ileg ální

02

03

04

05

06

07

The Tyger
William Blake

Tyger! Tyger! burning bright
In the forests of the night,
What immortal hand or eye
Could frame thy fearful symmetry?

In what distant deeps or skies
Burnt the fire of thine eyes?
On what wings dare he aspire?
What the hand, dare sieze the fire?

And what shoulder, & what art,
Could twist the sinews of thy heart?
And when thy heart began to beat,
What dread hand? & what dread feet?

What the hammer? what the chain?
In what furnace was thy brain?
What the anvil? what dread grasp
Dare its deadly terrors clasp?

When the stars threw down their spears,
And water'd heaven with their tears,
Did he smile his work to see?
Did he who made the Lamb make thee?

Tyger! Tyger! burning bright
In the forests of the night,
What immortal hand or eye
Dare frame thy fearful symmetry?

08

The Other Tiger

Jorge Luis Borges

A tiger comes to mind. The twilight here
Exalts the vast and busy Library
And seems to set the bookshelves back in gloom;
Innocent, ruthless, bloodstained, sleek
It wanders through its forest and its day
Printing a track along the muddy banks
Of sluggish streams whose names it does not know
(In its world there are no names or past
Or time to come, only the vivid now)
And makes its way across wild distances
Sniffing the braided labyrinth of smells
And in the wind picking the smell of dawn
And tantalizing scent of grazing deer;
Among the bamboo's slanting stripes I glimpse
The tiger's stripes and sense the bony frame
Under the splendid, quivering cover of skin.
Curving oceans and the planet's wastes keep us
Apart in vain; from here in a house far off
In South America I dream of you,
Track you, O tiger of the Ganges' banks.

It strikes me now as evening fills my soul
That the tiger addressed in my poem
Is a shadowy beast, a tiger of symbols
And scraps picked up at random out of books,
A string of labored tropes that have no life,
And not the fated tiger, the deadly jewel
That under sun or stars or changing moon

09

Goes on in Bengal or Sumatra fulfilling
Its rounds of love and indolence and death.
To the tiger of symbols I hold opposed
The one that's real, the one whose blood runs hot
As it cuts down a herd of buffaloes,
And that today, this August third, nineteen
Fifty-nine, throws its shadow on the grass;
But by the act of giving it a name,
By trying to fix the limits of its world,
It becomes a fiction not a living beast,
Not a tiger out roaming the wilds of earth.

We'll hunt for a third tiger now, but like
The others this one too will be a form
Of what I dream, a structure of words, and not
The flesh and one tiger that beyond all myths
Paces the earth. I know these things quite well,
Yet nonetheless some force keeps driving me
In this vague, unreasonable, and ancient quest,
And I go on pursuing through the hours
Another tiger, the beast not found in verse.

010

011

Old Men Playing Basketball

B. H. Fairchild

The heavy bodies lunge, the broken language
of fake and drive, glamorous jump shot
slowed to a stutter. Their gestures, in love
again with the pure geometry of curves,

rise toward the ball, falter, and fall away.
On the boards their hands and fingertips
tremble in tense little prayers of reach
and balance. Then, the grind of bone

and socket, the caught breath, the sigh,
the grunt of the body laboring to give
birth to itself. In their toiling and grand
sweeps, I wonder, do they still make love

to their wives, kissing the undersides
of their wrists, dancing the old soft-shoe
of desire? And on the long walk home
from the VFW, do they still sing

to the drunken moon? Stands full, clock
moving, the one in army fatigues
and houseshoes says to himself, pick and roll,
and the phrase sounds musical as ever,

radio crooning songs of love after the game,
the girl leaning back in the Chevy's front seat
as her raven hair flames in the shuddering
light of the outdoor movie, and now he drives,

gliding toward the net. A glass wand
of autumn light breaks over the backboard.
Boys rise up in old men, wings begin to sprout
at their backs. The ball turns in the darkening air.

012

Tithonus

Lord Alfred Tennyson (1809-1892)

The woods decay, the woods decay and fall,
The vapors weep their burthen to the ground,
Man comes and tills the field and lies beneath,
And after many a summer dies the swan.
Me only cruel immortality
Consumes: I wither slowly in thine arms,
Here at the quiet limit of the world,
A white-hair'd shadow roaming like a dream
The ever-silent spaces of the East,
Far-folded mists, and gleaming halls of morn.

Alas! for this gray shadow, once a man–
So glorious in his beauty and thy choice,
Who madest him thy chosen, that he seem'd
To his great heart none other than a God!
I ask'd thee, `Give me immortality.'
Then didst thou grant mine asking with a smile,
Like wealthy men who care not how they give.
But thy strong Hours indignant work'd their wills,
And beat me down and marr'd and wasted me,
And tho' they could not end me, left me maim'd
To dwell in presence of immortal youth,
Immortal age beside immortal youth,
And all I was, in ashes. Can thy love,
Thy beauty, make amends, tho' even now,
Close over us, the silver star, thy guide,
Shines in those tremulous eyes that fill with tears
To hear me? Let me go: take back thy gift:
Why should a man desire in any way
To vary from the kindly race of men,
Or pass beyond the goal of ordinance
Where all should pause, as is most meet for all?

013

A soft air fans the cloud apart; there comes
A glimpse of that dark world where I was born.
Once more the old mysterious glimmer steals
From thy pure brows, and from thy shoulders pure,
And bosom beating with a heart renew'd.
Thy cheek begins to redden thro' the gloom,
Thy sweet eyes brighten slowly close to mine,
Ere yet they blind the stars, and the wild team
Which love thee, yearning for thy yoke, arise,
And shake the darkness from their loosen'd manes,
And beat the twilight into flakes of fire.

Lo! ever thus thou growest beautiful
In silence, then before thine answer given
Departest, and thy tears are on my cheek.

Why wilt thou ever scare me with thy tears,
And make me tremble lest a saying learnt,
In days far-off, on that dark earth, be true?
`The Gods themselves cannot recall their gifts.'

Ay me! ay me! with what another heart
In days far-off, and with what other eyes
I used to watch--if I be he that watch'd--
The lucid outline forming round thee; saw
The dim curls kindle into sunny rings;
Changed with thy mystic change, and felt my blood
Glow with the glow that slowly crimson'd all
Thy presence and thy portals, while I lay,
Mouth, forehead, eyelids, growing dewy-warm
With kisses balmier than half-opening buds
Of April, and could hear the lips that kiss'd

014

Whispering I knew not what of wild and sweet,
Like that strange song I heard Apollo sing,
While Ilion like a mist rose into towers.

Yet hold me not for ever in thine East:
How can my nature longer mix with thine?
Coldly thy rosy shadows bathe me, cold
Are all thy lights, and cold my wrinkled feet
Upon thy glimmering thresholds, when the steam
Floats up from those dim fields about the homes
Of happy men that have the power to die,
And grassy barrows of the happier dead.
Release me, and restore me to the ground;
Thou seest all things, thou wilt see my grave:
Thou wilt renew thy beauty morn by morn;
I earth in earth forget these empty courts,
And thee returning on thy silver wheels.

015


Race
Win
Place
Quinella
Tierce
Race time
Win odds
Quinella odds
Win total 34 202 090
Place total 15 618 890
Quinella total 16 350 070
Tierce total 29 157 697

018

019

Immaterial Labor

Maurizio Lazzarato

A significant amount of empirical research has been conducted concerning the new forms of the organization of work. This, combined with a corresponding wealth of theoretical reflection, has made possible the identification of a new conception of what work is nowadays and what new power relations it implies.

An initial synthesis of these results—framed in terms of an attempt to define the technical and subjective-political composition of the working class—can be expressed in the concept of immaterial labor, which is defined as the labor that produces the informational and cultural content of the commodity. The concept of immaterial labor refers to two different aspects of labor. On the one hand, as regards the "informational content" of the commodity, it refers directly to the changes taking place in workers' labor processes in big companies in the industrial and tertiary sectors, where the skills involved in direct labor are increasingly skills involving cybernetics and computer control (and horizontal and vertical communi-cation). On the other hand, as regards the activity that produces the "cultural content" of the commodity, immaterial labor involves a series of activities that are not normally recognized as "work"—in other words, the kinds of activities involved in defining and fixing cultural and artistic standards, fashions, tastes, consumer norms, and more strategically, public opinion. Once the privileged domain of the bourgeoisie and its children, these activities have since the end of the 1970s become the domain of what we have come to define as "mass intellectuality." The profound changes in these strategic sectors

have radically modified not only the composition, managtement, and regulation of the workforce—the organization of production—but also, and more deeply, the role and function of intellectuals and their activities within society. The "great transformation" that began at the start of the 1970s has changed the very terms in which the question is posed. Manual labor is increasingly coming to involve procedures that could be defined as "intellectual," and the new communictions technologies increasingly require subjectivities that are rich in knowledge. It is not simply that intellectual labor has become subjected to the norms of capitalist production. What has happened is that a new "mass intellectuality" has come into being, created out of a combination of the demands of capitalist production and the forms of "self-valorization" that the struggle against work has produced. The old dichotomy between "mental and manual labor," or between "material labor and immaterial labor," risks failing to grasp the new nature of productive activity, which takes this separation on board and transforms it. The split between conception and execution, between labor and creativity, between author and audience, is simultaneously transcended within the "labor process" and reimposed as political command within the "process of valorization."

The Restructured Worker

Twenty years of restructuring of the big factories has led to a curious paradox. The various different post-Fordist models have been constructed both on the defeat of the Fordist worker and on the recognition of the centrality of (an ever increasingly intellectualized) living labor within production. In today's large restructured company, a worker's work increasingly involves, at various levels, an ability to choose among different alternatives and thus a degree of responsibility regarding decision making. The concept of "interface" used by communications sociologists provides a fair definition of the activities of this kind of worker—as an interface between different functions, between different work teams, between different levels of the hierarchy, and so forth. What modern management techniques are looking for is for "the worker's soul to become part of the factory." The worker's personality and subjectivity have to be made susceptible to organization and command. It is around immateriality that the quality and quantity of labor are organized. This transformation of working-

class labor into a labor of control, of handling information, into a decision-making capacity that involves the investment of subjectivity, affects workers in varying ways according to their positions within the factory hierarchy, but it is nevertheless present as an irreversible process. Work can thus be defined as the capacity to activate and manage productive cooperation. In this phase, workers are expected to become "active subjects" in the coordination of the various functions of production, instead of being subjected to it as simple command. We arrive at a point where a collective learning process becomes the heart of productivity, because it is no longer a matter of finding different ways of composing or organizing already existing job functions, but of looking for new ones.

The problem, however, of subjectivity and its collective form, its constitution and its development, has immediately expressed itself as a clash between social classes within the organization of work. I should point out that what I am describing is not some Utopian vision of recomposition, but the very real terrain and conditions of the conflict between social classes.

The capitalist needs to find an unmediated way of establishing command over subjectivity itself; the prescription and definition of tasks transforms into a prescription of subjectivities. The new slogan of Western societies is that we should all "become subjects." Participative management is a technology of power, a technology for creating and controlling the "subjective processes." As it is no longer possible to confine subjectivity merely to tasks of execution, it becomes necessary for the subject's competence in the areas of management, communication, and creativity to be made compatible with the conditions of "production for pro-duction's sake." Thus the slogan "become subjects," far from eliminating the antagonism between hierarchy and cooperation, between autonomy and command, actually re-poses the antagonism at a higher level, because it both mobilizes and clashes with the very personality of the individual worker. First and foremost, we have here a discourse that is authoritarian: one has to express oneself, one has to speak, communicate, cooperate, and so forth. The "tone" is that of the people who were in executive command under Taylorization; all that has changed is the content. Second, if it is no longer possible to lay down and specify jobs and responsibilities rigidly (in the way that was once done with "scientific" studies of work), but if, on the contrary, jobs now require cooperation and collective coordination, then the subjects of that

production must be capable of communication—they must be active participants within a work team. The communicational relationship (both vertically and horizontally) is thus completely predetermined in both form and content; it is subordinated to the "circulation of information" and is not expected to be anything other. The subject becomes a simple relayer of codification and decodification, whose transmitted messages must be "clear and free of ambiguity," within a communications context that has been completely normalized by management. The Immaterial Labor necessity of imposing command and the violence that goes along with it here take on a normative communicative form. The management mandate to "become subjects of communication" threatens to be even more totalitarian than the earlier rigid division between mental and manual labor (ideas and execution), because capitalism seeks to involve even the worker's personality and subjectivity within the production of value. Capital wants a situation where command resides within the subject him- or herself, and within the communicative process. The worker is to be responsible for his or her own control and motivation within the work group without a foreman needing to intervene, and the foreman's role is redefined into that of a facilitator. In fact, employers are extremely worried by the double problem this creates: on one hand, they are forced to recognize the autonomy and freedom of labor as the only possible form of cooperation in production, but on the other hand, at the same time, they are obliged (a life-and-death necessity for the capitalist) not to "redistribute" the power that the new quality of labor and its organization imply. Today's management thinking takes workers' subjectivity into consideration only in order to codify it in line with the requirements of production. And once again this phase of transformation succeeds in concealing the fact that the individual and collective interests of workers and those of the company are not identical. I have defined working-class labor as an abstract activity that nowadays involves the application of subjectivity. In order to avoid misunderstandings, however, I should add that this form of productive activity is not limited only to highly skilled workers; it refers to a use value of labor power today, and, more generally, to the form of activity of every productive subject within postindustrial society. One could say that in the highly skilled, qualified worker, the "communicational model" is already given, already constituted, and that its potentialities are already defined. In the young worker,

however, the "precarious" worker, and the unemployed youth, we are dealing with a pure virtuality, a capacity that is as yet undetermined but that already shares all the characteristics ofpostindustrial productive subjectivity. The virtuality of this capacity is neither empty nor ahistoric; it is, rather, an opening and a potentiality that have as their historical origins and antecedents the "struggle against work" of the Fordist worker and, in more recent times, the processes of socialization, educational formation, and cultural self-valorization. This transformation of the world of work appears even more evident when one studies the social cycle of production: the "diffuse factory" and decentralization of production on the one hand and the various forms of tertiarization on the other. Here one can measure the extent to which the cycle of immaterial labor has come to assume a strategic role within the global organization of produc-tion. The various activities of research, conceptualization, management of human resources, and so forth, together with all the various tertiary activities, are organized within computerized and multimedia networks. These are the terms in which we have to understand the cycle of production and the organization of labor. The integration of scientific labor into industrial and tertiary labor has become one of the principal sources of productivity, and it is becoming a growing factor in the cycles of production that organize it.

'Immaterial Labor" in the Classic Definition

All the characteristics of the postindustrial economy (both in industry and society as a whole) are highly present within the classic forms of "immaterial" production: audiovisual production, advertising, fashion, the production of software, photography, cultural activities, and so forth. The activities of this kind of immaterial labor force us to question the classic definitions of work and workforce, because they combine the results of various different types of work skill: intellectual skills, as regards the cultural-informational content; manual skills for the ability to combine creativity, imagination, and technical and manual labor; and entrepreneurial skills in the management of social relations and the structuring of that social cooperation of which they are a part. This immaterial labor constitutes itself in forms that are immediately collective, and we might say that it exists

only in the form of networks and flows. The organization of the cycle of production of immaterial labor (because his is exactly what it is, once we abandon our factoryist prejudices — a cycle of production) is not obviously apparent to the eye, because it is not defined by the four walls of a factory. The location in which it operates is outside in the society at large, at a territorial level that we could call "the basin of immaterial labor." Small and sometimes very small "productive units" (often consisting of only one individual) are organized for specific ad hoc projects, and may exist only for the duration of those particular jobs. The cycle of production comes into operation only when it is required by the capitalist; once the job has been done, the cycle dissolves back into the networks and flows that make possible the reproduction and enrichment of its productive capacities. Precariousness, hyperexploitation, mobility, and hierarchy are the most obvious characteristics of metropolitan immaterial labor. Behind the label of the independent "self-employed" worker, what we actually find is an intellectual proletarian, but who is recognized as such only by the employers who exploit him Immaterial Laboror her. It is worth noting that in this kind of working it becomes increasingly difficult to distinguish leisure time from work time. In a sense, life becomes inseparable from work. This labor form is also characterized by real managerial functions that consist in (1) a certain ability to manage its social relations and (2) the eliciting of social cooperation within the structures of the basin of immaterial labor. The quality of this kind of labor power is thus defined not only by its professional capacities (which make possible the construction of the cultural-informational content of the commodity), but also by its ability to "manage" its own activity and act as the coordinator of the immaterial labor of others (production and management of the cycle). This immaterial labor appears as a real mutation of "living labor." Here we are quite far from the Taylorist model of organization.

