’s fervent emotional involvement, grounded firmly in his own time.

The precise location can be established as the Maidenhead crossing of the Thames, looking east toward Taplow. The bottom portion of the painting exposes a landscape of golden browns punctuated by touches of white, while the top half is tinged by the blue of the sky, a color echoed slightly on the meandering river to the left. This sky is stained by arched swirls of gold and white, which straighten around the advancing train, becoming vertical lines above and behind its carriages and parallel diagonals at and before the locomotive. Perhaps a summer shower is just ending, one too brief to have driven away the plowman on the extreme right or the group of people on the riverbank at the lower left, whose raised arms might allude to a passage in a popular 1839 railway guide describing the “banks [of the Thames] waving with the groves of Clief-
den, Taplow, and so many poet-hallowed scenes." It is one of those transitory moments of natural variety and brilliance, always appealing to Turner’s eye, in which the bright rays of the sun are just emerging through the moisture-soaked atmosphere, turned white by their energy.

Out of this complex background comes the railway train, a conspicuous study of human precision, caught for but an instant, like the fleeting weather conditions. Carried across the river on the arches of a majestic stone bridge, the train advances along dark parallel iron rails, which, because of their mechanical exactness and the way the bottom of the canvas is cropped, suggest a road of infinite length. These precise lines are echoed by the equally straight walls of the viaduct, which, together with the long rectangle of the train carriages, draw the eye back into the misty, limitless distance. Defining the rail line at two points on the canvas concentrates attention on its identifiable iron and machine elements, as well as the speed suggested in the painting’s title.

The soft golds, blues, and whites of nature stand in stark contrast to the blacks and grays of industrial technology, which makes the latter all that more startling to the onlooker. Dark coloration could imply a threatening quality in industrial objects, considerably enhancing their prominence, as it did for the critic of the Morning Post: “Nothing can be more vigorous and fine than the manner in which the delicate hues of this picture are focused by the dark monster which is advancing along the line . . . . The eye is fastened upon the coming train by its colour . . . the eye returns to the dark engine.” Late eighteenth-century theory taught the association of black with those things “which minister to the convenience of life.” The locomotive in Rain, Steam, and Speed—and to some extent the carriages it pulls—speaks to such utilitarianism. Its blackness shines with a factory-made, precision smoothness (familiar in early Turner steam paintings), which reflects perpendicular lines of sunlight. Black also indicates the secondary effects of technological power, in the stains in the immediate vicinity of the track left by machine-burned coke fuel. The long stone bridge, already stained by the residue of the countless locomotives passing over it, presents a further contrast to the bright, undefiled preindustrial road bridge in the left distance.

Rain, Steam, and Speed, a large canvas occupying “the place of honour upon the sight line” of the wall of the exhibition’s East Room, thus became, along with the singular evocation of the words of its title, an important and provocative essay on technology, worthy of its characterization as “the very apotheosis of the Romantic view of industry.” Turner’s fascination with mechanized power here emerged with uncommon force, as did his interest in contrasts, which were only enhanced by the coincidental placing of this painting opposite another artist’s conventionally bucolic effort bearing the gentle label A Rapid