The Force of Art

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Introduction: The Turn of the Avant-Garde

> Talk of machines, technologies, capabilities, costs, markets, infra-
> structures, offers no guidance and is inadequate and irrelevant to
> the development of our inner lives. This is why art today, tradition-
> ally the articulation and expression of the "why" side of life, is now
> so important and so vital, even though it remains confused and
> inconsistent in its response to the new demands and responsibilities
> placed on it in this time of transition.
> —Bill Viola, "Between How and Why"

At the turn of the new millennium, almost a hundred years after the Modernist explosion and the great promise of the avant-garde, art appears to have lost whatever meager vestiges of force and importance it still might have held in the increasingly technological and commodified culture of the twentieth century. This crisis in aesthetics, which began in the nine-teenth century, has been exacerbated by the rapid growth of mass culture with its corollaries, the entertainment industry, commercialization, and information technologies. In the process, art has become increasingly mar-ginalized, as contemporary reality has come to be determined by techno-science and various technologies of power, while the aesthetic plays at best a secondary role, as it is most often reduced to a tool in cultural, ideolog-ical, and identity wars. What underlies this sense of the powerlessness, even irrelevance, of contemporary art is the determination, firmly embed-ded in the fabric of modern society, that reality is elsewhere, as one might say, and that its centers of power are digital technology, economic global-ization, and increasing commodification. With the speedy advances in information technologies, the Internet, and new modes of advertising, even cultural and aesthetic innovations seem to lie more in the domains of

the virtual and the commercial than in the artistic. Thus what was experienced at the beginning of the last century as the crisis of aesthetics has apparently resolved itself into the problematic contained within technologies of power, which have incorporated the advances of modernist aesthetics, transformed them, and often in the process dulled and popularized these new techniques for the sake of profit.

With the annexation of modernist aesthetics by advertising and popular culture, aesthetic issues have come to be disclosed, as the commercial collages of Web pages make amply evident, as essentially technological issues, that is, as a matter of advancing information technologies, which, far from coming into conflict with capitalist modes of production, increase their ability to translate reality and experience into data, codes, and programs in the service of globalization and the accumulation of capital. The problem at the turn of the millennium is therefore less that the radical aesthetics of the avant-garde has become popularized than that the aesthetic itself has become exposed as intrinsically technological—a situation that, ironically, may be taken to represent precisely the fulfillment of some avant-garde dreams, especially those of F. T. Marinetti and Francis Picabia. Andy Warhol's remark "I want to be a machine" and the rise of material technology in the sculpture of Donald Judd or David Smith further illustrate this increasing sense of the aesthetic as technological. In such works, the essence of the aesthetic appears to be fundamentally consonant with technicity, and thus to constitute the matter of the same manipulation, reducibility to information, and reprogramming that we see rapidly advanced in the realms of digital technology or genetic engineering. With those intensifying social and cultural changes in view, it seems almost inevitable that art would continue to lose its social and cultural status and find itself even further marginalized in relation to the technoscientific, consumer-oriented, entertainment-driven society. It is therefore not surprising that aesthetics at the beginning of the new millennium is once again dominated by visions of the end and of exhaustion, and that, as a reaction, many critics—for instance, Richard Shusterman[1]—turn toward areas marginal to traditional aesthetics (popular music, film, or mass media) in search of vitality and significance.

In response to this impasse and pessimism concerning art's social function, my approach aims to recover and redefine art's transformative force. I claim that we have not yet recognized how radically avant-garde