Immaterial labor finds itself at the crossroads (or rather, it is the interface) of a new relationship between production and consumption. The activation of both productive cooperation and the social relationship with the consumer is materialized within and by the process of communication. The role of immaterial labor is to promote continual innovation in the forms and conditions of communication (and thus in work and consumption). It gives form to and materializes needs, the imaginary, consumer tastes, and so forth, and these

products in turn become powerful producers of needs, images, and tastes. The particularity of the commodity produced through immaterial labor (its essential use value being given by its value as informational and cultural content) consists in the fact that it is not destroyed in the act of consumption, but rather it enlarges, transforms, and creates the "ideological" and cultural environment of the consumer. This commodity does not produce the physical capacity of labor power; instead, it transforms the person who uses it. Immaterial labor produces first and foremost a "social relationship" (a relationship of innovation, production, and consumption). Only if it succeeds in this production does its activity have an economic value. This activity makes immediately apparent something that material production had "hidden," namely, that labor produces not only commodities, but first and foremost it produces the capital relation.

The Autonomy of the Productive Synergies of Immaterial Labor

My working hypothesis, then, is that the cycle of immaterial labor takes as its starting point a social labor power that is independent and able to organize both its own work and its relations with business entities. Industry does not form or create this new labor power, but simply takes it on board and adapts it. Industry's control over this new labor power presupposes the independent organization and "free entrepreneurial activity" of the labor power. Advancing further on this terrain brings us into the debate on the nature of work in the post-Fordist phase of the organization of labor. Among economists, the predominant view of this problematic can be expressed in a single statement: immaterial labor operates within the forms of organization that the centralization of industry allows. Moving from this common basis, there are two differing schools of thought: one is the extension of neoclassical analysis; the other is that of systems theory.

In the former, the attempt to solve the problem comes through a redefinition of the problematic of the market. It is suggested that in order to explain the phenomena of communication and the new dimensions of organization one should introduce not only cooperation and intensity of labor, but also other analytic variables

(anthropological variables? immaterial variables?) and that on this basis one might introduce other objectives of optimization and so forth. In fact, the neoclassical model has considerable difficulty in freeing itself from the coherence constraints imposed by the theory of general equilibrium. The new phenomenologies of labor, the new dimensions of organization, communication, the potentiality of spontaneous synergies, the autonomy of the subjects involved, and the independence of the networks were neither foreseen nor foreseeable by a general theory that believed that material labor and an industrial economy were indispensable. Today, with the new data available, we find the microeconomy in revolt against the macroeconomy, and the classical model is corroded by a new and irreducible anthropological reality.

Systems theory, by eliminating the constraint of the market and giving pride of place to organization, is more open to the new phenomenology of labor and in particular to the emergence of immaterial labor. In more developed systemic theories, organization is conceived as an ensemble of factors, both material and immaterial, both individual and collective, that can permit a given group to reach objectives. The success of this organizational process requires instruments of regulation, either voluntary or automatic. It becomes possible to look at things from the point of view of social synergies, and immaterial labor can be taken on board by virtue of its global efficacy. These viewpoints, however, are still tied to an image of the organization of work and its social territory within which effective activity from an economic viewpoint (in other words, the activity conforming to the objective) must inevitably be considered as a surplus in relation to collective cognitive mechanisms. Sociology and labor economics, being systemic disciplines, are both incapable of detaching themselves from this position.

I believe that an analysis of immaterial labor and a description of its organization can lead us beyond the presuppositions of business theory— whether in its neoclassical school or its systems theory school. It can lead us to define, at a territorial level, a space for a radical autonomy of the productive synergies of immaterial labor. We can thus move against the old schools of thought to establish, decisively, the viewpoint of an "anthropo-sociology" that is constitutive.

Once this viewpoint comes to dominate within social production, we find that we have an interruption in the continuity of models of production. By this I mean that, unlike the position held by many theoreticians of post-Fordism, I do not believe that this new labor power is merely functional to a new historical phase of capitalism and its processes of accumulation and reproduction. This labor power is the product of a "silent revolution" taking place within the anthropological realities of work and within the reconfiguration of its meanings. Waged labor and direct subjugation (to organization) no longer constitute the principal form of the contractual relationship between capitalist and worker. A poly-morphous self-employed autonomous work has emerged as the dominant form, a kind of "intellectual worker" who is him- or herself an entrepreneur, inserted within a market that is constantly shifting and within networks that are changeable in time and space.

The Cycle of Immaterial Production

Up to this point I have been analyzing and constructing the concept of immaterial labor from a point of view that could be defined, so to speak, as "microeconomic." If now we consider immaterial labor within the globality of the production cycle, of which it is the strategic stage, we will be able to see a series of characteristics of post-Taylorist production that have not yet been taken into consideration. I want to demonstrate in particular how the process of valorization tends to be identified with the process of the production of social communication and how the two stages (valorization and communication) immediately have a social and territorial dimension. The concept of immaterial labor presupposes and results in an enlargement of productive cooperation that even includes the production and reproduction of communication and hence of its most important contents: subjectivity. If Fordism integrated consumption into the cycle of the reproduction of capital, post-Fordism integrates communication into it. From a strictly economic point of view, the cycle of reproduction of immaterial labor dislocates the production-consumption relationship as it is defined as much by the "virtuous Keynesian circle" as by the Marxist reproduction schemes of the second volume of Capital. Now,

rather than speaking of the toppling of "supply and demand," we should speak about a redefinition of the production-consumption relationship. As we saw earlier, the consumer is inscribed in the manufacturing of the product from its conception. The consumer is no longer limited to consuming commodities (destroying them in the act of consumption). On the contrary, his or her consumption should be productive in accordance to the necessary conditions and the new products. Consumption is then first of all a consumption of information. Consumption is no longer only the "realization" of a product, but a real and proper social process that for the moment is defined with the term communication.

Large-Scale Industry and Services

To recognize the new characteristics of the production cycle of immaterial labor, we should compare it with the production of large-scale industry and services. If the cycle of immaterial production immediately demonstrates to us the secret of post-Taylorist production (that is to say, that social communication and the social relationship that constitutes it become productive), then it would be interesting to examine how these new social relationships innervate even industry and services, and how they oblige us to reformulate and reorganize even the classical forms of "production."

Large-Scale Industry

The postindustrial enterprise and economy are founded on the manipulation of information. Rather than ensuring (as nineteenth-century enterprises did) the surveillance of the inner workings of the production process and the supervision of the markets of raw materials (labor included), business is focused on the terrain outside of the production process: sales and the relationship with the consumer. It always leans more toward commercialization and financing than toward production. Prior to being manufactured, a product must be sold, even in "heavy" industries such as automobile manufacturing; a car is put into production only after the sales network orders it. This strategy is based on the production and consumption of information. It mobilizes important communication and marketing strategies in order to gather in-

formation (recognizing the tendencies of the market) and circulate it (constructing a market). In the Taylorist and Fordist systems of production, by introducing the mass consumption of standardized commodities, Ford could still say that the consumer has the choice between one black model T5 and another black model T5. "Today the standard commodity is no longer the recipe to success, and the automobile industry itself, which used to be the champion of the great 'low price' series, would want to boast about having become a neoindustry Immaterial Labor of singularization" — and quality.[1] For the majority of businesses, survival involves the permanent search for new commercial openings that lead to the identification of always more ample or differentiated product lines. Innovation is no longer subordinated only to the rationalization of labor, but also to commercial imperatives. It seems, then, that the postindustrial commodity is the result of a creative process that involves both the producer and the consumer.

1. Yves Clot, "Renouveau de l'industrialisme et activite phlosophique," Futur anterieur, no. 10 (1992): 22.

Services

If from industry proper we move on to the "services" sector (large banking services, insurance, and so forth), the characteristics of the process I have described appear even more clearly. We are witnessing today not really a growth of services, but rather a development of the "relations of service." The move beyond the Taylorist organization of services is characterized by the integration of the relationship between production and consumption, where in fact the consumer intervenes in an active way in the composition of the product. The product "service" becomes a social construction and a social process of "conception" and innovation. In service industries, the "back-office" tasks (the classic work of services) have diminished and the tasks of the "front office" (the relationship with clients) have grown. There has been thus a shift of human resources toward the outer part of business. As recent sociological analyses tell us, the more a product handled by the service sector is characterized as an immaterial product, the more it distances itself from the model of industrial organization of the relationship between production and consumption. The change in this relationship between production and consumption has direct consequences for the organization of the Taylorist labor of production of services, because it draws into question both the contents

of labor and the division of labor (and thus the relationship between conception and execution loses its unilateral character). If the product is defined through the intervention of the consumer, and is therefore in permanent evolution, it becomes always more difficult to define the norms of the production of services and establish an "objective" measure of productivity.

Immaterial Labor

All of these characteristics of postindustrial economics (present both in large-scale industry and the tertiary sectors are accentuated in the form of properly "immaterial" production. Audiovisual production, advertising, fashion, software, the management of territory, and so forth are all defined by means of the particular relationship between production and its market or consumers. Here we are at the furthest point from the Taylorist model. Immaterial labor continually creates and modifies the forms and conditions of communication, which in turn acts as the interface that negotiates the relationship between production and consumption. As I noted earlier, immaterial labor produces first and foremost a social relation—it produces not only commodities, but also the capital relation.

If production today is directly the production of a social relation, then the "raw material" of immaterial labor is subjectivity and the "ideological" environment in which this subjectivity lives and reproduces. The production of subjectivity ceases to be only an instrument of social control (for the reproduction of mercantile relationships) and becomes directly productive, because the goal of our postindustrial society is to construct the consumer/communicator — and to construct it as "active." Immaterial workers (those who work in advertising, fashion, marketing, television, cybernetics, and so forth) satisfy a demand by the consumer and at the same time establish that demand. The fact that immaterial labor produces subjectivity and economic value at the same time demonstrates how capitalist production has invaded our lives and has broken down all the oppositions among economy, power, and knowledge. The process of social communication (and its principal content, the production of subjectivity) becomes here directly productive because in a certain way it "produces" production. The process by

which the "social" (and what is even more social, that is, language, communication, and so forth) becomes "economic" has not yet been sufficiently studied. In effect, on the one hand, we are familiar with an analysis of the production of subjectivity defined as the constitutive "process" specific to a "relation to the self with respect to the forms of production particular to knowledge and power (as in a certain vein of poststructuralist French philosophy), but this analysis never intersects sufficiently with the forms of capitalist valorization. On the other hand, in the 1980s a network of economists and sociologists (and before them the Italian postworkerist tradition) developed an extensive analysis of the "social form of production," but that analysis does not integrate sufficiently the production of subjectivity as the content of valorization. Now, the post-Taylorist mode of production is defined precisely by putting subjectivity to work both in the activation of productive cooperation and in the production of the "cultural" contents of commodities.

The Aesthetic Model

But how is the production process of social communication formed? How does the production of subjectivity take place within this process? How does the production of subjectivity become the production of the consumer/communicator and its capacities to consume and communicate? What role does immaterial labor have in this process? As I have already said, my hypothesis is this: the process of the production of communication tends to become immediately the process of valorization. If in the past communication was organized fundamentally by means of language and the institutions of ideological and literary/artistic production, today, because it is invested with industrial production, communication is reproduced by means of specific technological schemes (knowledge, thought, image, sound, and language reproduction technologies) and by means of forms of organization and "management" that are bearers of a new mode of production.

It is more useful, in attempting to grasp the process of the formation of social communication and its subsumption within the "economic," to use, rather than the "material" model of production, the "aesthetic" model that involves author, reproduction, and reception. This model reveals aspects that traditional economic categories

tend to obscure and that, as I will show, constitute the "specific differences" of the post-Taylorist means of production.[2] The "aesthetic/ideological" model of production will be transformed into a small-scale sociological model with all the limits and difficulties that such a sociological transformation brings. The model of author, reproduction, and reception requires a double transformation: in the first place, the three stages of this creation process must be immediately characterized by their social form; in the second place, the three stages must be understood as the articulations of an actual productive cycle.[3]

The "author" must lose its individual dimension and be transformed into an industrially organized production process (with a division of labor, investments, orders, and so forth), "reproduction" becomes a mass reproduction organized according to the imperatives of profitability, and the audience ("reception") tends to become the consumer/communicator. In this process of socialization and subsumption within the economy of intellectual activity the "ideological" product tends to assume the form of a commodity. I should emphasize, however, that the subsumption of this process under capitalist logic and the transformation of its products into commodities does not abolish the specificity of aesthetic production, that is to say, the creative relationship between author and audience.

The Specific Differences of the Immaterial Labor Cycle

Allow me to underline briefly the specific differences of the "stages" that make up the production cycle of immaterial labor (immaterial labor itself, its "ideological/commodity products," and the "public/consumer") in relation to the classical forms of the reproduction of "capital." As far as immaterial labor being an "author" is concerned, it is necessary to emphasize the radical autonomy of its productive synergies. As we have seen, immaterial labor forces us to question the classical definitions of work and workforce, because it results from a synthesis of different types of know-how: intellectual skills, manual skills, and entrepreneurial skills. Immaterial labor constitutes itself in immediately collective

2. Both the creative and the social elements of this production encourage me to venture the use of the "aesthetic model." It is interesting to see how one could arrive at this new concept of labor by starting either from artistic activity (following the situationists) or from the traditional activity of the factory (following Italian workerist theories), both relying on the very Marxist concept of "living labor."

3. Walter Benjamin has already analyzed how since the end of the nineteenth century both artistic production and reproduction, along with its perception, have assumed collective forms. I cannot pause here to consider his works, but they are certainly fundamental for any genealogy of immaterial labor and its forms of reproduction.

forms that exist as networks and flows. The subjugation of this form of cooperation and the "use value" of these skills to capitalist logic does not take away the autonomy of the constitution and meaning of immaterial labor. On the contrary, it opens up antagonisms and contradictions that, to use once again a Marxist formula, demand at least a "new form of exposition."

The "ideological product" becomes in every respect a commodity. The term ideological does not characterize the product as a "reflection" of reality, as false or true consciousness of reality. Ideological products produce, on the contrary, new stratifications of reality; they are the intersection where human power, knowledge, and action meet. New modes of seeing and knowing demand new technologies, and new technologies demand new forms of seeing and knowing. These ideological products are completely internal to the processes of the formation of social communication; that is, they are at once the results and the prerequisites of these processes. The ensemble of ideological products constitutes the human ideological environment. Ideological products are transformed into commodities without ever losing their specificity; that is, they are always addressed to someone, they are "'ideally signifying," and thus they pose the problem of "meaning."

The general public tends to become the model for the consumer (audience/client). The public (in the sense of the user—the reader, the music listener, the television audience) whom the author addresses has as such a double productive function. In the first place, as the addressee of the ideological product, the public is a constitutive element of the production process. In the second place, the public is productive by means of the reception that gives the product "a place in life" (in other words, integrates it into social communication) and allows it to live and evolve. Reception is thus, from this point of view, a creative act and an integrative part of the product. The transformation of the product into a commodity cannot abolish this double process of "creativity"; it must rather assume it as it is, and attempt to control it and subordinate it to its own values.

