NIETZSCHE ON TECHNOLOGY

BY ROBERT E. McGINN

1. Introduction—The publication in 1932, in German, French, and Russian, of the first complete editions of Marx’s Economic and Philosophical Manuscripts touched off what has since become one of the major growth industries of this century: the production of books and articles about Marx’s views on the interrelations of technology, work, alienation, and capitalism. The Paris Manuscripts of 1844 is the locus classicus for discussion of alienated labor under capitalism. While little explicit reference is made to technology in this work, its celebrated discussion of alienated labor was clearly meant to apply to the tool-based manufacturing system of early capitalism and the “machinofacture” system of mature capitalism.1 Marx’s explicit analysis of technology is found primarily in Grundrisse and Capital.2 However, his abhorrence of alienated labor provided part of the motivational context for this treatment of machine technology. These interwoven strands of Marx’s thought became the point of departure for, if not the cynosure of, much twentieth-century reflection on the subject of technology and work under capitalism.

In what follows I wish to draw attention to the treatment of modern technology by another major nineteenth-century social and cultural critic, Friedrich Nietzsche (hereafter: N). N had a unique set of views on modern technology, ones reflecting some of his characteristic hopes and fears regarding the development of industrial society. Comparing these views with those of Marx can contribute to a better appreciation of the insights and limitations of each account as well as to a more comprehensive assessment of the Industrial Revolution. Although in the Paris Manuscripts Marx discussed the spiritual impoverishment allegedly caused by alienated labor under capitalism, the focus of his subsequent treatment of modern technol-

1 “Whereas the medieval handicraftsmen performed a whole range of operations in the production of a single commodity, the manufacturing system broke down the productive process into a series of discrete steps, and assigned each step to a separate detail laborer. However, . . . it nevertheless shared a basic feature in common with the medieval handicraft system: a continued reliance upon human skills and capacities. . . . The decisive step was the development of a machine technology which was not heavily dependent upon human skills or volitions, where the productive process was broken down into a series of separately analyzable steps. The historic importance of the manufacturing system was that it had provided just such a breakdown. The historic importance of Modern Industry was that it incorporated these separate steps into machine processes to which scientific knowledge and principles could now be routinely applied.” Nathan Rosenberg, “Marx as a Student of Technology,” Monthly Review, 38 (1976), 63-64.

ogy is its socio-economic consequences: e.g., the bearing of machine technology on profit, on the organization of work, and on the prospects for the liberation of the working class. As we shall see, N’s treatment, while not completely overlooking social-structural or economic aspects, emphasizes sociocultural considerations. His overriding interest in examining modern technology was in ascertaining the bearing of various aspects of its social and cultural impact on the prospects for enhanced human spirituality through the cultivation of exceptional human beings. Thus, divergence in their underlying points of view and agenda of concern notwithstanding, N’s and Marx’s treatments of technology are to a degree complementary: both draw attention to important dimensions of the impact of modern technology which must be included in any account of the significance of the Industrial Revolution purporting to be comprehensive.

In previous accounts of Nietzsche’s social and cultural thought, no attention has been paid to his views on technology and its impact on modern life, the focus of concern below. Most of N’s remarks about technology appear in the works of his middle period (1876–1882)\(^3\) when he was engaged in articulating “a new image and ideal of the free spirit.” \(^4\) While N’s treatment of technology does not amount to a mature or comprehensive theory, it merits consideration as a penetrating, prescient account of the intangible costs of industrialization and as an example of the way N brought his emerging ideal critically to bear on important aspects of modern society and culture.

2. General Views—Nietzsche had an interesting and fairly balanced set of attitudes toward and views about technology and its impact on modern life, an impact he deemed pervasive enough to warrant speaking of modern “machine Kultur”\(^5\) (WSS 220). I begin with his general views.