art redefines the problematic of power and freedom, and how this redefinition makes it possible to rethink art's force beyond the boundaries of aesthetics. The single most important problem raised in this book concerns art's relation to power, and it hinges on how one reads the current—de facto correct and widespread—diagnosis of the powerlessness of art in contemporary society: does one take it to mean that art is without force, barely important, and thus hardly worth the effort in the global culture of the twenty-first century, or that perhaps a significant and unexamined "truth" addresses itself to us in the idea of art's powerlessness? To phrase it differently, how to understand the relation between powerlessness and power in the context of art? how to read the all-important yet often unthought suffix "-less"? Unexamined, this suffix is almost always taken for granted as signifying absence of power, and so the word "powerlessness," in the context of art, suggests that artworks, when compared with social, political, or even physical forces, lack any effectiveness in changing reality. Art, determined by power, is without a critical force of its own; and, in the world defined by exponentially increasing technopower on the macroglobal and microgenetic scales, this means that art is progressively drained of significance. In particular in the context of capital accumulation and consumption, the suffix "-less" will always be construed as privation, loss, or lack of "profit"—will be construed, that is, as Theodor Adorno was quick to note, exclusively in negative terms. Yet when we take the notion of the powerlessness of art not as an all too obvious product of contemporary technocratic society but as a question posed to us and our culture, the possibility of a different understanding opens up: a different understanding not only of art but also, and perhaps more important, of power and its relation to art. Insofar as art discloses an alternative to the paradigms of production, mobilization, and technical manipulation at the core of contemporary operations of power, art's work is never exclusively negative but constitutes as well a "positive," albeit paradoxical, articulation of the possibility of freedom. The "-less" in the adjective "powerless," when attached to art, does not necessarily mean lack of power but instead indicates an alternative economy of forces, which changes the very makeup of power. In this view, the powerlessness of art is not a negative judgment rendered on artworks but a provocative indication that art functions otherwise than through dominant articulations of power. Though art, like everything else, is produced and regulated within the power-driven econ-

omy of modern being, art can become disencumbered of the governing configuration of power and open an alternative modality of relations. This ability to let go of power, to transform relations and enable their alternative configurations, constitutes the paradoxical force of contemporary art.

It would be hard to deny that modern reality is increasingly characterized by the intensifying play of power. Recent developments in globalization, as well as in genetic and information technologies, testify to the unprecedented reach of power on both the macro- and microscopic scales. Already in the late 1930's, Martin Heidegger described modernity as a constant drive toward the intensification of power, whose sole aim is to spread its domain and increase its magnitude. Power thus became the defining momentum of modern reality, a fluid complex of operations and relations whose increasingly technological character allowed it both a continuously expanding reach and greater flexibility. Later Michel Foucault, through his readings of Friedrich Nietzsche's "will to power" and Heidegger's lectures on Nietzsche, confirmed this diagnosis and extended the scope of modern power: technological power became biopower, reaching from individual bodies to the life of the population. At present, we have moved even beyond Foucault's horizon as power operates simultaneously on both the molecular and the global level. Power is understood here not only in terms of domination and violence but also as creation and production. These various aspects of power are two sides of the same coin, which has an increasing purchase on modern reality, determining its value in terms of the ability to make and manipulate. Power thus refers to the various flexible operations of producing, managing, and (re)programming, in which entities and relations come to be constituted into the modern world, whose standards of "reality" and "importance" are determined with a view toward a greater penetrative and formative reach of power. Such power, though often described in terms of efficiency, calculability, and normalization, certainly among the most important parameters of power today, is much too fluid and productive to be thought of simply under these rubrics. Its "domination" is more subtle, often blurring the distinction between creation, on one side, and manipulation or normalization, on the other. Modern genetics is one of the fields where contemporary operations of biopower efface the boundary between invention and manipulation, fluidity and calculability, crossing paths with technological calculus on the level of molecular codes, that is, with unprecedented efficiency and pene-

trative reach. It is such programming that appears to be the effective measure of what it means "to be" in contemporary culture.