What the transformation of the product into a commodity cannot remove, then, is the character of event, the open process of creation that is established between immaterial labor and the public and organized by communication. If the innovation in immaterial

production is introduced by this open process of Immaterial Labor creation, the entrepreneur, in order to further consumption and its perpetual renewal, will be constrained to draw from the "values" that the public/consumer produces. These values presuppose the modes of being, modes of existing, and forms of life that support them. From these considerations there emerge two principal consequences. First, values are "put to work." The transformation of the ideological product into a commodity distorts or deflects the social imaginary that is produced in the forms of life, but at the same time, commodity production must recognize itself as powerless as far as its own production is concerned. The second consequence is that the forms of life (in their collective and cooperative forms) are now the source of innovation.

The analysis of the different "stages" of the cycle of immaterial labor permits me to advance the hypothesis that what is "productive" is the whole of the social relation (here represented by the author-work-audience relationship) according to modalities that directly bring into play the "meaning." The specificity of this type of production not only leaves its imprint on the "form" of the process of production by establishing a new relationship between production and consumption, but it also poses a problem of legitimacy for the capitalist appropriation of this process. This cooperation can in no case be predetermined by economics, because it deals with the very life of society. "Economics" can only appropriate the forms and products of this cooperation, normalizing and standardizing them. The creative and innovative elements are tightly linked to the values that only the forms of life produce. Creativity and productivity in postindustrial societies reside, on the one hand, in the dialectic between the forms of life and values they produce and, on the other, in the activities of subjects that constitute them. The legitimation that the (Schumpeterian) entrepreneur found in his or her capacity for innovation has lost its foundation. Because the capitalist entrepreneur does not produce the forms and contents of immaterial labor, he or she does not even produce innovation. For economics there remains only the possibility of managing and regulating the activity of immaterial labor and creating some devices for the control and creation of the public/consumer by means of the control of communication and information technologies and their organizational processes.

035

Creation and Intellectual Labor

These brief considerations permit us to begin questioning the model of creation and diffusion specific to intellectual labor and to get beyond the concept of creativity as an expression of "individuality" or as the patrimony of the "superior" classes. The works of Simmel and Bakhtin, conceived in a time when immaterial production had just begun to become "productive," present us with two completely different ways of posing the relationship between immaterial labor and society. The first, Simmel's, remain completely invested in the division between manual labor and intellectual labor and give us a theory of the creativity of intellectual labor. The second, Bakhtin's, in refusing to accept the capitalist division of labor as a given, elaborate a theory of social creativity. Simmel, in effect, explains the function of "fashion" by means of the phenomenon of imitation or distinction as regulated and commanded by class relationships. Thus the superior levels of the middle classes are the ones that create fashion, and the lower classes attempt to imitate them. Fashion where functions like a barrier that incessantly comes up because it is incessantly battered down. What is interesting for this discussion is that, according to this conception, the immaterial labor of creation is limited to a specific social group and is not diffused except through imitation. At a deeper level, this model accepts the division of labor founded on the opposition between manual and intellectual labor that has as its end the regulation and "mystification" of the social process of creation and innovation. If this model had some probability of corresponding to the dynamics of the market of immaterial labor at the moment of the birth of mass consumption (whose effects Simmel very intelligently anticipates), it could not be utilized to account for the relationship between immaterial labor and consumer-public in postindustrial society. Bakhtin, on the contrary, defines immaterial labor as the superseding of the division between "material labor and intellectual labor" and demonstrates how creativity is a social process. In fact, the work on "aesthetic production" of Bakhtin and the rest of the Leningrad circle has this same social focus. This is the line of investigation that seems most promising for developing a theory of the social cycle of immaterial production.

Translated by Paul Colilli and Ed Emory

Maurizio Lazzarato

036

037

038

039

Critical Art Ensemble: Tactical Media

Next Five Minutes 1997

Traditional practitioners of anti-authoritarian resistance tend to dwell on the micro-phenomena of tactics. This is understandable, since tactical activity has many of the characteristics that are valued by this variety of activist. Tactics are immediate; they address a particular real space situation; they are grounded in a sense of "community;" they can deliver moments of empirical freedom; and their ad hoc nature prevents them from transforming and solidifying into a structure of authority. At the same time, the very elements which make tactics a focal point for some resistant groups also reveal the weakness of overemphasizing this particular category of struggle. Real space tactics alone tend to remove a situation from the continuity of space and time, and treat the event as an independent unit. The problem here is that tactical planning and activity in real space is far too localized and limited. Consequently, the apparatus of punishment has easily designed countertactics not only to contain a resistant situation, but also to control the representation of the event after it has come to an end. Pancapitalism, using a strategy of continuous counterinsurgency, has constructed a sight machine that allows not only for the total visualization of its theater of operations, but also facilitates either a rapid distribution of its interpretation of the meaning of a given situation, or an accelerated reduction of an event into invisibility. Resistance thus becomes imprisoned in a particular moment in time, and locked into a particular area in space. The corporate state clearly understands that contained localized activity, even in aggregate form, does not affect general policy construction and deployment. CAE believes that

no one understands the unfortunate condition of traditional tactics and their fetishization better than radical electronic media activists, artists, and theorists. Hence, these groups must ask: What are we to do now? Resistance in the age of the virtual requires extreme reorganization, if it is to be successful at this crucial moment in history. All the tactics of the past must be reviewed with an intensely skeptical eye, and in addition, all other elements of struggle must also be reconsidered. The radical left cannot afford to focus solely on tactics in real or even in virtual space, nor can it act as if tactical planning and activity exist in a vacuum. Strategy, logistics, resistant social organization, and even radical subjectivity itself should all be re-evaluated. The reason for such extreme measures is clear: The radical left is losing the means to appropriate, distort, or even blind the vision of the sight machine; however, on the virtual battlefields of the new media apparatus, resistant powers are finding the means for visual disruption, as well as the methods for disturbing the construction and deployment of authoritarian policy. Through the use of critique, resisters can map the virtual terrain, and from this information, new tactics of resistance can be deduced. However, possibilities are also needed other than reactive tactics filtered through instrumental aims. Tactics which spring from nonrational, nonutilitarian, perverse, and unreasonable consciousness, as well as from absurd and delinquent social currents, should also be investigated with equal vigor .

BwO:

"BwO NOW. BwO NOW. BwO NOW. Imperfect flesh is the foundation of screenal economy. The frenzy of the electronic sign oscillates between perfection and excess, production and counter-production, panic and hysteria. BwO now. The electronic body is the perfect body. The electronic body is the complete body. It seduces all who see it into the bliss of the surface. It reinscribes the flesh as the sight of the abject, the disgusting. BwO now. The electronic body is the perfect body. The electronic body is a body without organs. It is both self and mirrored self. The electronic body does not decay, it does not need the plastic surgeon's scalpel, lipo-suction, make-up or deodorant. The electronic body cannot suffer, not physiologically, not psychologically, not sociologically. It is not conscious

of separation. The electronic body seduces all who see it into the bliss of counter-production by offering the hope of a bodily unity that will transcend consumption. But the poor pathetic organic body, always in a state of becoming. Perhaps if it consumed just one more product, it too could become whole, perhaps it too could become a body without organs, sliding in screenal space. But the electronic body oscillates between panic perfection and hysterical decay. The electronic body reinscribes the flesh as the site of the abject. At any moment the organic body could fracture and its surface could decay with sickness, ooze and the squirting of antisocial fluids. The electronic body has consistently shown the splitting of skin, the eruption of pus, the projecting of vomit, the spilling of guts. Any sign of the organic in screenal space exists only to instill fear, contempt and embarrassment. BwO dreams of a body that never existed. BwO dreams of a body that never existed. BwO dreams of a body that never existed. Bwo Now."

Deep spectacle began with the advent of urban planning in the 19th Century, when all the architectural micro-phenomena of spectacle were networked into a unified manifestation of bourgeois ideology. Shortly after this development, spectacle took increasingly huge leaps forward by incorporating generations of electronic mass media (telegraph, radio, cinema, television) into the visual apparatus. When the rapid growth and the insidious function of the spectacle were finally strategically identified and attacked in the 60s, an understandable error was made in assessing the overall use of the media apparatus. Rather than being developed as a great homogenizer of populations, it was constructed as a means to narrowcast specialized identities to various social aggregates, as well as to articulate social boundaries beneficial to a multinational ruling class, and to generate nationalist illusions of welfare capitalism. On the other hand, the early critics of spectacle were quite correct when they argued that the media apparatus is the primary means of mediating social relationships. The response to this development emerged in the form of the tactics of subversion. The power of counterspectacle to subvert authoritarian representation rests on three strategies: The first intends to reveal the exploitive ideological imperatives that the spectacle masks, the second intends to reveal all that spectacle erases, and the third intends to collapse spectacle into its own meaningless rhetoric. Very quickly, tactics for subverting spectacularized representation surfaced in forms such as

detournment, appropriation, radical juxtapositioning, conceptualism, and plagiarism. These methods were combined with research into alternative means of distribution, such as guerrilla and invisible theater and graphics, pirate radio and television, and even the hostile appropriation or jamming of state media distribution centers. It was soon realized (after '68) that the successes of such actions were temporary, because the power of the spectacle to resituate itself made it possible for it to reconsume subversive practice, and because of the strong corporate hold on distribution networks. A realization quickly emerged that resistant tactics had to continually evolve to remain disruptive, and that the idea of achieving social utopia had to be surrendered once and for all. To complicate the problem further, just as the strategies of subversion began to bloom, spectacle lost its place as the key to power. It was rapidly reduced to a hollow regional garrison-a mere trace of the antiquated notion of power as presence. A new decentralized communication apparatus arose, made possible by the ascendancy of computer and satellite technology, that allows multinational power to retreat into absence, where it is free from the theater of subversive operations because it can be everywhere yet nowhere simultaneously. From this moment on, the tactics of subversion have survived primarily to support virtual strategies and tactics that have yet to be fully developed.

Cyborg as Bureaucrat:

"You know, I always thought technology was going to make my life easier. I'm told that the dawn of the information age is upon me, and that information technology will be designed for premium convenience. But whose convenience? Not mine. Convenience really means "efficiency," and that always means more work. I turned in my typewriter for a powerful computer believing that I would have more free time to spend with family and friends. Then the office raised the rate of production. Not only do I have to work harder, but I have to use my holiday time to attend computer classes in order to keep up with the latest software. The corporate futurologists talk of evolution, revolution, new horizons, and global vision. Well, their global vision is blinding me. My computer has a program that counts my keystrokes. It watches me all the time, and tells me when I am not working hard enough. It's like the computer

is my boss. Every time I leave my computer, I return to find the message "insufficient data entry" posted on the screen. What's really frightening is that I've actually begun to care. I hesitate to leave my work station for any reason. I question, and even ignore, my own needs and desires, and instead concern myself with the demands of my computer. Perhaps if I go on-line I'll find someone to talk to, and to commiserate with. But this technology connects me to a thousand voices I cannot hear. I reach out and touch no one. Sure, it's a world without borders but it's a world without people too. I am seperated from others more than I've ever been. Text on a screen is poor company. This new day isn't exactly how I imagined it. It certainly isn't how the corporations described it. They just want to plug me in, and I can't unplug myself. I'm hooked-up, inserted, unfulfilled, but ready to go. Just another office drone. Perhaps the only release is self-sabotage--to short-circuit the fear that keeps me tied to my machine. I hack myself to reestablish the boundaries between my flesh and their technology."

The resistant situation has deteriorated, and not just on the sociological level. Since the emergence of the virtual sweat shop, individuals caught in the labor machine have experienced a sharp increase in the intensity of alienation in their everyday lives. The corporate desire to attach the worker or the bureaucrat to the tools of production is certainly nothing new; however, what has changed is the design of the machines to which the worker can be attached. The current generation of machines now simulate authoritarian consciousness. Not only is the boundary between flesh and machine continuing to erode, but organic consciousness is being invaded and colonized by alien mental structures. The sight machine not only scans the surface of the body, but it also penetrates the mind, and infects it with data-driven consciousness and machinic intelligence. In support of this development, the spectacular wing of the sight machine barrages populations with seductive double-edged promises of convenience, body reconfiguration, new spirituality, re-emergent community, and democratic access to knowledge and speech. Thus far, this spectacular media campaign has managed to convince increasing numbers of individuals that technology exists solely for their liberation. But anyone who has spent even a moment at a virtual workstation knows that these machines were not designed or deployed out of any intention to liberate, but as a means to increase control of an individual

(while simultaneously making considerable profit) through increased mediation of social interaction, and by implanting mechanisms of interior self-surveillance. The consequence is an intensified form of social alienation that conjures feelings of loneliness and separation so profound that consciousness is looped back into now-purified cycles of production and consumption. Having lost the primary pleasures of sexuality, sociability, mind alteration, and other nonutilitarian possibilities, individuals have no choice but to engage in work (alienated production) and in forced leisure (asocial consumption) in a futile attempt to find pleasure and self-satisfaction. This situation has been met first and foremost by the tactics of refusal. In its most naive form, refusal of the cyborg mind-meld manifests itself in reactive and desperate forms of neo-Luddism, such as smashing televisions or blindly crippling computers. At a more sophisticated level of resistance are the tactics of selective refusal; that is, some develop a philosophy of technology that allow them to separate the more utopian characteristics from those detrimental to individual autonomy, and then they act accordingly. Representation to assist individuals in this consciousness-raising process is one of the most significant contributions that producers of counter-spectacle can presently make. The final level, which is limited due to inequitable distribution of education, hardware, and software, is not negating, but affirming. Those with the ability to do so should continue to imagine and create hardware, software, and networking strategies that resist, to the highest degree possible, the pancapitalist imperatives of control, consumption, and production. The difficulties of achieving such ends cannot be overstated, but such is the task for a new generation of visionaries.

Data Body:

"I am not real. I am redundant. I am simulation living in physical space. My function is to mediate the intersection between information and production. What is real? Real is the information that validates my existence as cyborg. Real is my data body–the flow of files which represent me. Correction. I represent them. The data is the original; I am the counterfeit. Look at all files that intersect my organic subjectivity: Credit files, travel files, education files, medical files, employment files, communication files, political files, tax files, investment files, consumption files, files onto infinity.

Were it not for these digital abstractions, I would have no existence in the realm of the social. These files explain to others the nature of my social role and cultural identity. As an individual my input is considered contaminated. Desire is to be programed into my life by those who control my data body. My being-in-the-world is reduced to the political and economic result of my daily activities. All my actions are carefully surveilled and statistically scrutinized to make certain that I follow the commands of my program, and that I do exceed the program's parameters. When I came to this territory, I was stopped by an official at the airport. He took my passport, and scanned it. I cannot say specifically what he discovered, but I am sure that my data body assured him that I, this organic mass before you, was permitted to cross geographic borders. Nothing I might say was of the least significance to the official. Cyborgs have no common language. But we can interface with the data body, so we are never alone. Is this not better living through technology?"

The appearance of the mature form of the data body is an indicator of two problems that plague resistant culture. The first is a micro-level problem, of concern to all people (whether they know it or not) in technologically saturated societies: Now that the data body has appropriated and defines one's social being in the world, how can control of this virtual twin be returned to the individual so he or she can again have the sovereignty to construct and control personal representation in the realm of the social? The second concern is a macro-level problem: If the data body is indicative of an absent virtual power which controls information and constructs social policy for purposes of domination, how can this virtual power be confronted (made present) and challenged by resistant forces? There is no choice but to meet this two pronged menace with the tactics of direct attack. Unfortunately, such tactics are severely underdeveloped. Much like the tactics of refusal, electronic resistance seems to be reactive and blindly destructive. Typical of this situation are offenses such as electronic assassination (electronic attacks on the data bodies of offensive individuals), random release of viruses, idiosyncratic security breeches, and other adolescent pranks. While these actions do offer the perpetrators moments of amusement, they too often hurt the undeserving, or alert members of the elite virtual class to weaknesses in their security systems, which in turn helps strengthen virtual bunkers. Individualized attacks should focus on reappropriating one's own

data body using the tactic of data corruption or deletion. This way the individual can maintain relative control his or her own virtual representation. The tactics needed to attack the policies and practices of the elite virtual class are much different. Here, there is a profound need for informed strategic action. This means that first, the elite must be returned to sedentary status (as opposed to its current nomadic status), and second, that something of value to virtual power must be appropriated and withheld. CAE suggests that nomadic power can be found in presence in the virtual environments of cyberspace, and second, that the object of value to be appropriated is vital information (such as research and development data bases), or the conduits of information transfer themselves. Without total information access, or deprived of full velocity information transfer, the networks of vision and production collapse under the weight of their own inertia. In the end, it will be cheaper for virtual power to negotiate its policies rather than for it to sustain unrelenting hits on its communication system. Resistant forces no longer require violence nor destruction to obtain their goals. All that is needed are courageous virtual activists with the skills to slow the velocity of the system. This is the heart of the tactics of electronic civil disobedience.