\(^3\) With the exception of a few fleeting references to technology in the early (1869-76) and late (1883-88) works, N’s remarks on technology are limited to approximately a dozen sections of the so-called “aphoristic” works of the middle period, ranging in length from a sentence to several pages. Titles, abbreviations, and corresponding volumes of Nietzsche Werke: Kritische Gesamtausgabe, ed. by Giorgio Colli and Mazzino Montinari (Berlin, 1967 ff.), for the works of the middle period are: Menschliches, Allzumenschliches (MA/IV\(_2\)); Vermischte Meinungen und Sprüche (VMS/IV\(_3\)); Der Wanderer und Sein Schatten (WSS/IV\(_3\)); Morgenröte (M/V\(_1\)); and Die Fröhliche Wissenschaft (FW/IV\(_2\)). Direct quotations and important ideas and claims of N are referenced as follows: “(FW 18)” indicates that the preceding quotation, idea, or claim is drawn from the eighteenth small section or aphorism of FW. Translations of passages from MA, VMS, WSS, and M are largely those of the present writer although the following translations have been consulted and occasionally used: Human, All Too Human, part I, trans. Helen Zimmern, in Vol. 6 of The Complete Works of Friedrich Nietzsche, ed. Oscar Levy (London, 1909-11); part II, i.e., Miscellaneous Maxims and Opinions and The Wanderer and His Shadow, trans. Paul V. Cohn, in Vol. 7 of Levy, op. cit., and The Dawn of Day, trans. Johanna Volz (London, 1903). Translations of passages from FW are from Walter Kaufmann’s The Gay Science (New York, 1974).

\(^4\) Quoted in Kaufmann, op. cit., 30.

\(^5\) To avoid unnecessary confusion, in translated quotations from Nietzsche the spelling of the original German word “Kultur” has been retained. In the middle
A significant change has taken place in man’s relations to his technics (i.e., the material products of technological activity). Human beings in "crude, religiously productive primitive Kulturen" did not think of themselves as controlling the technics they used, e.g., bows, arrows, pencils, hammers, weapons, hatchets, trowels, and ploughs. The gods controlled these items; man simply used them at the leave of the gods. The notion of natural causality was lacking (MA 111). Now that this superstition has been routed, along with belief in divine providence, modern man makes his own technics and deliberately attempts to control nature with them in order to increase his power. However, as indicated by his allusion to a steam engine which blows up through human miscalculation destroying itself and its maker (MA 446), N did not look upon this development as an unmixed blessing or as ushering in utopia. Caution is also evident in his reference to the fact that "the printing press, the machine, the railroad, and [the] telegraph and premises whose thousand-year conclusion no one has yet dared to draw" (WSS 278). N implies here that the long-term spiritual effects of these innovations are likely to be profound, although their specific nature is still an open question.6

Nevertheless, N emphasizes the creative nature of technological activity, particularly in the modern era: "the machine [is] a product of the highest intellectual powers" (WSS 220). Indeed, the creativity involved in modern inventions is far greater than that achieved by inventors of "ancient Kulturen" in their tools, measuring instruments, wagons, ships, and houses. To deny this is a prejudice and depreciates contemporary intellect (M 36). N’s justification for this contrast is that whereas chance was the greatest discoverer and instigator of these ancient inventions, even the most insignificant invention of modern times expends "more intellect, discipline, and scientific imagination" than was available earlier in whole times. If nothing else, this dubious hyperbolic argument underscores how much importance N attached to method in technological (and scientific) activity. We also see that N distinguished clearly between the laudable creative character of much modern technological activity and the problematic nature of some of its effects, some of which thwarted creativity, as will be seen shortly. It is also noteworthy, and to his credit, that N, unlike most philosophers, saw technology—at least modern machine technology—as an intellectually creative activity ("the highest intellectual powers"), not simply as a matter of trial and error, manual dexterity, and an intuitive talent for tinkering.

period, "Kultur" for N sometimes meant "way of life," sometimes "level of human development" as measured by the yardstick of N’s ideal of the free spirit. Neither of these meanings is precisely the modern anthropological one which explicitly emphasizes the transmission of a total way of life. In what follows "culture" is to be understood in the modern anthropological sense of a total way of life transmitted from one generation to another and, unless otherwise noted, "Kultur" means "way of life."