Since contemporary forms of power are increasingly infotechnical in their modes of operation, the force of art, as I formulate it in this book, bears upon the modern technicity of power, interrogating its forms and flows, calling into question its increasing flexibility and reach. As Bill Viola suggests, contemporary art finds itself in a transitional stage, no longer capable or willing to play the old aesthetic and cultural roles assigned to it and yet uncertain, even confused, about its place in the technoworld of the twenty-first century. Technology, machines, and tools, as Viola remarks, function always as engines of "how" rather than "why" or "what for," and the centrality of technology in modern life and art evidences a shift not only in the manner of art's production but, more important, in the very direction of the aesthetic. This displacement at the heart of the aesthetic goes far beyond the occlusion of the aura, which Walter Benjamin diagnosed at the beginning of the twentieth century, as it now marks a much more fundamental and wide-reaching emergence of technicity as the "essence" of the aesthetic. In the face of what looks like a gradual disclosure of art's basically technological constitution, of the "how" replacing and altering the "why," Viola reawakens the dilemma of art's continuing (or disappearing) difference from the technological. The disorientation to which Viola points indeed signals the central dilemma facing art today: is art part and parcel of the continuing technological acceleration of modern culture, an aesthetic branch of technopower, as it were, or does it mark the possibility of a critical turn, even transformation, in the play of power? The impasse in contemporary discussions of art, our discomfort with the very term "aesthetics," stems in many ways from the evasion of this crucial question about the force of art in today's reality.

In order to move beyond this impasse and read the suffix "-less" in "powerless" as a paradoxical possibility of transformation, we need both a different understanding of power and a different conception of the artwork. For me, the transition from traditional cultural roles to new future(s) for art, which Viola mentions, is more than an indication of a period of instability and change in aesthetic practices, precisely because it draws attention to the transformative character of art. Current approaches to art tend to underestimate this transformative force and give up the attempt to articulate a notion of the artwork that would reflect this poten-

tial. Taking an overall view, contemporary approaches to art can be roughly divided into five categories: (1) post-Hegelian scenarios of art's death and exhaustion, (2) attempts to revive the old terms of the beautiful and the sublime in order to define the essence of art, (3) conceptions that put art on the "back burner" and concentrate on instances of subversiveness and aesthetic import in popular culture and mass forms of entertainment, (4) the apparently progressive fusion of art with technology, as in electronic or transgenic art forms, and (5) isolated but interesting attempts to think of art beyond or after aesthetics.[2] Perhaps with the exception of the last category, these often quite different views—whether attempts to refurbish "classical" aesthetic terminology, shift aesthetic concerns and critical legitimacy to popular culture, or explore the increasing proximity between artworks and technology in the age of informational and genetic revolution—all but confirm the "end of art," confessing the apparent absence of critical force in contemporary art. However, such judgments either overlook or abdicate the project of a radical critique of aesthetics, opened up by such twentieth-century thinkers and artists as Adorno, Heidegger, Benjamin, Luce Irigaray, Marcel Duchamp, and Gertrude Stein, to name a few.

Even though Heidegger and Adorno are often regarded as antithetical and incompatible thinkers—a perspective that leads to unfortunate retrenchment and self-enclosure of both Adornian and Heideggerian approaches—I argue that some of the most interesting possibilities for considering art "after aesthetics" emerge from the space between their work. In reflecting on the paradoxical force of modern art, I have found both Adorno's negativity and Heidegger's radical revision of the idea of poiēsis particularly useful for rearticulating art's transformative potential with regard to technological forms of power. Taking Heidegger's and Adorno's insights as the point of departure, I argue that art discloses the possibility of thinking not only beyond the currently existing forms of power but also, as I will explain later, beyond the very idea of being as power. Heidegger's and Adorno's engagement with art, in the context of the intensification of technologization and its modern forms of power, mandate a thorough reworking of aesthetic categories, which continue to dominate discussions of art. Until such a revision takes place—a revision only intimated and not carried through by these thinkers—art's relation to power will continue to be misunderstood and will remain constrained

by aesthetic categorizations of the artwork. Yet in explaining the force of art in contemporary culture in a postaesthetic manner, as a redisposition of force relations and a transformation of the operations of power, my approach goes beyond the limitations of both Adorno's and Heidegger's thought.[3] It is meant to change the aesthetic optics that still determines much discussion of art, and to offer a new way of understanding art's intimate yet critical relation to the very modalities and operations of power in today's society.