047

048

049

Immanence
A Life...

Gilles
Deleuze

What is a transcendental field? It is distinct from experience in that it neither refers to an object nor belongs to a subject (empirical representation). It therefore appears as a pure a-subjective current of consciousness, an impersonal pre-refelxive consciousness, a qualitative duration of consciousness without self. It would seem strange for the transcendental to be defined by such immediate data were it not a question of transcendental empiricism, in opposition to everything that constitutes the world of the subject and object. There is something wild and powerful in such a transcendental empiricism. This is clearly not the element of sensation (simple empiricism) since sensation is only a break in the current of absolute consciousness; it is rather, however close together two sensations might be, the passage from one to the other as becoming, as increase or reduction of power (puissance) (virtual quantity). That being the case, should the transcendental field be defined by this pure immediate consciousness with neither object nor self, as movement which neither begins nor ends? (Even the Spinozist conception of the passage or quantity of power invokes consciousness.)

However, the relation of the transcendental field to consciousness is only de jure. Consciousness becomes a fact only if a subject is produced at the same time as its object, all three of them being outside the field (hors champ) and appearing as 'transcendents'. On the other hand, as long as conscious-

ness crosses the transcendental field at an infinite speed which is everywhere diffuse, there is nothing that can reveal it.[1] It expresses itself as fact only by reflecting itself onto a subject which refers it to objects. This is why the transcendental field cannot be defined by its consciousness which is nonetheless coextensive with it, but withdraws from all revelation.

The transcendent is not the transcendental. Without consciousness the transcendental field would be defined as a pure plane of immanence since it escapes every transcendence of the subject as well of the object.[2] Absolute immanence is in itself: it is not in something, not to something; it does not depend on an object and does not belong to a subject. In Spinoza immanence is not immanence to substance, but substance and modes are in immanence. When the subject and the object, being outside the plane of immanence, are taken as universal subject or object in general to which immanence is itself attributed, then the transcendental is completely denatured and merely reduplicates the empirical (as in Kant) while immanence is deformed and ends up being contained in the transcendent. Immanence does not relate to a Something that is a unity superior to everything, nor to a Subject that is an act operating the synthesis of things: it is when immanence is no longer immanence to anything other than itself that we can talk of a plane of immanence. The plane of immanence is no more defined by a Subject or an Object capable of containing it than the transcendental field is defined by consciousness.

Pure immanence is A LIFE, and nothing else. It is not immanence to life, but the immanence which is in nothing is itself a life. A life is the immanence of immanence, absolute immanence: it is sheer power, utter beatitude. Insofar as he overcomes the aporias of the subject and the object Fichte, in his later philosophy, presents the transcendental field as a life which does not depend on a Being and is not subjected to an Act: an absolute immediate consciousness whose very activity no longer refers back to a being but ceaselessly posits itself in a life.[3] The transcendental field thus becomes a genuine plane of immanence that reintroduces Spinozism into the heart of the philosophical operation. Was not Maine de bi-

1.Cf. Bergson: 'as though we reflected back to surfaces the light which emanates from them, the light which, had it passed on unopposed, would never have been revealed' (Bergson, 1911:29)

2.Cf. Sartre (1957). Sartre establishes a transcendental field without subject which refers to an impersonal, absolute, immanent consciousness in relation to which the subject and object are 'transcendents'.

On James, Cf David Lapoujade's analysis (Lapoujade, 1995)

3.Already in the second introduction to the Science of Knowledge:

ran taken on a similar adventure in his 'later philosophy' [the one he was too tired to see through to the end] when he discovered an absolute and immanent life beneath the transcendence of effort? The transcendental field is defined by a plane of immanence, and the plane of immanence by a life.

'an intuition of sheer activity, not static, but dynamic; not a matter of existence, but of life; [Fichte, 1970:40]. On life according to Fichte, cf. his Initiation à la vie bienheureuse [1943:9], and Gueroult's commentary [gueroult, 1974:9]

What is immanence? a life... No one has related what a life is better than Dickens, by taking account of the indefinite article understood as the index of the transcendental. A good-for-nothing, universally scorned rogue is brought in dying, only for those caring for him to show a sort of ardent devotion and respect, an affection for the slightest sign of life in the dying man. Everyone is so anxious to save him that in the depths of his coma even the wretch himself feels something benign passing into him. But as he comes back to life his carers grow cold and all his coarseness and malevolence return. Between his life and death there is a moment which is now only that a life playing with death [Dickens, 1953:443]. The life of the individual has given way to a life that is impersonal but singular nevertheless, and which releases a pure event freed from the accidents of inner and outer life; freed, in other words, from the subjectivity and objectivity of what happens: "Homo tantum' with which everyone sympathizes and which attains a sort of beatitude. This is a haecceity which now singularizes rather than individuating: life of pure immanence, a neutral and beyond good and evil since only the subject which incarnated it in the midst of things rendered it good or bad. The life of such an individuality effaces itself to the benefit of the singular life that is immanent to a man who no longer has a name and yet cannot be confused with anyone else. Singular essence, a life...

A life should not be contained in the simple moment when individual life confronts universal death. A life is everywhere, in all the moments in a certain living subject passes through and that certain lived objects regulate: immanent life carrying along the events or singularities which do nothing more than actualize themselves in subjects and objects. This indefinite life does not itself have moments, however close together they might be, but only meantimes [des entre-temps], between-moments.

It neither takes place nor follows, but presents the immensity of the empty time where the event can be seen that is still to come and yet has already passed, in the absolute of an immediate consciousness. The novels of Lernet Holenia put the event in a meantime (un entre-temps) that is capable of swallowing up whole regiments. The singularities or events constitutive of a life coexist with the accidents of the corresponding life, but neither come together nor divide in the same way. They do not communicate with each other in the same way as do individuals. It seems that a singular life can do without any individuality whatsoever, or without any other concomitant that individualizes it. Very young children, for example, all resemble each other and have barely any individuality; but they have singularities, a smile, a gesture, a grimace-events which are not subjective characteristics. They are traversed by immanent life that is pure power and even beatitude through the sufferings and weaknesses. The indefinites of a life lose all indetermination insofar as they fill a place of immanence or, which strictly speaking comes to the same thing, constitute the elements of a transcendental field (individual life on the other hand remains inseparable from empirical determinations). The indefinite as such does not mark an empirical indetermination, but a determination of immanence or a transcendental determinability. The indefinite article cannot be the indetermination of the person without at the same time being the determination of the singular. The One (L'Un) is not the transcendent which can contain everything, even immanence, but is the immanent contained in a transcendental field. 'A' (Un) is always the index of a multiplicity; an event, a singularity, a life... Although a transcendent which falls outside the plane of immanence can always be invoked or even attributed to it, it remains the case that all transcendence is constituted uniquely in the immanent current of consciousness particular to this plane.[4] Transcendence is always a product of immanence.

A life contains only virtuals. It is made of virtualities, events, singularities. What we call virtual is not something that lacks reality, but something that enters into a process of actualization by following the plane that gives it its own reality. The immanent event actualizes itself in a state

4. Even Husserl recognizes this: 'That the being of the world "transcends" consciousness in this fashion (even with respect to the

of things and in a lived state which bring the event about. The plane of immanence itself is actualized in an Object and Subject to which it attributes itself. But, however hard it might be to separate them from their actualization, the plane of immanence is itself virtual, just as the events which people it are virtualities. The events or singularities give all their virtuality to the plane, just as the plane of immanence gives a full reality to the virtual events. The event, considered as non-actualized (indefinite), lacks nothing; all it requires is for it to be put it in relation with its concomitants; a transcendental field, a plane of immanence, a life, some singularities. A wound incarnates or actualizes itself in a state of things and in a lived state; but it is itself a pure virtual on the plane of immanence which draws us into a life. My wound existed before me....[5] Not a transcendence of the wound as a superior actuality, but its immanence as a virtuality always at the heart of a milieu (field or plane). There is a great difference between the virtuals which define the immanence of the transcendental field and the possible forms which actualize them and which transform them into something transcendent.

Translated by Nick Millett[6]

evidence in which the world presents itself), and that it necessarily remains transcendent, in no wise alters the fact that it is conscious life alone, wherein everything transcendent becomes constituted, as something inseparable from consciousness...' (Husserl, 1960:62). This will be the point of departure for Sartre's text.

5. cf. Joe Bousquet, Les Capitales (1955).

6. Thanks to Ariel Greco for his comments on this translation

056

057

Formalism

Clement Greenberg

There is the common notion of Modernism as something hectic, heated. Thus Irving Howe lists among the "formal or literary attributes of modernism" the fact that "Perversity-Which Is to Say: Surprise, Excitement, Shock, Terror, Affront-Becomes a Dominant Motif" (Introduction to a collection of essays by various hands called The Idea of the Modern [New York, I967]). A related notion is that Modernism can be understood as an extreme version of Romanticism. But a long look at Modernism doesn't bear out either notion as a covering one.

Modernism is as specific a historical phenomenon as Romanticism was, but it doesn't represent nearly so specific an attitude, position, or outlook. Modernism may continue certain aspects of Romanticism but it also reacts against Romanticism in general just as in reviving certain aspects of Classicism it reacts against Classicism in general. In the context of what is signified by terms like Romanticism and Classicism when they are used unhistorically, Modernism as a whole distinguishes itself by its inclusiveness, its openness, and also its indeterminateness. It embraces the conventional polarities of literary and art history; or rather it abandons them (and in doing so exposes their limited usefulness). Modernism defines itself in the long run not as a "movement," much less a program, but rather as a kind of bias or tropism: towards esthetic value, esthetic value as such and as an ultimate. The specificity of Modernism lies in its being so heightened a tropism in this regard.

This more conscious, this almost exacerbated concern with esthetic value emerges in the mid-igth century in response to an emergency. The emergency is perceived in a growing relaxation of esthetic standards at the top of Western society, and

in the threat this offers to the serious practice of art and literature. The Modernist response to this emergency becomes effective because it takes place in actual production rather than in discourse; in fact, it is more conscious in the practice of art than it is in discourse or criticism. This response begins to make a break with many well-tried conventions and habits, ostensibly a radical break. But for the most part is remains only ostensibly a break and only ostensibly radical. Actually, it's a "dialectical" turn that works to maintain or restore continuity: a most essential continuity: continuity with the highest esthetic standards of the past. It's not particular past styles, manners, or modes that are to be maintained or restored, but standards, levels of quality. And these levels are to be preserved in the same way in which they were achieved in the first place: by constant renewal and innovation.

The emergency has proved to be a lasting one, and Modernism a lasting response to it. And so far it has been a more or less successful response. The higher standards of the past have been maintained in production, which does not have to mean that the best of the past has been matched in quality in a point-for-point way; it suffices that the best of Modernist production attains a similar qualitative level.

The Modernist preoccupation with esthetic value or quality as an ultimate is not new in itself. What makes it new is its explicitness, its self-consciousness, and its intensity. This self-consciousness and intensity (together with the Igth century's increasing rationality in fitting means to ends) could not but lead to a much closer and larger concern with the nature of the medium in each art, and hence with "technique." This was also a questioning concern, and because it got acted on in practice by artists, poets, novelists, and composers, not by pedants, it could not but become an "artisanal" concern too (which does not mean the same thing as a "mechanical" concern-or at least the best of Modernism has shown that it does not mean the same thing). And it's this, the artisanal concern and emphasis of Modernism that has proved to be its covering emphasis, its enduring and also its saving one-the one that again and again brings Modernism back to itself.

Its artisanal emphasis is what more than anything else makes for the hard-headed, sober, "cold" side of Modernism. It's also part of what makes it react against Romanticism. An eventual tendency of Romanticism was to take medium and artisanry too much for

granted and to consider them as more or less transparent or routine. I won't say that this was a decisive factor in the deterioration of standards, but it was a symptom of that deterioration. It was not just the soft-headedness of Romanticism popularized and in decline that provoked the hard-headed reaction of the first Modernists; it was also a certain unprofessionalism.

I don't for a moment contend that Modernism is exclusively an affair of hard-headedness and artisanal sobriety. I started out by saying that it distinguishes itself by its openness and inclusiveness of temper and attitude. And I set out to correct, not demolish, what I feel is too one-sided a view. Yet this view almost invites demolition when it comes to Modernist painting and sculpture (and maybe to Modernist music too). For these exhibit Modernism as almost crucially a concern in the first place with medium and exploratory technique, and a very workman-like concern. Manet and the Impressionists were paragons of hard-headed professionalism; so was Cezanne in his way, and so were Seurat and Bonnard and Vuillard; so were the Fauves-if ever there was a cool practitioner, it was Matisse. Cubist was overwhelmingly artisanal in its emphasis. And this emphasis remains a dominant one, under all the journalistic rhetoric, in Abstract Expressionism and art informel. Of course, Apollonian temperaments may produce Dionysian works, and Dionysian temperaments Apollonian works. Nor does artisanal hard-headedness exclude passion; it may even invite and provoke it. And of course, there were notable Modernist artists like Gauguin and Van Gogh and Soutine who were anything but soberly artisanal in outlook; but even they occupied themselves with questions of "technique" to an extent and with a consciousness that were uniquely Modernist.

Artisanal concerns force themselves more evidently on a painter or sculptor than on a writer, and it would be hard to make my point about the artisanal, the "formalist" emphasis of Modernism nearly so plausible in the case of literature. For reasons not to be gone into here, the medium of words demands to be taken more for granted than any other in which art is practiced. This holds even in verse, which may help explain why what is Modernist and what is not cannot be discriminated as easily in the poetry of the last hundred years as in the painting ....

It remains that Modernism in art, if not in literature, has stood or fallen so far by its "formalism." Not that Modernist art is

coterminous with "formalism." And not that "formalism" hasn't lent itself to a lot of empty, bad art. But so far every attack on the "formalist" aspect of Modernist painting and sculpture has worked out as an attack on Modernism itself because every such attack developed into an attack at the same time on superior artistic standards. The recent past of Modernist art demonstrates this ever so clearly. Duchamp's and Dada's was the first outright assault on "formalism," that came from within the avant-garde, or what was nominally the avant-garde, and it stated itself immediately in a lowering of aspirations. The evidence is there in the only place where artistic evidence can be there: in the actual productions of Duchamp and most of the Dadaists. The same evidence continues to be there in the neo-Dadaism of the last ten years, in its works, in the inferior quality of these works. From which it has to be concluded that if Modernism remains a necessary condition of the best art of our time, as it has been of the best art of the hundred years previous, then "formalism," apparently, remains a necessary condition too, which is the sole and sufficient justification of either Modernism or "formalism."

And if "formalism" derives from the hard-headed, "cold" side of Modernism, then this must be its essential, defining side, at least in the case of painting and sculpture. That's the way it looks right now and looks more than ever right now. The question is whether it will keep on looking that way in the future: that is, whether Modernism will continue to stand or fall by its "cold" side and by its "formalism." Modernism has been a failing thing in literature these past twenty years and more; it's not yet a failing thing in painting or sculpture, but I can imagine its turning into that in another decade (even in sculpture, which seems to have a brighter future before it than painting does). If so, this may come about in the same way that it has come about, as it seems to me, in literature: through the porousness of Modernism's "hot" side, the enthusiastic and hectic side, which is the one that middlebrows have found it easier all along to infiltrate.