Having rebuffed both those who view technology as an uncreative form of human activity as well as those who believe that technological creativity reached its peak in the "ancient Kulturen," N calls attention to a disturbing aspect of modern man's attitude toward his technology. There appears to be a readiness on the part of modern society "mercilessly" to use "all" human beings "as material to heat its great machines" (MA 585). What appalls N is the indiscriminate character of this readiness. The fact that society seems ready to use even talented and excellent human beings to run, feed, and maintain its machines makes it seem almost as if these machines were end-in-themselves.7 But, "if all individuals (that is, mankind) are only used to maintain" machines, "for what then are the machines?" (MA 585). The fact that N even asks this question, given his awareness of capitalism and its pursuit of profit, suggests a posture of mock disbelief that capitalists would actually sacrifice the exceptional individual on the altar of profit; thus the "umanan commedia." Had these remarks been written in the mid-eighties rather than the late seventies perhaps N would have answered his question in terms of the "will to power," the name he subsequently gave to the basic life force which, he believed, continuously sought self-aggrandizement. He already contends that the modern lust for money happens to be the social medium which in modern society affords "the highest feeling of power and good conscience" (M 204). Thus it would not have been surprising if N had come to see preoccupation with machines, on the part of both controllers and operators, as explicable in terms of the insatiable will to power, not simply in terms of survival benefits they provide in enabling man to adapt successfully to his environment.

3. The Impact of Modern Machine Technology—I now turn to several specific aspects of the impact of modern technology that captured N's attention, particularly ones involving machine technology.

N contends that "the machine," in light of the speed and scale of production it makes possible, is having a widespread influence on organizational structure in various areas of modern society (WSS 218). It has become a "model" for party organization and the waging of war.8 It "teaches the meshing of crowds of human beings in activities where each has only one thing to do." In other words, the success of the factory is rooted in the coordinated division of labor. N thus clearly recognizes the diffusion of a method of structuring organizations and various kinds of human activity, a key element in the process Weber later termed the progressive rationaliza-

7 N believed that a "better order of society" would be one in which "hard work and the stresses of life," including, one may assume, machine work, are reserved for "the most insensitive," those who would suffer least from them. N would thus except potentially interesting and excellent human beings from boring machine-related labor (MA 462). However, the difficulties of recognizing such individuals remain.

8 It is clear from the list of "the printing press, the machine, the railroad, [and] the telegraph" as well from these references to the organization of political parties and the activity of making war, that by "the machine" N sometimes refers not to a machine per se. i.e., a kind of technic, but rather to a specific kind of large-scale socio-technical system, e.g., the machine-run factory.
tion of industrial society. "The machine," however, does not "teach" the self-glorification or autocracy of the individual (die individuelle Selbstherrlichkeit), but rather the molding of many into "one machine" and of the individual into a tool for "one purpose." Given the indiscriminate use of individuals discussed above, and N’s conception of the unrealized wealth of human potential, he cannot possibly embrace this "teaching" of "the machine," just as he cannot support the constriction of the exceptional individual entailed by the projection of one morality for all human beings. Finally, N observes incisively, the machine’s "most general effect" is to teach "the advantage of centralization" (ibid.). This point enriches his observation (M 132) that modern society is increasingly becoming a set of large organizations (and their adjunct members), none of which have purposes noble enough to outweigh the suppression of the individual they affect. For the putative advantage of machine-based centralization, efficiency, is a spur to the proliferation of larger organizations and to the organizational absorption and routinization of more and more spheres of human life.

The machine, a product of the highest powers of thought, unleashes a vast quantity of energy which otherwise would have lain dormant (WSS 220). N quarrels, however, with qualitative aspects of the activity in which that energy is given expression. It sets in motion "almost only the lower, mechanical energies" of factory worker operatives and does not communicate the impulse "to climb higher, to become better, to become an artist" (WSS 220), activities or tasks requiring more than mere mechanical energy. The machine gives rise to a great deal of activity and uniformity, but this "produces in the long run a countereffect, a despondent boredom of the soul which through it learns to thirst after a variegated idleness" (ibid.). N suggests here that such mechanical activity does not fulfill the full range of needs of the whole human being. Moreover, as indicated by the phrase "through it," the worker’s uniform activity on the job shapes the character of his time off the job: he attempts to drown his work-induced boredom in changeful leisure-time activity, an overcompensation apt to lead to a Don Juan ethic of experience. N’s attitude toward the machine thus parallels his attitude toward the liberation from the fetters of artistic convention, a development he believed was precipitated by the French Revolution and confronted the artist with a flood of artistic styles from various cultures. In this case, as in that of the machine, the liberation of energy effected did not carry with it built-in spurs to creativity or built-in forms or structures adequate to produce disciplined, excellent activity. In both cases liberated energies were dissipated in respectively unfruitful artistic experimentation and restless, variegated, off-the-job activity.