To indicate the scope and the implications of this turn or transformation in power that characterizes the artwork, I approach art as a force field, where forces drawn from historical and social reality come be to formed into an alternative relationality.[4] I call this transformative event "forcework" and understand it as a specifically artistic redisposition of forces, in which relations are freed from power structures and the unrelenting, intensifying manipulative drive characteristic of modernity. Force has a double valence in my argument. On the one hand, the term refers to Foucault's and Gilles Deleuze's approaches to force, which understand force on the level of nonformalized functions and flows of energy, that is, in terms of the elemental constituents of "being" prior to their actualization into substances, objects, or bodies. On the other hand, force is seen in the Heideggerian perspective as rupture, change, transformation, that is, as the very dynamic of being and unfolding. In short, it is the force of the event. Thus the term "forcework" refers to the manner in which artworks redispose relations on the microlevel of forces—underneath the sedimented relations, so to speak, between objects, bodies, substances, and the operations of power forming them. Such transformation cannot be described in traditional aesthetic terms, because it is not a matter of form and content, of images and statements, of the seen and the said, or of the sensible and the intelligible. The rupture and transformation that art's forcework occasions describes the specific artistic force with which art "acts" in historical and cultural context. And the "occasion" of such a change constitutes art's event. The notion of contemporary art as forcework highlights the dynamic, transformative momentum of art's work over and against the notion of artworks as objects and/or commodities. It also revises art's relation to the "outside" world as well as its effect on the audience. What the artistic forcework occasions in the world around it and in its viewers cannot be explained either in traditional aesthetic terms of

affect, perception, and judgment or through the sociocultural categories of production, manipulation, and critique. Rather, the *work* that takes place in art—"work" understood here not as a produced object but in the active, transformative sense—needs to be approached on the level of force relations. To develop such an understanding of art's transformative forcework, I consider a wide range of twentieth- and twenty-first-century artistic practices: from those of the Italian Futurists Marinetti and Boccioni to those of the Russian avant-garde artists Velimir Khlebnikov, Liubov Popova, and Dziga Vertov to the practices of Dadaism, Duchamp, and Stein to those of such contemporary artists as Bill Viola, Krzysztof Wodiczko, Amiri Baraka, Seiko Mikami, and Eduardo Kac. As such, my approach responds to and even further radicalizes Fredric Jameson's call for a nonreified, nonobjectified conception of the artwork.[5] Such a "postaesthetic" approach accounts for the *force* with which art redisposes relations and alters their mode of being in the world, releasing them from flexible and penetrative flows of technopower. This new way of thinking would suggest a radical and transformative significance of art vis-à-vis the predominance of power-oriented relations, not only in the realms of commerce, politics, and technology but also in the everyday practices of living. Yet this power-free relationality, to the extent that it occurs in art, can be called artistic.

As forcework, art can no longer be conceived as an object but instead should be understood as an event, that is, as a dynamic, "force-ful" redisposition of relations inscribed in it through the sociocultural determination of artistic production. The emphasis placed here on the "event" of art does not cancel the inevitable, and necessary, materiality and objectification of artworks but points to their double character as both "act" and shaped product. It is the "fact" of the physicality of artworks, their necessary existence as objects with their apparent constancy, that in fact highlights the "inconstant," volatile, and transformative event at the core of art. In Viola's installations, the juxtaposition of such objects as chairs, tables, jugs, television monitors, projection panels, and so on, with virtual, electronically generated or processed images gives these works their particular force in terms of the exploration and questioning of the boundary between the aesthetic and the technological. This interplay (to evoke Heidegger's terminology) between the thing-character and the work-character of works of art, their necessary interrelation and mutual determina-

tion and differentiation, foregrounds the fact that art's force is not at all abstracted from its material existence. On the contrary, materiality performs an active role in art's "work" precisely to the extent that the overt immutability of the thing-aspect of the work (the work as object) puts into play its active, verb features.[6] The "fact" of the work's existence as a thing both shelters and reinforces the "act" of its *working*, the event of transformation, the dynamic forcework of art. Thus the notion of "artwork" comes to play a double role here, not just an art *object* but also an art *work*: its "labor," performance, act, in a word, its force. Revealed in its full complexity, the artwork is the reciprocal animation of the nominal and the verbal sense of "work," the event of the actualization of art's status as an object into the performance of its work.