There have, of course, to be deeper, larger factors in all this than the ambiguous difference between Modernism's "hot" and "cold" sides. If Modernism's "hot" side has become a liability in these past years, this is a symptom, not a cause; the cause, or causes, have to be sought outside Modernism and outside art or literature.

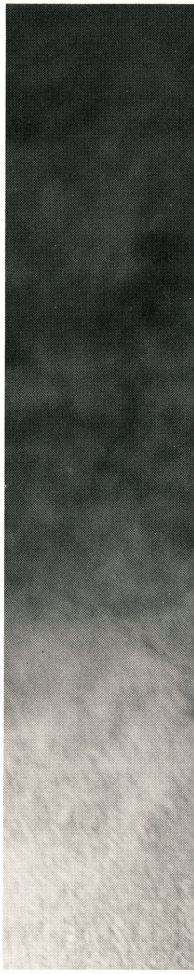
Postscriptum

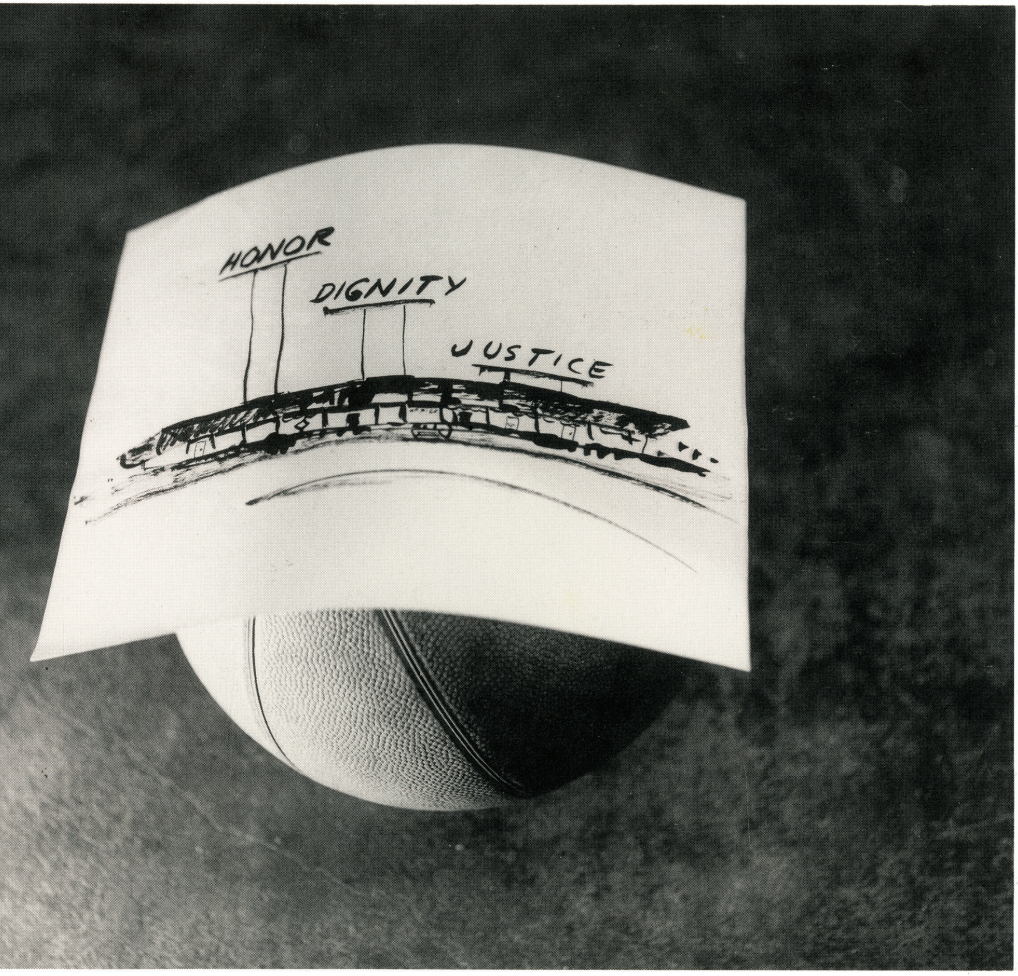
Art is, art gets experienced, for its own sake, which is what Modernism recognized in identifying esthetic value as an ultimate value. But this doesn't mean that art or the esthetic is a supreme value or end of life.The neglect of this distinction by the original art-for-art's-sakers- most of whom were not Modernists anyhow-compromised a valid perception.

Post-Postscriptum

My harping on the artisanal and "formalist" emphasis of Modernism opens the way to all kinds of misunderstanding, as I know from tiresome experience. Quality, esthetic value orginates in inspiration,vision, "content," not in "form." This is an unsatisfactory way of putting it, but for the time being there seems to be no better one available. Yet "form" not only the way to inspiration; it can also act as means to it; and technical preoccupations, when searching enough and compelled enough, can generate or discover "content." When a work of art or literature succeeds, when it moves us enough, it does so ipso facto by the "content" which it conveys; yet that "content" cannot be separated from its "form"-no more in Dante's than Mallarme's case, no more in Goya's than in Mondrian's, no more in Verdi's than in Schoenberg's. It embarasses me to have to repeat this, but I feel I count here on the illiteracy of enough of my readers in the matter of what can and what can't be legitimately put in words about works of art.

062




HONOR
DIGNITY
JUSTICE

064

Federer as Religious Experience

David Foster Wallace

Almost anyone who loves tennis and follows the men's tour on television has, over the last few years, had what might be termed Federer Moments. These are times, as you watch the young Swiss play, when the jaw drops and eyes protrude and sounds are made that bring spouses in from other rooms to see if you're O.K.

The Moments are more intense if you've played enough tennis to understand the impossibility of what you just saw him do. We've all got our examples. Here is one. It's the finals of the 2005 U.S. Open, Federer serving to Andre Agassi early in the fourth set. There's a medium-long exchange of groundstrokes, one with the distinctive butterfly shape of today's power-baseline game, Federer and Agassi yanking each other from side to side, each trying to set up the baseline winner...until suddenly Agassi hits a hard heavy cross-court backhand that pulls Federer way out wide to his ad (=left) side, and Federer gets to it but slices the stretch backhand short, a couple feet past the service line, which of course is the sort of thing Agassi dines out on, and as Federer's scrambling to reverse and get back to center, Agassi's moving in to take the short ball on the rise, and he smacks it hard right back into the same ad corner, trying to wrong-foot Federer, which in fact he does Federer's still near the corner but running toward the centerline, and the ball's heading to a point behind him now, where he just was, and there's no time to turn his body around, and Agassi's following the shot in to the net at an angle from the backhand side...and what Federer now does is somehow instantly reverse thrust and sort of skip backward three or

four steps, impossibly fast, to hit a forehand out of his backhand corner, all his weight moving backward, and the forehand is a topspin screamer down the line past Agassi at net, who lunges for it but the ball's past him, and it flies straight down the sideline and lands exactly in the deuce corner of Agassi's side, a winner Federer's still dancing backward as it lands. And there's that familiar little second of shocked silence from the New York crowd before it erupts, and John McEnroe with his color man's headset on TV says (mostly to himself, it sounds like), "How do you hit a winner from that position?" And he's right: given Agassi's position and world-class quickness, Federer had to send that ball down a two-inch pipe of space in order to pass him, which he did, moving backwards, with no setup time and none of his weight behind the shot. It was impossible. It was like something out of "The Matrix." I don't know what-all sounds were involved, but my spouse says she hurried in and there was popcorn all over the couch and I was down on one knee and my eyeballs looked like novelty-shop eyeballs.

Anyway, that's one example of a Federer Moment, and that was merely on TV and the truth is that TV tennis is to live tennis pretty much as video porn is to the felt reality of human love.

Journalistically speaking, there is no hot news to offer you about Roger Federer. He is, at 25, the best tennis player currently alive. Maybe the best ever. Bios and profiles abound. "60 Minutes" did a feature on him just last year. Anything you want to know about Mr. Roger N.M.I. Federer his background, his home town of Basel, Switzerland, his parents' sane and unexploitative support of his talent, his junior tennis career, his early problems with fragility and temper, his beloved junior coach, how that coach's accidental death in 2002 both shattered and annealed Federer and helped make him what he now is, Federer's 39 career singles titles, his eight Grand Slams, his unusually steady and mature commitment to the girlfriend who travels with him (which on the men's tour is rare) and handles his affairs (which on the men's tour is unheard of), his old-school stoicism and mental toughness and good sportsmanship and evident overall decency and thoughtfulness and charitable largess it's all just a Google search away. Knock yourself out.

This article is more about a spectator's experience of Federer, and its context. The specific thesis here is that if you've never seen the young man play live, and then do, in person, on the sacred grass of Wimbledon, through the literally withering heat and then wind and rain of the '06 fortnight, then you are apt to have what one of the tournament's press bus drivers describes as a "bloody near-religious experience." It may be tempting, at first, to hear a phrase like this as just one more of the overheated tropes that people resort

067

to to describe the feeling of Federer Moments. But the driver's phrase turns out to be true literally, for an instant ecstatically though it takes some time and serious watching to see this truth emerge.

Beauty is not the goal of competitive sports, but high-level sports are a prime venue for the expression of human beauty. The relation is roughly that of courage to war.

The human beauty we're talking about here is beauty of a particular type; it might be called kinetic beauty. Its power and appeal are universal. It has nothing to do with sex or cultural norms. What it seems to have to do with, really, is human beings' reconciliation with the fact of having a body.[1]

Of course, in men's sports no one ever talks about beauty or grace or the body. Men may profess their "love" of sports, but that love must always be cast and enacted in the symbology of war: elimination vs. advance, hierarchy of rank and standing, obsessive statistics, technical analysis, tribal and/or nationalist fervor, uniforms, mass noise, banners, chest-thumping, face-painting, etc. For reasons that are not well understood, war's codes are safer for most of us than love's. You too may find them so, in which case Spain's mesomorphic and totally martial Rafael Nadal is the man's man for you he of the unsleeved biceps and Kabuki self-exhortations. Plus Nadal is also Federer's nemesis and the big surprise of this year's Wimbledon, since he's a clay-court specialist and no one expected him to make it past the first few rounds here. Whereas Federer, through the semifinals, has provided no surprise or competitive drama at all. He's outplayed each opponent so completely that the TV and print press are worried his matches are dull and can't compete effectively with the nationalist fervor of the World Cup.[2]

July 9's men's final, though, is everyone's dream. Nadal vs. Federer is a replay of last month's French Open final, which Nadal won. Federer has so far lost only four matches all year, but they've all been to Nadal. Still, most of these matches have been on slow clay, Nadal's best surface. Grass is Federer's best. On the other hand, the first week's heat has baked out some of the Wimbledon courts' slickness and made them slower. There's also the fact that Nadal has adjusted his clay-based game to grass moving in closer to the baseline on his groundstrokes, amping up his serve, overcoming his allergy to the net. He just about disemboweled Agassi in the third round. The networks are in ecstasies. Before the match, on Centre Court, behind the glass slits above the south backstop, as the linesmen are coming out on court in their new Ralph Lauren uniforms that look so much like

069

1. There's a great deal that's bad about having a body. If this is not so obviously true that no one needs examples, we can just quickly mention pain, sores, odors, nausea, aging, gravity, sepsis, clumsiness, illness, limits every last schism between our physical wills and our actual capacities. Can anyone doubt we need help being reconciled? Crave it? It's your body that dies, after all.

There are wonderful things about having a body, too, obviously it's just that these things are much harder to feel and appreciate in real time. Rather like certain kinds of rare, peak-type sensuous epiphanies ("I'm so glad I have eyes to see this sunrise!" etc.), great athletes seem to catalyze our awareness of how glorious it is to touch and perceive, move through space, interact with matter. Granted, what great athletes can do with their bodies are things that the rest of us can only dream of. But these dreams are important they make up for a lot.

2. The U.S. media here are especially worried because no Americans of either sex survived into even the quarterfinals this year. (If you're into obscure statistics, it's the first time this has happened at Wimbledon since 1911.)

children's navalwear, the broadcast commentators can be seen practically bouncing up and down in their chairs. This Wimbledon final's got the revenge narrative, the king-versus-regicide dynamic, the stark character contrasts. It's the passionate machismo of southern Europe versus the intricate clinical artistry of the north. Apollo and Dionysus. Scalpel and cleaver. Righty and southpaw. Nos. 1 and 2 in the world. Nadal, the man who's taken the modern power-baseline game just as far as it goes, versus a man who's transfigured that modern game, whose precision and variety are as big a deal as his pace and foot-speed, but who may be peculiarly vulnerable to, or psyched out by, that first man. A British sportswriter, exulting with his mates in the press section, says, twice, "It's going to be a war."

Plus it's in the cathedral of Centre Court. And the men's final is always on the fortnight's second Sunday, the symbolism of which Wimbledon emphasizes by always omitting play on the first Sunday. And the spattery gale that has knocked over parking signs and everted umbrellas all morning suddenly quits an hour before match time, the sun emerging just as Centre Court's tarp is rolled back and the net posts driven home.

Federer and Nadal come out to applause, make their ritual bows to the nobles' box. The Swiss is in the buttermilk-colored sport coat that Nike's gotten him to wear for Wimbledon this year. On Federer, and perhaps on him alone, it doesn't look absurd with shorts and sneakers. The Spaniard eschews all warm-up clothing, so you have to look at his muscles right away. He and the Swiss are both in all-Nike, up to the very same kind of tied white Nike hankie with the swoosh positioned above the third eye. Nadal tucks his hair under his hankie, but Federer doesn't, and smoothing and fussing with the bits of hair that fall over the hankie is the main Federer tic TV viewers get to see; likewise Nadal's obsessive retreat to the ballboy's towel between points. There happen to be other tics and habits, though, tiny perks of live viewing. There's the great care Roger Federer takes to hang the sport coat over his spare courtside chair's back, just so, to keep it from wrinkling he's done this before each match here, and something about it seems childlike and weirdly sweet. Or the way he inevitably changes out his racket sometime in the second set, the new one always in the same clear plastic bag closed with blue tape, which he takes off carefully and always hands to a ballboy to dispose of. There's Nadal's habit of constantly picking his long shorts out of his bottom as he bounces the ball before serving, his way of always cutting his eyes warily from side to side as he walks the baseline, like a convict expecting to be shanked.

071

And something odd on the Swiss's serve, if you look very closely. Holding ball and racket out in front, just before starting the motion, Federer always places the ball precisely in the V-shaped gap of the racket's throat, just below the head, just for an instant. If the fit isn't perfect, he adjusts the ball until it is. It happens very fast, but also every time, on both first serves and second.

Nadal and Federer now warm each other up for precisely five minutes; the umpire keeps time. There's a very definite order and etiquette to these pro warm-ups, which is something that television has decided you're not interested in seeing. Centre Court holds 13,000 and change. Another several thousand have done what people here do willingly every year, which is to pay a stiff general admission at the gate and then gather, with hampers and mosquito spray, to watch the match on an enormous TV screen outside Court 1. Your guess here is probably as good as anyone's.