One of the most important effects of the emergence of machine Kultur is a twofold increase in the impersonality of modern life. First, the machine "deprives the piece of work of its pride, its individual good points and defects which cling to all non-machine-made work, thus its bit of humanity" (WSS 288; emphasis added). Second, the machine has made the fabric of social life more anonymous and impersonal than formerly when all buying from craftsmen was an honoring of persons with whose decorations one surrounded oneself. Household effects and clothing thus turned into sym-
bolism of mutual esteem and personal solidarity” (ibid.). N held that while it clearly alleviated the physical burden of some workers, the expansion of the “machine Kultur” also exacted a cost, including spiritual intangibles like depersonalization and a decrease in intimacy. There is something “beyond all price” in the work of “the acquaintance for us”: “the sentiment and invention put into his work for our sake” (WSS 283). The feeling this engenders in the recipient can only be expressed by “the heaviest tax”: respect. But “the more competition dominates and the more one buys from the works for unknown individuals, the lower becomes this tax,” which happens to be precisely “the standard for the height of human spiritual intercourse” (ibid.). In short, “one must not purchase the lightening of work too expensively” (WSS 288).

For N, capitalism, machine production, and low quality products were intimately connected in modern society. Under the reign of capitalist competition, the public is made the judge of goods. But given the proliferation and increasing complexity of production, the public must necessarily be ignorant of what constitutes real quality in most kinds of product. Hence it tends to rely on appearances in deciding which to buy, thus lending added impetus to this factor in production. Although it does not follow logically, N held that under a capitalist, profit-oriented system this situation necessarily results in a decrease in the quality of products, less consideration being given by producers to quality-making and quality-enhancing factors as against mere appearance-enhancing ones. Further, the limited disposable income of most people in a capitalist society prompts producers to place a premium on making goods which can be sold at cheap prices. N again assumes, presumably on an empirical basis, that such goods are also apt to be of inferior quality. In particular, the public’s emphasis on the appearances and (what it regards as) the cheapness of products gives a double-pronged spur to “machine-made work”— “naturally”9 (WSS 280). On the other hand, the capitalist’s investment in his machines and his desire for a “handsome profit” means he cannot allow his machines to stand idle too often. Thus he must produce a large quantity of the most saleable kind of article, viz., those that satisfy the public’s desire for appearance and cheapness, a desire which he sometimes attempts to reinforce. To N, however, this situation is replete with illusion and deceit; appearance is no guarantor of real quality and cheap purchase price is to be clearly distinguished from good value which depends on durability ascertainable only over time. Although, as we have seen, N felt strongly about the value of handmade work, the remedy he proposes for this situation is not an impossible return to a pre-machine age but rather greater reliance on human reason as a critical factor in buying decisions, for example, in seeing through the above illusions. He asserts that the public should align its judgments of products with those of recognized masters of the craft in question, ideally the worker himself, or, if the creator of the work is unknown, then some expert whose reputation hinges on the proven reliability of his judgments. In addition to this practical

9 It is far from clear how emphasis on appearances necessarily gives an advantage to machine work.
recommendation, one not unrelated to contemporary reliance on specialized consumer journals, N predicted that if human reason expands its influence, then the very mode of exchange of products prevailing under capitalism as he knew it would yield to a new though unspecified principle of exchange, one embodying his motto: “more respect for the knowledgeable” (WSS 280).

In addition to its impact on the organizational structure of various social forms and activities, on the ways in which human energy is expressed on and off the job, on the degree of impersonality of modern life, and on the quality of the products of modern manufacture, N also spoke of the impact of the machine on nature: “Our whole attitude toward nature, the way we violate her with the aid of machines and the heedless inventiveness of our technicians and engineers, in hubris.” Implicit here is the discriminating recognition that what are often misleadingly called the “effects of technology” are not simply due to the general nature of technology as a form of activity aimed at increasing human power, or to characteristics of specific technologies; rather the effects also depend on the particular mental sets with which makers, operators, and other users design and employ the products of technological activity.

4. Criticism of the Factory Worker—N addresses himself directly to workers beginning to accept their condition in industrial society. He criticizes their attitudes and sketches an alternate strategy for combatting their condition. If his suggestions seem extreme, it should be borne in mind that N regarded the modern worker as worse off in many respects than the traditional slave. The latter at least lived securely and happily, and his labor was “much less work” than that of the modern slave whose long hours of diligence in the factory consumed “an extraordinarily great amount of nervous energy, withdrawing it from reflection, brooding, dreaming, caring, loving [and] hating” (M 173). And yet, while the modern worker professed to loathe traditional slavery, his protest against his own grim condition was not commensurate with its greater depravity (MA 457). Indeed, N’s remarks to non-revolutionary workers suggest that he saw signs that their protest against their condition was beginning to be muted by rising wages. Thus the first idea N heaps scorn upon is the emerging notion that by receiving “higher payment” the “essential” aspect of worker misery could be improved: viz., “impersonal enslavement” (M 206).