Right before play, up at the net, there's a ceremonial coin-toss to see who'll serve first. It's another Wimbledon ritual. The honorary coin-tosser this year is William Caines, assisted by the umpire and tournament referee. William Caines is a 7-year-old from Kent who contracted liver cancer at age 2 and somehow survived after surgery and horrific chemo. He's here representing Cancer Research UK. He's blond and pink-cheeked and comes up to about Federer's waist. The crowd roars its approval of the re-enacted toss. Federer smiles distantly the whole time. Nadal, just across the net, keeps dancing in place like a boxer, swinging his arms from side to side. I'm not sure whether the U.S. networks show the coin-toss or not, whether this ceremony's part of their contractual obligation or whether they get to cut to commercial. As William's ushered off, there's more cheering, but it's scattered and disorganized; most of the crowd can't quite tell what to do. It's like once the ritual's over, the reality of why this child was part of it sinks in. There's a feeling of something important, something both uncomfortable and not, about a child with cancer tossing this dream-final's coin. The feeling, what-all it might mean, has a tip-of-the-tongue-type quality that remains elusive for at least the first two sets.[3]

A top athlete's beauty is next to impossible to describe directly. Or to evoke. Federer's forehand is a great liquid whip, his backhand a one-hander that he can drive flat, load with topspin, or slice the slice with such snap that the ball turns shapes in the air and skids on the grass to maybe ankle height. His serve has world-class pace and a degree of placement and variety no one else comes close to; the service motion is lithe and uneccen-

3. Actually, this is not the only Federer-and-sick-child incident of Wimbledon's second week. Three days prior to the men's final, a Special One-on-One Interview with Mr. Roger Federer(†) takes place in a small, crowded International Tennis Federation office just off the third floor of the Press Center. Right afterward, as the ATP player-rep is ushering Federer out the back door for his next scheduled obligation, one of the I.T.F. guys (who's been talking loudly on the tele-

(†) (Only considerations of space and basic believability prevent a full description of the hassles

tric, distinctive (on TV) only in a certain eel-like all-body snap at the moment of impact. His anticipation and court sense are otherworldly, and his footwork is the best in the game — as a child, he was also a soccer prodigy. All this is true, and yet none of it really explains anything or evokes the experience of watching this man play. Of witnessing, firsthand, the beauty and genius of his game. You more have to come at the aesthetic stuff obliquely, to talk around it, or — as Aquinas did with his own ineffable subject — to try to define it in terms of what it is not.

One thing it is not is televisable. At least not entirely. TV tennis has its advantages, but these advantages have disadvantages, and chief among them is a certain illusion of intimacy. Television's slow-mo replays, its close-ups and graphics, all so privilege viewers that we're not even aware of how much is lost in broadcast. And a large part of what's lost is the sheer physicality of top tennis, a sense of the speeds at which the ball is moving and the players are reacting. This loss is simple to explain. TV's priority, during a point, is coverage of the whole court, a comprehensive view, so that viewers can see both players and the overall geometry of the exchange. Television therefore chooses a specular vantage that is overhead and behind one baseline. You, the viewer, are above and looking down from behind the court. This perspective, as any art student will tell you, "foreshortens" the court. Real tennis, after all, is three-dimensional, but a TV screen's image is only 2-D. The dimension that's lost (or rather distorted) on the screen is the real court's length, the 78 feet between baselines; and the speed with which the ball traverses this length is a shot's pace, which on TV is obscured, and in person is fearsome to behold. That may sound abstract or overblown, in which case by all means go in person to some professional tournament — especially to the outer courts in early rounds, where you can sit 20 feet from the sideline — and sample the difference for yourself. If you've watched tennis only on television, you simply have no idea how hard these pros are hitting the ball, how fast the ball is moving,[4] how little time the players have to get to it, and how quickly they're able to move and rotate and strike and recover. And none are faster, or more deceptively effortless about it, than Roger Federer.

Interestingly, what is less obscured in TV coverage is Federer's intelligence, since this intelligence often manifests as angle. Federer is able to see, or create, gaps and angles for winners that no one else can envision, and television's perspective is perfect for viewing and reviewing these Federer Moments. What's harder to appreciate on TV is that these spectacular-looking

phone through the whole Special Interview) now comes up and asks for a moment of Roger's time. The man, who has the same slight, generically foreign accent as all I.T.F. guys, says: "Listen, I hate doing this. I don't do this, normally. It's for my neighbor. His kid has a disease. They will do a fund-raiser, it's planned, and I'm asking can you sign a shirt or something, you know something." He looks mortified. The ATP rep is glaring at him. Federer, though, just nods, shrugs: "No problem. I'll bring it tomorrow." Tomorrow's the men's semifinal. Evidently the I.T.F. guy has meant one of Federer's own shirts, maybe from the match, with Federer's actual sweat on it. (Federer throws his used wristbands into the crowd after matches, and the people they land on seem pleased rather than grossed out.) The I.T.F. guy, after thanking Federer three times very fast, shakes his head: "I hate doing this." Federer, still halfway out the door: "It's no problem." And it isn't. Like all pros, Federer changes his shirt during matches, and he can just have somebody save one, and then he'll sign it. It's not like Federer's being Gandhi here he doesn't stop and ask for details about the kid or his illness. He doesn't pretend to care more than he does. The request is just one more small, mildly distracting obligation he has to deal with. But he does say yes, and he will remember you can tell. And it won't distract him; he won't permit it. He's good at this kind of stuff, too.

involved in securing such a One-on-One. In brief, it's rather like the old story of someone climbing an enormous mountain to talk to the man seated lotus on top, except in this case the mountain is composed entirely of sports-bureaucrats.)

4. Top men's serves often reach speeds of 125-135 m.p.h., true, but what all the radar signs and graphics neglect to tell you is that male power-baseliners' groundstrokes themselves are often traveling at over 90 m.p.h., which is the speed of a big-league fastball. If you get down close enough to a pro court, you can hear an actual sound coming off the ball in flight, a kind of liquid hiss, from the combination of pace and spin. Close up and live, you'll also understand better the "open stance" that's become such an emblem of the power-baseline game. The term, after all, just means not turning one's side all the way to the net before hitting a groundstroke,

angles and winners are not coming from nowhere — they're often set up several shots ahead, and depend as much on Federer's manipulation of opponents' positions as they do on the pace or placement of the coup de grâce. And understanding how and why Federer is able to move other world-class athletes around this way requires, in turn, a better technical understanding of the modern power-baseline game than TV again — is set up to provide.

Wimbledon is strange. Verily it is the game's Mecca, the cathedral of tennis; but it would be easier to sustain the appropriate level of on-site veneration if the tournament weren't so intent on reminding you over and over that it's the cathedral of tennis. There's a peculiar mix of stodgy self-satisfaction and relentless self-promotion and -branding. It's a bit like the sort of authority figure whose office wall has every last plaque, diploma, and award he's ever gotten, and every time you come into the office you're forced to look at the wall and say something to indicate that you're impressed. Wimbledon's own walls, along nearly every significant corridor and passage, are lined with posters and signs featuring shots of past champions, lists of Wimbledon facts and trivia, historic lore, and so on. Some of this stuff is interesting; some is just odd. The Wimbledon Lawn Tennis Museum, for instance, has a collection of all the various kinds of rackets used here through the decades, and one of the many signs along the Level 2 passage of the Millennium Building [5] promotes this exhibition with both photos and didactic text, a kind of History of the Racket. Here, sic, is the climactic end of this text:

> Today's lightweight frames made of space-age materials like graphite, boron, titanium and ceramics, with larger heads — mid-size (90-95 square inches) and over-size (110 square inches) — have totally transformed the character of the game. Nowadays it is the powerful hitters who dominate with heavy topspin. Serve-and-volley players and those who rely on subtlety and touch have virtually disappeared.

It seems odd, to say the least, that such a diagnosis continues to hang here so prominently in the fourth year of Federer's reign over Wimbledon, since the Swiss has brought to men's tennis degrees of touch and subtlety unseen since (at least) the days of McEnroe's prime. But the sign's really just a testament to the power of dogma. For almost two de-

and one reason why so many power-baseliners hit from the open stance is that the ball is now coming too fast for them to get turned all the way.

5. This is the large (and presumably six-year-old) structure where Wimbledon's administration, players, and media all have their respective areas and HQs.

cades, the party line's been that certain advances in racket technology, conditioning, and weight training have transformed pro tennis from a game of quickness and finesse into one of athleticism and brute power. And as an etiology of today's power-baseline game, this party line is broadly accurate. Today's pros truly are measurably bigger, stronger, and better conditioned,[6] and high-tech composite rackets really have increased their capacities for pace and spin. How, then, someone of Federer's consummate finesse has come to dominate the men's tour is a source of wide and dogmatic confusion.

There are three kinds of valid explanation for Federer's ascendancy. One kind involves mystery and metaphysics and is, I think, closest to the real truth. The others are more technical and make for better journalism.

The metaphysical explanation is that Roger Federer is one of those rare, preternatural athletes who appear to be exempt, at least in part, from certain physical laws. Good analogues here include Michael Jordan,[7] who could not only jump inhumanly high but actually hang there a beat or two longer than gravity allows, and Muhammad Ali, who really could "float" across the canvas and land two or three jabs in the clock-time required for one. There are probably a half-dozen other examples since 1960. And Federer is of this type — a type that one could call genius, or mutant, or avatar. He is never hurried or off-balance. The approaching ball hangs, for him, a split-second longer than it ought to. His movements are lithe rather than athletic. Like Ali, Jordan, Maradona, and Gretzky, he seems both less and more substantial than the men he faces. Particularly in the all-white that Wimbledon enjoys getting away with still requiring, he looks like what he may well (I think) be: a creature whose body is both flesh and, somehow, light.

This thing about the ball cooperatively hanging there, slowing down, as if susceptible to the Swiss's will — there's real metaphysical truth here. And in the following anecdote. After a July 7 semifinal in which Federer destroyed Jonas Bjorkman — not just beat him, destroyed him — and just before a requisite post-match news conference in which Bjorkman, who's friendly with Federer, says he was pleased to "have the best seat in the house" to watch the Swiss "play the nearest to perfection you can play tennis," Federer and Bjorkman are chatting and joking around, and Bjorkman asks him just how unnaturally big the ball was looking to him out there, and Federer confirms that it was "like a bowling ball or basketball." He means it just as a bantery, modest way to make Bjorkman feel better, to confirm that he's

6. (Some, like Nadal or Serena Williams, look more like cartoon superheroes than people.)

7. When asked, during the aforementioned Special One on-One Interview, for examples of other athletes whose performances might seem beautiful to him, Federer mentions Jordan first, then Kobe Bryant, then "a soccer player like guys who play very relaxed, like a Zinédine Zidane or something: he does great effort, but he seems like he doesn't need to try hard to get the results."

Federer's response to the subsequent question, which is what-all he makes of it when pundits and other players describe his own game as "beautiful," is interesting mainly because the response is pleasant, intelligent, and cooperative as is Federer himself without ever really saying anything (because, in fairness, what could one say about others' descriptions of him as beautiful? What would you say? It's ultimately a stupid question): "It's always what people see first for them, that's what you are 'best at.' When you used to watch John McEnroe, you know, the first time, what would you see? You would see a guy with incredible talent, because the way he played, nobody played like this. The way he played the ball, it was just all about feel. And then you go over to Boris Becker, and right away you saw a powerful player, you know?(†) When you see me play, you see a 'beautiful' player and maybe after that you maybe see that he's fast, maybe you see that he's got a good forehand, maybe then you see that he has a good serve. First, you know, you have a base, and to me, I think it's great, you know, and I'm very lucky to be called basically 'beautiful,' you know, for style of play. ... With me it's, like, 'the beautiful player,' and that's really cool."

(†) N.B. Federer's big conversational tics are "maybe" and "you know." Ultimately, these tics are helpful because they serve as reminders of how appallingly young he really is. If you're

surprised by how unusually well he played today; but he's also revealing something about what tennis is like for him. Imagine that you're a person with preternaturally good reflexes and coordination and speed, and that you're playing high-level tennis. Your experience, in play, will not be that you possess phenomenal reflexes and speed; rather, it will seem to you that the tennis ball is quite large and slow-moving, and that you always have plenty of time to hit it. That is, you won't experience anything like the (empirically real) quickness and skill that the live audience, watching tennis balls move so fast they hiss and blur, will attribute to you.[8]

Velocity's just one part of it. Now we're getting technical. Tennis is often called a "game of inches," but the cliché is mostly referring to where a shot lands. In terms of a player's hitting an incoming ball, tennis is actually more a game of micrometers: vanishingly tiny changes around the moment of impact will have large effects on how and where the ball travels. The same principle explains why even the smallest imprecision in aiming a rifle will still cause a miss if the target's far enough away.

By way of illustration, let's slow things way down. Imagine that you, a tennis player, are standing just behind your deuce corner's baseline. A ball is served to your forehand you pivot (or rotate) so that your side is to the ball's incoming path and start to take your racket back for the forehand return. Keep visualizing up to where you're about halfway into the stroke's forward motion; the incoming ball is now just off your front hip, maybe six inches from point of impact. Consider some of the variables involved here. On the vertical plane, angling your racket face just a couple degrees forward or back will create topspin or slice, respectively; keeping it perpendicular will produce a flat, spinless drive. Horizontally, adjusting the racket face ever so slightly to the left or right, and hitting the ball maybe a millisecond early or late, will result in a cross-court versus down-the-line return. Further slight changes in the curves of your groundstroke's motion and follow-through will help determine how high your return passes over the net, which, together with the speed at which you're swinging (along with certain characteristics of the spin you impart), will affect how deep or shallow in the opponent's court your return lands, how high it bounces, etc. These are just the broadest distinctions, of course like, there's heavy topspin vs. light topspin, or sharply cross-court vs. only slightly cross-court, etc. There are also the issues of how close you're allowing the ball to get to your body, what grip you're using, the extent to which your knees are bent and/or weight's moving forward, and whether you're able simultaneously to watch the ball and to see what your opponent's

8. Special One-on-One support from the man himself for this claim: "It's interesting, because this week, actually, Ancic [comma Mario, the towering Top-10 Croatian whom Federer beat in Wednesday's quarterfinal] played on Centre Court against my friend, you know, the Swiss player Wawrinka [comma Stanislas, Federer's Davis Cup teammate], and I went to see it out where, you know, my girlfriend Mirka [Vavrinec, a former women's Top-100 player, knocked out by injury, who now basically functions as Federer's Alice B. Toklas] usually sits, and I went to see for the first time since I have come here to Wimbledon, I went to see a match on Centre Court, and I was also surprised, actually, how fast, you know, the serve is and how fast you have to react to be able to get the ball back, especially when a guy like Mario [Ancic, who's known for his vicious serve] serves, you know? But then once you're on the court yourself, it's totally different, you know, because all you see is the ball, really, and you don't see the speed of the ball.... "

interested, the world's best tennis player is wearing white warm-up pants and a long-sleeved white microfiber shirt, possibly Nike. No sport coat, though. His handshake is only moderately firm, though the hand itself is like a carpentry rasp (for obvious reasons, tennis players tend to be very callusy). He's a bit bigger than TV makes him seem broader-shouldered, deeper in the chest. He's next to a table that's covered with visors and headbands, which he's been autographing with a Sharpie. He sits with his legs crossed and smiles pleasantly and seems very relaxed; he never fidgets with the Sharpie. One's overall impression is that Federer is either a very nice guy or a guy who's very good at dealing with the media or (most likely) both.

doing after he serves. These all matter, too. Plus there's the fact that you're not putting a static object into motion here but rather reversing the flight and (to a varying extent) spin of a projectile coming toward you coming, in the case of pro tennis, at speeds that make conscious thought impossible. Mario Ancic's first serve, for instance, often comes in around 130 m.p.h. Since it's 78 feet from Ancic's baseline to yours, that means it takes 0.41 seconds for his serve to reach you.[9] This is less than the time it takes to blink quickly, twice.

The upshot is that pro tennis involves intervals of time too brief for deliberate action. Temporally, we're more in the operative range of reflexes, purely physical reactions that bypass conscious thought. And yet an effective return of serve depends on a large set of decisions and physical adjustments that are a whole lot more involved and intentional than blinking, jumping when startled, etc.

Successfully returning a hard-served tennis ball requires what's sometimes called "the kinesthetic sense," meaning the ability to control the body and its artificial extensions through complex and very quick systems of tasks. English has a whole cloud of terms for various parts of this ability: feel, touch, form, proprioception, coordination, hand-eye coordination, kinesthesia, grace, control, reflexes, and so on. For promising junior players, refining the kinesthetic sense is the main goal of the extreme daily practice regimens we often hear about.[10] The training here is both muscular and neurological. Hitting thousands of strokes, day after day, develops the ability to do by "feel" what cannot be done by regular conscious thought. Repetitive practice like this often looks tedious or even cruel to an outsider, but the outsider can't feel what's going on inside the player tiny adjustments, over and over, and a sense of each change's effects that gets more and more acute even as it recedes from normal consciousness.[11] The time and discipline required for serious kinesthetic training are one reason why top pros are usually people who've devoted most of their waking lives to tennis, starting (at the very latest) in their early teens. It was, for example, at age 13 that Roger Federer finally gave up soccer, and a recognizable childhood, and entered Switzerland's national tennis training center in Ecublens. At 16, he dropped out of classroom studies and started serious international competition.