Workers were adopting two other responses to their condition which appalled N: first, allowing themselves to be persuaded that if only the impersonality of their condition became widespread enough in the “mechanistic bustle” of the new society, then “the disgrace of slavery could be made into a virtue”; and, second, having a price at which one is willing to trade one’s status as a “person” for that of a “screw.” The first of these three postures is a self-justifying delusion based on confusing qualitative with quantitative considerations: enslavement with higher wages. The second attitude suggests that workers had been protesting not so much against the inherent

baseness of their condition but against the fact that early on they were perceivably inferior in status to other laborers. In other words, this second attitude is born of vanity, a vanity which would be assuaged if their own condition became the norm (MA 457), coupled with the herd idea that a pattern of behavior that is common enough must be virtuous. The third strategy was sheer spiritual depravity. Addressing directly the partisans of these strategies N asks:

"Are you fellow conspirators to the present folly of nations which above all wants to produce as much as possible and to be a rich as possible? Your task should be to press the counter-claim: how much inner value is being thrown away for such an external aim! But where is your inner value if you no longer know what it is to breathe freely? if you control yourselves not even temporarily? if you become tired of yourselves all too often, as of a stale beverage? if you listen closely to the newspaper and squint at the rich neighbor, being made desirous by the rapid rise and fall of power, money, and opinion? if you no longer believe in a philosophy which wears rags, in the straight-forwardness of those who have few needs? if voluntary idyllic poverty, being professionless and unmarried—a state which should suit the more intellectual and spiritual among you quite well—has become a subject of derision to you? if, on the other hand, the fife of the socialist Pied Pipers always rings in your ear, wishing to make you lustful with wild hopes, bidding you to be ready and nothing further, ready today for tomorrow, so that you wait and wait for something to come from without, living in all other respects as you have lived before—until this waiting turns into hunger and thirst and fever and raving madness and finally the day of the bestia triumphans will dawn in all its splendor?" (M 206)

Having thus attempted to puncture the non-revolutionary workers’ various justifications for adapting to their lot, N sketches what seems to him a more praiseworthy approach. Each worker ‘should’ rather convince himself that it would be better to emigrate to some place where he can be master, especially over himself. If worse comes to worse, better to consider even death: anything but ‘this indecent servitude,’ this ‘getting mad, spiteful, and conspiratorial. This would be the right attitude.’ (Emphasis added.)

"The workers in Europe should declare themselves henceforth, as a class, to be a human impossibility, and not only, as usually happens, as somewhat harshly and inefficiently managed. They should take the lead and usher in an era of a great swarming out of the European beehive, such as never before experienced, and through this action of freedom of movement on a large scale, protest against the machine, capital, and the menacing choice now facing them: having to become either slaves of the state or of a revolutionary party. May Europe unburden herself of a quarter of her inhabitants! . . .

Thus, finally, purer air would return to old, presently over-populated Europe. May it at least then lack something in ‘manpower’ (Arbeitskräfte). herb. 11 Perhaps we will thus remember that we first became accustomed to many wants when they became so easy to satisfy—we will again forget some wants!" 112 (ibid.)

11 As opposed to its increasing machine power?

12 ‘Need is considered the cause of why something came to be; but in truth it is often merely an effect of what has come to be’ (FW 205). That is, a need is often a want we cannot now bear to do without, having experienced and gotten used to its satisfaction in the past.
These remarks call for several comments. First, N began the rich section from which these quotations are drawn speaking as if he merely intended to call to the attention of factory workers an alternate possible mode of existence: "Poor, cheerful, and independent! These are possible together. Poor, cheerful, and slavish! These are also possible." But soon we read that the workers "should" or "ought" to do such and so, that following another course of action would be the "right" (recht) attitude. This is apt to obscure the fact that these judgments are based ultimately on N's aesthetic distaste for slavery, as indicated by his use of the word "indecent." While it is tempting on the basis of this passage to ascribe to middle N a genuine concern for the well-being of factory workers, it seems at least equally likely that these remarks were prompted by fear of the spread of a modern form of servitude and horror at the prospect of a world freely embracing slavery. Second, it is characteristically Nietzschean that he holds the workers as well as the capitalists responsible for the workers’ plight. If only the workers as a class had the courage, fortitude, and will power, they could undermine this vulgar form of existence. Their assent or passivity is a condition for the possibility of the continuation of this system. This emphasis on the lack of a strong will to resist some allegedly pernicious socio-cultural phenomenon was also pivotal in young N's account of the triumph of secularization. N was fond of uncovering the conditions for the possibility of a phenomenon, especially the ideational ones, in the name of attaining a more comprehensive explanation of it. The ascription of practical responsibility to workers as well as to capitalists is also indicative of N's continuing disbelief in the economic interpretation of history, of his disposition not to make the realm of consciousness a mere by-product of the material realm, of his belief in the efficacy of ideas (here, the depiction of an alternate mode of existence), and of the fact that the free spirit does not play the role of the partisan who attempts to assign all responsibility to one party in a complex, unsavory situation. Third, the series of questions N hurls at the acquiescing workers in doubting their inner value involves reference to qualities readily related to various aspects of his emerging ideal of human excellence. Fourth, the suggestion of worker emigration was probably prompted by the wave of emigration that swept western Europe in the mid-nineteenth century. However, neither should the strictly autobiographical correlates be overlooked, for example, N's then recent departure from the University of Basel.

5. Cultural Changes—N discusses several technology-related cultural changes engendered by the age of work and machines. The "breathless haste" of modern work, the "distinctive vice" of the new world, exemplified in the American lust for gold (FW 329), is contributing to the rapid spread of a lack of spirituality (Geistlosigkeit) throughout various spheres of modern life. For example, obsession with time is vitiating thought ("One thinks with a watch in one's hand") and obsession with economic gain is dehumanizing the taking of meals ("one lunches, eyes glued to the financial section of the newspaper"). In general, people are living more and more as if they "might miss out on something." Further, work-related haste is contributing to the demise of various forms of inefficient social behavior,

13 In a similar vein, N holds the capitalists and other rich as well as the poor responsible for the rise and spread of socialism (VMS 304).
indeed to the decline of "the feeling for form itself" and "the ear and eye for the melody of movements." As "proof" for this claim, N cites the "universal demand for gross obviousness" in all kinds of interpersonal relations except on those rare, thus hard to recognize, occasions in capitalist society when, instead of "continual pretense and overreaching and anticipating others," honesty is desired. "One no longer has time for ceremonies," for being obliging in an indirect way, for esprit in conversation, for any otium at all." Indeed leisure in the age of work is not a time of life-affirming creativity and renewal but one of "letting go" and of crude stretching out "as long and wide and ungainly as one happens to be." Going hand in hand with the restless pursuit of highly variegated leisure activities, virtue has come increasingly to consist in "doing something in less time than someone else" (FW 329). Finally, worker haste and industriousness have resulted in only residual time and energy being given to art. Consequently, to survive, the latter has had to coarsen itself and promise to deliver recreation and distraction (WSS 170). Thus, by contributing to declines in sensory acuity, sensitivity to aesthetic and social forms, and the capacity for indirection, capitalism is throttling the development of Freigeisterel.

The cult of work has canonized the principle "Rather do anything than nothing," which translates into preference for work, however trivial and demeaning, over the intangible delights of joyful leisure, however noble and elevating. Joy has in fact become suspect and the "inclination toward joy," the characteristic goal of the free spirit, has been reduced to a "need for relaxation," really a need for recuperation before again undertaking boring and enervating work. What were once viewed as occasions for joy, e.g., excursions into the country or walks "with friends and ideas," are now increasingly viewed as having to be justified by appeal to dictates of prudence, e.g., as being good for one's health (FW 329). For N such phenomena mark an important transformation in Western Kultur, both as way of life and as level of human development: bad conscience has been divorced from work and married to leisure and idleness, including the vita contemplativa.16

Young N, in the Untimely Meditations, noted two additional related cultural changes nurtured although not wholly caused by modern technology. First, there has been a general change in the temporal focus of human consciousness. In earlier societies people were cautioned against taking affairs of the day and things of the moment too seriously. They were advised

14 Elsewhere N argues that the progress of modern science has also contributed to the decline of ceremonial observance. The more comprehensible the world has become, the more ceremoniousness of every kind has decreased. For the latter grew out of the human, all-too-human fear of the unknown, mysterious and inconceivable, and was intended to placate potentially recalcitrant forces (M 551).