It was only weeks after quitting school that Federer won Junior Wimbledon. Obviously, this is something that not every junior who devotes himself to tennis can do. Just as obviously, then, there is more than time and training involved there is

9. We're doing the math here with the ball traveling as the crow flies, for simplicity. Please do not write in with corrections. If you want to factor in the serve's bounce and so compute the total distance traveled by the ball as the sum of an oblique triangle's(†) two shorter legs, then by all means go ahead you'll end up with between two and five additional hundredths of a second, which is not significant.

(†) (The slower a tennis court's surface, the closer to a right triangle you're going to have. On fast grass, the bounce's angle is always oblique.)

10. Conditioning is also important, but this is mainly because the first thing that physical fatigue attacks is the kinesthetic sense. (Other antagonists are fear, self-consciousness, and extreme upset which is why fragile psyches are rare in pro tennis.)

11. The best lay analogy is probably to the way an experienced driver can make all of good driving's myriad little decisions and adjustments without having to pay attention to them.

also sheer talent, and degrees of it. Extraordinary kinesthetic ability must be present (and measurable) in a kid just to make the years of practice and training worthwhile...but from there, over time, the cream starts to rise and separate. So one type of technical explanation for Federer's dominion is that he's just a bit more kinesthetically talented than the other male pros. Only a little bit, since everyone in the Top 100 is himself kinesthetically gifted but then, tennis is a game of inches.

This answer is plausible but incomplete. It would probably not have been incomplete in 1980. In 2006, though, it's fair to ask why this kind of talent still matters so much. Recall what is true about dogma and Wimbledon's sign. Kinesthetic virtuoso or no, Roger Federer is now dominating the largest, strongest, fittest, best-trained and -coached field of male pros who've ever existed, with everyone using a kind of nuclear racket that's said to have made the finer calibrations of kinesthetic sense irrelevant, like trying to whistle Mozart during a Metallica concert.

According to reliable sources, honorary coin-tosser William Caines's backstory is that one day, when he was 2½, his mother found a lump in his tummy, and took him to the doctor, and the lump was diagnosed as a malignant liver tumor. At which point one cannot, of course, imagine...a tiny child undergoing chemo, serious chemo, his mother having to watch, carry him home, nurse him, then bring him back to that place for more chemo. How did she answer her child's question the big one, the obvious one? And who could answer hers? What could any priest or pastor say that wouldn't be grotesque?

It's 2-1 Nadal in the final's second set, and he's serving. Federer won the first set at love but then flagged a bit, as he sometimes does, and is quickly down a break. Now, on Nadal's ad, there's a 16-stroke point. Nadal is serving a lot faster than he did in Paris, and this one's down the center. Federer floats a soft forehand high over the net, which he can get away with because Nadal never comes in behind his serve. The Spaniard now hits a characteristically heavy topspin forehand deep to Federer's backhand; Federer comes back with an even heavier topspin backhand, almost a clay-court shot. It's unexpected and backs Nadal up, slightly, and his response is a low hard short ball that lands just past the service line's T on Federer's forehand side. Against most other opponents, Federer could simply end the point on a ball like this, but one reason Nadal gives him trouble is that he's faster than the others, can get to stuff they can't; and so Federer here just hits a flat, medium-hard cross-court forehand, going not for a winner but for a low, shallowly angled ball that forces Nadal

085

up and out to the deuce side, his backhand. Nadal, on the run, backhands it hard down the line to Federer's backhand; Federer slices it right back down the same line, slow and floaty with backspin, making Nadal come back to the same spot. Nadal slices the ball right back three shots now all down the same line and Federer slices the ball back to the same spot yet again, this one even slower and floatier, and Nadal gets planted and hits a big two-hander back down the same line it's like Nadal's camped out now on his deuce side; he's no longer moving all the way back to the baseline's center between shots; Federer's hypnotized him a little. Federer now hits a very hard, deep topspin backhand, the kind that hisses, to a point just slightly on the ad side of Nadal's baseline, which Nadal gets to and forehands cross-court; and Federer responds with an even harder, heavier cross-court backhand, baseline-deep and moving so fast that Nadal has to hit the forehand off his back foot and then scramble to get back to center as the shot lands maybe two feet short on Federer's backhand side again. Federer steps to this ball and now hits a totally different cross-court backhand, this one much shorter and sharper-angled, an angle no one would anticipate, and so heavy and blurred with topspin that it lands shallow and just inside the sideline and takes off hard after the bounce, and Nadal can't move in to cut it off and can't get to it laterally along the baseline, because of all the angle and topspin end of point. It's a spectacular winner, a Federer Moment; but watching it live, you can see that it's also a winner that Federer started setting up four or even five shots earlier. Everything after that first down-the-line slice was designed by the Swiss to maneuver Nadal and lull him and then disrupt his rhythm and balance and open up that last, unimaginable angle an angle that would have been impossible without extreme topspin.

Extreme topspin is the hallmark of today's power baseline game. This is something that Wimbledon's sign gets right.[12] Why topspin is so key, though, is not commonly understood. What's commonly understood is that high-tech composite rackets impart much more pace to the ball, rather like aluminum baseball bats as opposed to good old lumber. But that dogma is false. The truth is that, at the same tensile strength, carbon-based composites are lighter than wood, and this allows modern rackets to be a couple ounces lighter and at least an inch wider across the face than the vintage Kramer and Maxply. It's the width of the face that's vital. A wider face means there's more total string area, which means the sweet spot's bigger. With a composite racket, you don't have to meet the ball in the precise geometric center of the

12. (...assuming, that is, that the sign's "with heavy topspin" is modifying "dominate" rather than "powerful hitters," which actually it might or might not British grammar is a bit dodgy.)

strings in order to generate good pace. Nor must you be spot-on to generate topspin, a spin that (recall) requires a tilted face and upwardly curved stroke, brushing over the ball rather than hitting flat through it — this was quite hard to do with wood rackets, because of their smaller face and niggardly sweet spot. Composites' lighter, wider heads and more generous centers let players swing faster and put way more topspin on the ball...and, in turn, the more topspin you put on the ball, the harder you can hit it, because there's more margin for error. Topspin causes the ball to pass high over the net, describe a sharp arc, and come down fast into the opponent's court (instead of maybe soaring out).

So the basic formula here is that composite rackets enable topspin, which in turn enables groundstrokes vastly faster and harder than 20 years ago — it's common now to see male pros pulled up off the ground and halfway around in the air by the force of their strokes, which in the old days was something one saw only in Jimmy Connors.

Connors was not, by the way, the father of the power-baseline game. He whaled mightily from the baseline, true, but his groundstrokes were flat and spinless and had to pass very low over the net. Nor was Bjorn Borg a true power-baseliner. Both Borg and Connors played specialized versions of the classic baseline game, which had evolved as a counterforce to the even more classic serve-and-volley game, which was itself the dominant form of men's power tennis for decades, and of which John McEnroe was the greatest modern exponent. You probably know all this, and may also know that McEnroe toppled Borg and then more or less ruled the men's game until the appearance, around the mid-1980's, of (a) modern composite rackets [13] and (b) Ivan Lendl, who played with an early form of composite and was the true progenitor of power-baseline tennis [14]

Ivan Lendl was the first top pro whose strokes and tactics appeared to be designed around the special capacities of the composite racket. His goal was to win points from the baseline, via either passing shots or outright winners. His weapon was his groundstrokes, especially his forehand, which he could hit with overwhelming pace because of the amount of topspin he put on the ball. The blend of pace and topspin also allowed Lendl to do something that proved crucial to the advent of the power-baseline game. He could pull off radical, extraordinary angles on hard-hit groundstrokes, mainly because of the speed with which heavy topspin makes the ball dip and land without going wide. In retrospect, this changed the whole physics of aggressive tennis. For decades, it had been angle that made the serve-and-volley game

13. (which neither Connors nor McEnroe could switch to with much success their games were fixed around pre-modern rackets.)

14. Formwise, with his whippy forehand, lethal one-hander, and merciless treatment of short balls, Lendl somewhat anticipated Federer. But the Czech was also stiff, cold, and brutal; his game was awesome but not beautiful. (My college doubles partner used to describe watching Lendl as like getting to see "Triumph of the Will" in 3-D.)

so lethal. The closer one is to the net, the more of the opponent's court is open — the classic advantage of volleying was that you could hit angles that would go way wide if attempted from the baseline or midcourt. But topspin on a groundstroke, if it's really extreme, can bring the ball down fast and shallow enough to exploit many of these same angles. Especially if the groundstroke you're hitting is off a somewhat short ball — the shorter the ball, the more angles are possible. Pace, topspin, and aggressive baseline angles: and lo, it's the power-baseline game.

It wasn't that Ivan Lendl was an immortally great tennis player. He was simply the first top pro to demonstrate what heavy topspin and raw power could achieve from the baseline. And, most important, the achievement was replicable, just like the composite racket. Past a certain threshold of physical talent and training, the main requirements were athleticism, aggression, and superior strength and conditioning. The result (omitting various complications and subspecialties[15] has been men's pro tennis for the last 20 years: ever bigger, stronger, fitter players generating unprecedented pace and topspin off the ground, trying to force the short or weak ball that they can put away.

Illustrative stat: When Lleyton Hewitt defeated David Nalbandian in the 2002 Wimbledon men's final, there was not one single serve-and-volley point.[16]

The generic power-baseline game is not boring — certainly not compared with the two-second points of old-time serve-and-volley or the moon-ball tedium of classic baseline attrition. But it is somewhat static and limited; it is not, as pundits have publicly feared for years, the evolutionary endpoint of tennis. The player who's shown this to be true is Roger Federer. And he's shown it from within the modern game.

This within is what's important here; this is what a purely neural account leaves out. And it is why sexy attributions like touch and subtlety must not be misunderstood. With Federer, it's not either/or. The Swiss has every bit of Lendl and Agassi's pace on his groundstrokes, and leaves the ground when he swings, and can out-hit even Nadal from the backcourt.[17] What's strange and wrong about Wimbledon's sign, really, is its overall dolorous tone. Subtlety, touch, and finesse are not dead in the power-baseline era. For it is, still, in 2006, very much the power-baseline era: Roger Federer is a first-rate, kick-ass power-baseliner. It's just that that's not all he is. There's also his intelligence, his occult anticipation, his court sense, his ability to read and manipulate opponents, to mix spins and speeds, to misdirect and disguise, to use tactical foresight and peripheral vision and kinesthetic range instead of just rote pace

15. See, for one example, the continued effectiveness of some serve-and-volley (mainly in the adapted, heavily ace- and quickness-dependent form of a Sampras or Rafter) on fast courts through the 1990's.

16. It's also illustrative that 2002 was Wimbledon's last pre-Federer final.

17. In the third set of the '06 final, at three games all and 30-15, Nadal kicks his second serve high to Federer's backhand. Nadal's clearly been coached to go high and heavy to Federer's backhand, and that's what he does, point after point. Federer slices the return back to Nadal's center and two feet short not short enough to let the Spaniard hit a winner, but short enough to draw him slightly into the court, whence Nadal winds up and puts all his forehand's strength into a hard heavy shot to (again) Federer's backhand. The

all this has exposed the limits, and possibilities, of men's tennis as it's now played.

Which sounds very high-flown and nice, of course, but please understand that with this guy it's not high-flown or abstract. Or nice. In the same emphatic, empirical, dominating way that Lendl drove home his own lesson, Roger Federer is showing that the speed and strength of today's pro game are merely its skeleton, not its flesh. He has, figuratively and literally, re-embodied men's tennis, and for the first time in years the game's future is unpredictable. You should have seen, on the grounds' outside courts, the variegated ballet that was this year's Junior Wimbledon. Drop volleys and mixed spins, off-speed serves, gambits planned three shots ahead all as well as the standard-issue grunts and booming balls. Whether anything like a nascent Federer was here among these juniors can't be known, of course. Genius is not replicable. Inspiration, though, is contagious, and multiform and even just to see, close up, power and aggression made vulnerable to beauty is to feel inspired and (in a fleeting, mortal way) reconciled.

Correction: Aug. 27, 2006

An article in PLAY magazine last Sunday about the tennis player Roger Federer referred incompletely to a point between Federer and Andre Agassi in the 2005 United States Open final and incorrectly described Agassi's position on the final shot of the point. There was an exchange of groundstrokes in the middle of the point that was not described. And Agassi remained at the baseline on Federer's winning shot; he did not go to the net.

pace he's put on the ball means that Nadal is still backpedaling to the baseline as Federer leaves his feet and cranks a very hard topspin backhand down the line to Nadal's deuce side, which Nadal out of position but world-class fast reaches and manages to one-hand back deep to (again) Federer's backhand side, but this ball's floaty and slow, and Federer has time to step around and hit an inside-out forehand, a forehand as hard as anyone's hit all tournament, with just enough topspin to bring it down in Nadal's ad corner, and the Spaniard gets there but can't return it. Big ovation. Again, what looks like an overwhelming baseline winner was actually set up by that first clever semi-short slice and Nadal's own predictability about where and how hard he'll hit every ball. Federer sure whaled that last forehand, though. People are looking at each other and applauding. The thing with Federer is that he's Mozart and Metallica at the same time, and the harmony's somehow exquisite.

By the way, it's right around here, or the next game, watching, that three separate inner-type things come together and mesh. One is a feeling of deep personal privilege at being alive to get to see this; another is the thought that William Caines is probably somewhere here in the Centre Court crowd, too, watching, maybe with his mum. The third thing is a sudden memory of the earnest way the press bus driver promised just this experience. Because there is one. It's hard to describe it's like a thought that's also a feeling. One wouldn't want to make too much of it, or to pretend that it's any sort of equitable balance; that would be grotesque. But the truth is that whatever deity, entity, energy, or random genetic flux produces sick children also produced Roger Federer, and just look at him down there. Look at that.

094

095

960

097

Is it ok to be a Luddite?

Thomas Pynchon

As if being 1984 weren't enough, it's also the 25th anniversary this year of C. P. Snow's famous Rede lecture, "The Two Cultures and the Scientific Revolution," notable for its warning that intellectual life in the West was becoming polarized into "literary" and "scientific" factions, each doomed not to understand or appreciate the other. The lecture was originally meant to address such matters as curriculum reform in the age of Sputnik and the role of technology in the development of what would soon be known as the third world. But it was the two-culture formulation that got people's attention. In fact it kicked up an amazing row in its day. To some already simplified points, further reductions were made, provoking certain remarks, name-calling, even intemperate rejoinders, giving the whole affair, though attenuated by the mists of time, a distinctly cranky look.

Today nobody could get away with making such a distinction. Since 1959, we have come to live among flows of data more vast than anything the world has seen. Demystification is the order of our day, all the cats are jumping out of all the bags and even beginning to mingle. We immediately suspect ego insecurity in people who may still try to hide behind the jargon of a specialty or pretend to some data base forever "beyond" the reach of a layman. Anybody with the time, literacy, and access fee can get together with just about any piece of specialized knowledge s/he may need. So, to that extent,the two-cultures quarrel can no longer be sustained. As a visit to any local library or

magazine rack will easily confirm, there are now so many more than two cultures that the problem has really become how to find the time to read anything outside one's own specialty.

What has persisted, after a long quarter century, is the element of human character. C. P. Snow, with the reflexes of a novelist after all, sought to identify not only two kinds of education but also two kinds of personality. Fragmentary echoes of old disputes, of unforgotten offense taken in the course of a long-ago high-table chit-chat, may have helped form the subtext for Snow's immoderate, and thus celebrated, assertion, "If we forget the scientific culture, then the rest of intellectuals have never tried, wanted, or been able to understand the Industrial Revolution." Such "intellectuals," for the most part "literary,' were supposed by Lord Snow, to be "natural Luddites."

Except maybe for Brainy Smurf, it's hard to imagine anybody these days wanting to be called a literary intellectual, though it doesn't sound so bad if you broaden the labeling to, say, "people who read and think." Being called a Luddite is another matter. It brings up questions such as, Is there something about reading and thinking that would cause or predispose a person to turn Luddite? Is It O.K. to be a Luddite? And come to think of it, what is a Luddite, anyway?

HISTORICALLY, Luddites flourished In Britain from about 1811 to 1816. They were bands of men, organized, masked, anonymous, whose object was to destroy machinery used mostly in the textile industry. They swore allegiance not to any British king but to their own King Ludd. It Isn't clear whether they called themselves Luddites, although they were so termed by both friends and enemies. C.P. Snow's use of the word was clearly polemical, wishing to imply an irrational fear and hatred of science and technology. Luddites had, in this view, come to be imagined as the counter- revolutionaries of that "Industrial Revolution" which their modern versions have "never tried, wanted, or been able to understand."

But the Industrial Revolution was not, like the American and French Revolutions of about the same period, a violent struggle with a beginning, middle and end. It was smoother, less conclusive, more like an accelerated passage in a long evolution. The phrase was first popularized a hundred years ago by the historian Arnold Toynbee, and has had its share of revisionist attention, lately in the July 1984 Scientific American. Here, in "Medieval Roots of the Industrial Revolution," Terry S. Reynolds suggests that the early role of the steam engine (1765) may have been overdramatized. Far from being

revolutionary, much of the machinery that steam was coming to drive had already long been in place, having in fact been driven by water power since the Middle Ages. Nevertheless, the idea of a technosocial "revolution," in which the same people came out on top as in France and America, has proven of use to many over the years, not least to those who, like C. P. Snow, have thought that In "Luddite"" they have discovered a way to call those with whom they disagree both politically reactionary and anti-capitalist at the same time.

But the Oxford English Dictionary has an interesting tale to tell. In 1779, in a village somewhere in Leicestershire, one Ned Lud broke into a house and "in a fit of insane rage" destroyed two machines used for knitting hosiery. Word got around. Soon, whenever a stocking-frame was found sabotaged – this had been going on, sez the Encyclopedia Britannica, since about 1710 – folks would respond with the catch phrase "Lud must have been here." By the time his name was taken up by the frame-breakers of 1812, historical Ned Lud was well absorbed into the more or less sarcastic nickname "King (or Captain) Ludd," and was now all mystery, resonance and dark fun: a more-than-human presence, out In the night, roaming the hosiery districts of England, possessed by a single comic shtick –every time he spots a stocking-frame he goes crazy and proceeds to trash it.

But it's important to remember that the target even of the original assault of l779, like many machines of the Industrial Revolution, was not a new piece of technology. The stocking-frame had been around since 1589, when, according to the folklore, it was invented by the Rev. William Lee, out of pure meanness. Seems that Lee was in love with a young woman who was more interested in her knitting than in him. He'd show up at her place. "Sorry, Rev, got ome knitting." "What, again?" After a while, unable to deal with this kind of rejection, Lee, not, like Ned Lud, in any fit of insane rage, but let's imagine logically and coolly, vowed to invent a machine that would make the hand-knitting of hosiery obsolete, and so he did. According to the encyclopedia, the jilted cleric's frame "was so perfect in its conception that it continued to be the only mechanical means of knitting for hundreds of years."

Now, given that kind of time span, it's just not easy to think of Ned Lud as a technophobic crazy. No doubt what people admired and mythologized him for was the vigor and single- minded-

ness of his assault. But the words "fit of insane rage" are third-hand and at least 68 years after the event. And Ned Lud's anger was not directed at the machines, not exactly. I like to think of it more as the controlled, martial-arts type anger of the dedicated Badass.

There is a long folk history of this figure, the Badass. He is usually male, and while sometimes earning the quizzical tolerance of women, is almost universally admired by men for two basic virtues: he Is Bad, and he is Big. Bad meaning not morally evil, necessarily, more like able to work mischief on a large scale. What is important here is the amplifying of scale, the multiplication of effect. The knitting machines which provoked the first Luddite disturbances had been putting people out of work for well over two centuries. Everybody saw this happening–it became part of daily life. They also saw the machines coming more and more to be the property of men who did not work, only owned and hired. It took no German philosopher, then or later, to point out what this did, had been doing, to wages and jobs. Public feeling about the machines could never have been simple unreasoning horror, but likely something more complex: the love/hate that grows up between humans and machinery especially when it's been around for a while –not to mention serious resentment toward at least two multiplications of effect that were seen as unfair and threatening. One was the concentration of capital that each machine represented, and the other was the ability of each machine to put a certain number of humans out of work to be "worth" that many human souls. What gave King Ludd his special Bad charisma, took him from local hero to nationwide public enemy, was that he went up against these amplified, multiplied, more than human opponents and prevailed. When times are hard, and we feel at the mercy of forces many times more powerful, don't we, in seeking some equalizer, turn, if only in imagination, in wish, to the Badass–the djinn, the golem, the hulk, the superhero who will resist what otherwise would overwhelm us? Of course, the real or secular frame-bashing was still being done by everyday folks, trade unionists ahead of their time, using the night, and their own solidarity and discipline, to achieve their multiplications of effect.

It was open-eyed class war. The movement had its Parliamentary allies, among them Lord Byron, whose maiden speech in the House of Lords in 1812 compassionately argued against a bill proposing, among other repressive measures, to make frame- breaking punishable by death. "Are you not near the Luddites?" he wrote

from Venice to Thomas Moore. "By the Lord! if there's a row, but I'll be among ye! How go on the weavers – the breakers of frames – the Lutherans of politics – the reformers?" He includes an "amiable chanson," which proves to be a Luddite hymn sop inflammatory that it wasn't published until after the poet's death. The letter is dated December 1816: Byron had spent the summer previous in Switzerland, cooped up for a while in the Villa Diodati with the Shelleys, watching the rain come down, while they all told each other ghost stories. By that December, as it happened, Mary Shelley was working on Chapter Four of her novel "Frankenstein, or the Modern Prometheus."

If there were such a genre as the Luddite novel, this one, warning of what can happen when technology, and those who practice it, get out of hand, would be the first and among the best. Victor Frankenstein's creature also, surely, qualifies as a major literary Badass. "I resolved...," Victor tells us, "to make the being of a gigantic stature, that is to say, about eight feet in height, and proportionately large," which takes care of Big. The story of how he got to be so Bad is the heart of the novel, sheltered innermost: told to Victor in the first person by the creature himself, then nested inside of Victor's own narrative, which is nested in its turn in the letters of the arctic explorer Robert Walton. However much of "Frankenstein's" longevity is owing to the undersung genius James Whale, who translated it to film, it remains today more than well worth reading, for all the reasons we read novels, as well as for the much more limited question of its Luddite value: that is, for its attempt, through literary means which are nocturnal and deal in disguise, to deny the machine.

Look, for example, at Victor's account of how he assembles and animates his creature. He must, of course, be a little vague about the details, but we're left with a procedure that seems to include surgery, electricity (though nothing like Whale's galvanic extravaganzas), chemistry, even, from dark hints about Paracelsus and Albertus Magnus, the still recently discredited form of magic known as alchemy. What is clear, though, despite the commonly depicted BoltThrough the Neck, is that neither the method nor the creature that results is mechanical.

This is one of several interesting similarities between "Frankenstein" and an earlier tale of the Bad and Big, "The Castle of Otranto" (1765), by Horace Walpole, usually regarded as the first Gothic novel. For one thing, both authors, in presenting their books to the public, used voices not their own. Mary Shelley's

preface was written by her husband, Percy, who was pretending to be her. Not till 15 years later did she write an introduction to "Frankenstein"in her own voice. Walpole, on the other hand, gave his book an entire made-up publishing history, claiming it was a translation from medieval Italian. Only in his preface to the second edition did he admit authorship.

THE novels are also of strikingly similar nocturnal origin: both resulted from episodes of lucid dreaming. Mary Shelley, that ghost-story summer in Geneva, trying to get to sleep one midnight, suddenly beheld the creature being brought to life, the images arising in her mind "with a vividness far beyond the usual bounds of reverie." Walpole had been awakened from a dream, "of which, all I could remember was, that I had thought myself in an ancient castle... and that on the uppermost bannister of a great stair-case I saw a gigantic hand in armour."

In Walpole's novel, this hand shows up as the hand of Alfonso the Good, former Prince of Otranto and, despite his epithet, the castle's resident Badass. Alfonso, like Frankenstein's creature, is assembled from pieces – sable-plumed helmet, foot, leg, sword, all of them, like the hand, quite oversized – which fall from the sky or just materialize here and there about the castle grounds, relentless as Freud's slow return of the repressed. The activating agencies,again like those in "Frankenstein," are non-mechanical. The final assembly of "the form of Alfonso, dilated to an immense magnitude," is achieved through supernatural means: a family curse, and the intercession of Otranto's patron saint.

The craze for Gothic fiction after "The Castle of Otranto" was grounded, I suspect, in deep and religious yearnings for that earlier mythic time which had come to be known as the Age of Miracles. I ways more and less literal, folks in the 18th century believed that once upon a time all kinds of things had been possible which were no longer so. Giants, dragons, spells. The laws of nature had not been so strictly formulated back then. What had once been true working magic had, by the Age of Reason, degenerated into mere machinery. Blake's dark Satanic mills represented an old magic that, like Satan, had fallen from grace. As religion was being more and more secularized into Deism and nonbelief, the abiding human hunger for evidence of God and afterlife, for salvation – bodily resurrection, if possible – remained. The Methodist movement and the American Great Awakening were only two sectors on a broad front

of resistance to the Age of Reason, a front which included Radicalism and Freemasonry as well as Luddites and the Gothic novel. Each in its way expressed the same profound unwillingness to give up elements of faith, however "irrational," to an emerging technopolitical order that might or might not know what it was doing. "Gothic" became code for "medieval," and that has remained code for "miraculous," on through Pre-Raphaelites, turn-of- the-century tarot cards, space opera in the pulps and comics, down to "Star Wars" and contemporary tales of sword and sorcery.

TO insist on the miraculous is to deny to the machine at least some of its claims on us, to assert the limited wish that living things, earthly and otherwise, may on occasion become Bad and Big enough to take part in transcendent doings. By this theory, for example, King Kong (?-1933) becomes your classic Luddite saint. The final dialogue in the movie, you recall, goes, "Well, the airplanes got him." "No... it was Beauty killed the Beast." In which we again encounter the same Snovian Disjunction, only different, between the human and the technological.

But if we do insist upon fictional violations of the laws of nature – of space, time, thermodynamics, and the big one, mortality itself – then we risk being judged by the literary mainstream as Insufficiently Serious. Being serious about these matters is one way that adults have traditionally defined themselves against the confidently immortal children they must deal with. Looking back on "Frankenstein," which she wrote when she was 19, Mary Shelley said, "I have affection for it, for it was the offspring of happy days, when death and grief were but words which found no true echo in my heart." The Gothic attitude in general, because it used images of death and ghostly survival toward no more responsible end than special effects and cheap thrills, was judged not Serious enough and confined to its own part of town. It is not the only neighborhood in the great City of Literature so, let us say, closely defined. In westerns, the good people always win. In romance novels, love conquers all. In whodunits, murder, being a pretext for a logical puzzle, is hardly ever an irrational act. In science fiction, where entire worlds may be generated from simple sets of axioms, the constraints of our own everyday world are routinely transcended. In each of these cases we know better. We say, "But the world isn't like that." These genres, by insisting on what is contrary to fact, fail to be Serious enough, and so they get redlined under the label "escapist fare."

This is especially unfortunate in the case of science fiction, in which the decade after Hiroshima saw one of the most remarkable flowerings of literary talent and, quite often, genius, in our history. It was just as important as the Beat movement going on at the same time, certainly more important than mainstream fiction, which with only a few exceptions had been paralyzed by the political climate of the cold war and McCarthy years. Besides being a nearly ideal synthesis of the Two Cultures, science fiction also happens to have been one of the principal refuges, in our time, for those of Luddite persuasion.

By 1945, the factory system – which, more than any piece of machinery, was the real and major result of the Industrial Revolution – had been extended to include the Manhattan Project, the German long-range rocket program and the death camps, such as Auschwitz. It has taken no major gift of prophecy to see how these three curves of development might plausibly converge, and before too long. Since Hiroshima, we have watch nuclear weapons multiply out of control, and delivery systems acquire, for global purposes, unlimited range and accuracy. An unblinking acceptance of a hol-ocaust [...] eight-figure body counts has become [...] particularly since 1980, have been guiding our military policies –conventional wisdom.

To people who were writing science fiction in the 50's, none of this was much of a surprise, though modern Luddite imaginations have yet to come up with any countercritter Bad and Big enough, even in the most irresponsible of fictions, to begin to compare with what would happen in a nuclear war. So, in the science fiction of the Atomic Age and the cold war, we see the Luddite impulse to deny the machine taking a different direction. The hardware angle got de-emphasized in favor of more humanistic concerns – exotic cultural evolutions and social scenarios, paradoxes and games with space/time, wild philosophical questions –most of it sharing, as the critical literature has amply discussed, a definition of "human" as particularly distinguished from "machine." Like their earlier counterparts, 20th-century Luddites looked back yearningly to another age –curiously, the same Age of Reason which had forced the first Luddites into nostalgia for the Age of Miracles.

But we now live, we are told, in the Computer Age. What is the outlook for Luddite sensibility? Will mainframes attract the same hostile attention as knitting frames once did? I really doubt it.

105

Writers of all descriptions are stampeding to buy word processors. Machines have already become so user-friendly that even the most unreconstructed of Luddites can be charmed into laying down the old sledgehammer and stroking a few keys instead. Beyond this seems to be a growing consensus that knowledge really is power, that there is a pretty straightforward conversion between money and information, and that somehow, if the logistics can be worked out, miracles may yet be possible. If this is so, Luddites may at last have come to stand on common ground with their Snovian adversaries, the cheerful army of technocrats who were supposed to have the "future in their bones." It may be only a new form of the perennial Luddite ambivalence about machines, or it may be that the deepest Luddite hope of miracle has now come to reside in the computer's ability to get the right data to those whom the data will do the most good. With the proper deployment of budget and computer time, we will cure cancer, save ourselves from nuclear extinction, grow food for everybody, detoxify the results of industrial greed gone berserk – realize all the wistful pipe dreams of our days.

THE word "Luddite" continues to be applied with contempt to anyone with doubts about technology, especially the nuclear kind. Luddites today are no longer faced with human factory owners and vulnerable machines. As well-known President and unintentional Luddite D.D. Eisenhower prophesied when he left office, there is now a permanent power establishment of admirals, generals and corporate CEO's, up against whom us average poor bastards are completely outclassed, although Ike didn't put it quite that way. We are all supposed to keep tranquil and allow it to go on, even though, because of the data revolution, it becomes every day less possible to fool any of the people any of the time.

If our world survives, the next great challenge to watch out for will come – you heard it here first – when the curves of research and development in artificial intelligence, molecular biology and robotics all converge. Oboy. It will be amazing and unpredictable, and even the biggest of brass, let us devoutly hope, are going to be caught flat-footed. It is certainly something for all good Luddites to look forward to if, God willing, we should live so long. Meantime, as Americans, we can take comfort, however minimal and cold, from Lord Byron's mischievously improvised song, in which he, like other observers of the time, saw clear identification between the first Luddites and our own revolutionary origins. It begins:

106

As the Liberty lads o'er the sea

Bought their freedom, and cheaply, with blood,

So we; boys, we

Will die fighting, or live free,

And down with all kings but King Ludd!

107

Thomas Pynchon