15 One is reminded of Jürgen Habermas' reformulation of Weber's notion of the rationalization of modern society in terms of the increasing ascendancy of modes of "purposive-rational action" over modes of "symbolic interaction." Vide Habermas, "Technology and Science as 'Ideology'," in Toward a Rational Society (Boston, 1970), 81-122, esp. 91-92.

16 It it intriguing to contemplate a public debate on these matters between Nietzsche and Frederick W. Taylor, the father of "scientific management."
by the priestly class to adopt a posture of *nil admirari* and to concern themselves with things bordering on the eternal. This situation has changed decisively, such that the focus of modern consciousness is the ephemeral news of the day brought by the newspaper and the telegraph.\(^{17}\) Second, young N attacked one regressive result of this secularization process: an emerging cult of the new. He criticizes the celebrated writer David Strauss’s penchant for seasoning his theological and philosophical writings with metaphors drawn from recent technological development: the steam engine, the railway, the telegraph, modern road-improvement techniques, and the machine in general. The target of N’s criticism is Strauss’s apparent belief “that these metaphors must be new because they are modern.”\(^ {18}\) Here N uses “new” not purely descriptively but also prescriptively; it means not merely something different of recent vintage—in the quoted phrase “modern” has this meaning—but also something genuinely creative and of enduring value. N’s underlying concern is that the proliferation of intriguing technological innovations will enhance the esteem of the merely novel while distracting attention from and diminishing respect for the truly creative. Neither of these cultural changes will contribute to the enhancement of human development.

Given his concerns at the time, had young N expressed himself explicitly and at greater length on modern technology, he would not have echoed the shibboleth: technology is neutral in itself; what matter are the uses to which it is put. He would have underscored the danger of introducing powerful new technologies in environments devoid of firmly entrenched principles able to restrict the uses to which they can be put. Further, he would have emphasized that, as in the example of the newspaper, technologies can be developed which readily lend themselves to uses which exacerbate rather than ameliorate the spiritual impoverishment of modern life. Finally, young N would have noted that new technologies frequently increase, directly or indirectly, the flux of the modern socio-cultural environment, making it both more important and more difficult to acquire the discriminatory power requisite to avoiding inundation by this flux, a plight antithetical to the possibility of spiritual growth.

\(^{17}\) Richard Wagner in Bayreuth, NWKG, Vol. IV, Section 6. This point of view is remarkably similar to that expressed by Thoreau in *Walden*: “Our inventions are wont to be pretty toys, which distract our attention from serious things. They are but improved means to an unimproved end, an end which it was already but too easy to arrive at; as railroads lead to Boston and New York. We are in great haste to construct a magnetic telegraph from Maine to Texas; but Maine and Texas, it may be, have nothing important to communicate. . . . As if the main object were to talk fast and not to talk sensibly.” *Walden and Other Writings*, ed. J. W. Krutch (New York, 1962), 144. Again: “… We rarely meet a man who can tell us any news which he has not read in a newspaper, or been told by a neighbor; . . . I do not know but that it is too much to read one newspaper a week. I have tried it recently, and for so long it seems to me that I have not dwelt in my native region. . . . It is so hard to forget what it is worse than useless to remember. . . . I believe the mind can be permanently profaned by the habit of attending to trivial things. . . . Read not the Times, Read the Eternities.” “Life Without Principle,” loc. cit., 366-79.

6. Conclusion—N’s general attitude toward technology hinges on the fact that he related it to what he viewed as the two fundamental, opposing sides of human nature: an active, creative force—later called the “will to power”—ever seeking self-aggrandizement through overcoming resistance, and a passive, inertial force inclining the individual toward organismic states requiring minimal expenditures of energy to maintain. N’s attitude toward technology was ambivalent because he saw that, in its various aspects, it could strengthen or weaken either or both of these forces in human nature. On the one hand, much technology, from the point of view of invention, is the result of exercising the “highest intellectual powers.” Moreover, the development and use of certain technologies offer opportunities for strengthening the active, creative side of human nature, something vital to N’s ideal of human life. On the other hand, many technologies, especially in modern society, have effects which engender or reinforce inertial behavior in their users. Thus N deplored the fact that factory work dissipated much of the energy of workers, some of which might, perhaps with the aid of other technologies, be liberated and utilized for creative ends. N’s middle-period criticism of the factory worker was in part directed at the latter’s emerging tendency to adapt to rather than resist the inertia-inducing character of machine work.

One hallmark of N’s middle and late works is an attempt to ascertain the full range of benefits and costs\(^19\)—especially the spiritual ones—of the various phenomena he considered, e.g., morality, science, art, and technology. Although his treatment of technology is predominantly critical, N, unlike most philosophers, went some way toward achieving a balanced viewpoint in his consideration of technology. He was neither a facile technological optimist nor a categorical detractor of technology. Technology was a double-edged sword: at once a source of opportunities for creative growth and of temptations to inertial decay. The latter might be minimized or rebuffed but could never be finally eliminated. Alienation from the creative human life-force, whether occasioned by technology or not, was a permanent possibility in human life. To the mature N, technology-rooted alienation estranged man from his creative energies, often also from his fellows, and on occasion from nature. It could be overcome not, as the young N thought, by administering periodic doses of Greek tragedy or Wagnerian music drama, but by recurrently focussing one’s attention and desire on N’s evolving ideal of human excellence: the “free spirit” (in the middle works), the “overman” (in the late works). Only to the extent that such a focus was maintained could the individual keep technological and other forms of alienation at bay. Such an orientation also helped prepare the soil for the emergence of a more rational organization of technological relations of production, exchange, and use in future society. For Marx alienation arose not from any inherent vulnerability of human nature or from the inherently debilitating character of specific technologies but from the deployment of technology in exploitative socio-economic contexts. Further, unlike N, Marx held that technological alienation was the fundamental mode of alienation from which all others

\(^{19}\) In the perspective of his central values and related goal for mankind.
derived and that it could be eliminated definitively by a politico-economic transformation of society altering the power relationships governing the control and use of technology. N, ever a disbeliever in imposed revolutionary solutions, placed his fragile hopes on a vigilant will to resist the temptations of life-denying technologies. Inspired by the Nietzschean ideal of human excellence, the individual either would avoid traffic with technologies likely to engender in him inertial or dissipative behavior, e.g., the technology of the assembly line or technologies designed to make life “frictionless,” or, put positively, would use a particular technology only to the extent that he possessed the power of discrimination and it possessed the characteristics enabling him to turn it—directly or indirectly—to life-affirming and life-enhancing ends and effects.

Like some major nineteenth-century social critics, Nietzsche recognized that technology exercises a substantial influence on the structure and fabric of human existence. Like a few of them, he directed attention to, and expressed admiration for and concern over, intangible spiritual benefits and costs associated with the creation and spread of machine technology in capitalist society. However, what most distinguishes him from such writers is his characteristically voluntaristic belief that technology—and thus its impact—is decisively affected for good or ill, in any politico-economic context, by the shifting focus (e.g., dominant ideals) and varying strength of the human spirit.

Stanford University.

20 In his middle years N believed that in the long run significant numbers of individuals would go at least some way toward realizing the ideal of excellence he was then projecting and would thus enhance the level of “general earth Kultur” (MA 3; WSS 87). However, N later came to believe that only a relatively few gifted individuals were capable of grasping, much less realizing, even partially, such a demanding ideal. Consequently, in his middle years N would have seen in, say, the technology of television the potential to effect an enhancement in general earth Kultur by contributing to the growth of many of its viewers, e.g., by undermining chauvinism and racism. On the other hand, in his later years N would have noted its double-edged narcotic potential, its value dependent on the end for the sake of which the resultant narcosis is cultivated and exploited. Thus, as a rich source of “petty pleasure that is easily attainable and can be made into a regular event” (On the Genealogy of Morals, Third Essay, Sect. 18, 135), N would have regretted television’s value to the reigning elite who by using it to palliate the potentially dangerous discomfort of oppressed masses, advance their own narrow, ignoble vested interests. At the same time, he would have acknowledged that television might prove equally valuable to the overmen of the future. For in pacifying the discontented herd it would enhance society’s ability to function as a stable “scaffold” on which “a choice type of being,” the overman, can ascend to new spiritual heights. (See Beyond Good and Evil, transl. W. Kaufmann [New York, 1966], Sect. 258, 202.)

21 I am indebted to my colleague Nathan Rosenberg for helpful criticism of an earlier draft of this essay.