Perhaps the most significant, and yet most difficult, aspect of rethinking the work of art as forcework is the radical critique of the logic of production and the modalities of power that together regulate modern social praxis. The idea of production implicit in the aesthetic notion of art as "formed content" remains inadequate for the type of performative displacement involved in art. The creation of an artwork, while it inscribes both the forces and the relations of production that regulate its social context, not only exceeds but also revises the very modality of transactions and relations between forces that obtain within the paradigm of production.[7] Production and action inscribe violence in their very mode of operation in this specific sense: that, as modalities of making or effecting, they shape and recast material that is regarded as passive. Artworks encode in their forcework the possibility of a different, nonviolent mode of relation, which does not saturate force relations with either creative or restrictive manipulation. It is true that many modern and contemporary works rely heavily on the aesthetics of shock, but the violence and power in art, as Adorno is right to contend, happen for the sake of nonviolence, even if this is ultimately unintentional and even counter to the artist's aims or interests. Even in works explicitly relying on the shock produced by power and violence, there is, I would argue, another dimension, in which the artwork has a force that is no longer violent, that is, not dominating through production or reconfiguration but rather releasing forces into reciprocal shaping and becoming.

For example, Amiri Baraka's recent poetry can be seen as an instance of work involving such a paradoxical role of violence and power in con-

temporary art. On the one hand, Baraka must be understood as quintessentially invested in power, as seeking alternative modes of power or strategies of resistance and counterpower, which are forcefully brought into the foreground both in the themes and in the rhetoric of his poetry, plays, and essays, all sharply critical of the modern technocapital. On the other hand, Baraka's remapping of art in poems like "Art Against Art Not" hearkens back to the idea of poiēsis and transformation at the heart of African art, as discussed by Léopold Senghor in his work on Negritude. The funky rhythm Baraka infuses into his poetry becomes not simply an alternative mode of power but, more radically, an alternative *to* power, a story of being ("'is' story") whose language is not technological, not the lingo of capital and power, but a transformative reweaving of relations. Let me be clear here: the force of art does not exclude the shock effects associated with power games and violence in modern art; on the contrary, it often incorporates such power games as part of what nevertheless works, overall, as a transformative and power-free redisposition of relations, for the force that I associate with art has a paradoxical effect of dissipating, annulling, or desisting from power. What art's forcework does is to open, inside relations of power, an inverse of power: not powerlessness but desistance from power, not to be misunderstood as indifference or passivity but to be seen instead as a transformation of the very nature of what it means to work and to act. We can describe this transformation as a shift from the active to the middle voice.

Heidegger's critique of the metaphysics of production underlying modern technicity captures this nonviolent modality of being in the middle voice, in its suggestive distinction between making/producing (*machen*) and letting/releasing (*lassen*) as two fundamentally different ways of disposing relations. Intrinsic to *machen* is the formation, production, and manipulation of relations and objects (*Machenschaft*) into the terms of an ever-intensifying power (*Macht*) whose operations become increasingly flexible and fluid. Traditionally, making is any form of praxis with a view to the realization of well-defined goals, or a telos. As such, it includes a modality of self-realization, which of course can be blocked, postponed, or derailed by opposing forces. Even in the postmodern fluid or fragmentary conception of power, the idea of making, as genetic manipulation suggests, is a type of relation in which a dominant active force shapes, pro-

duces, or subjugates either a passive material or a weaker force. By contrast, *lassen* refers to an active release from power, to a transformation in the very mode of relating, which becomes articulated through a reciprocal interaction of forces. Insofar as *lassen* is a departure from the binary articulation of domination and submission, from active form and passive matter, it enables a becoming, in which forces unfold through each other in a continuously reactivated field of reciprocal shaping, because in this type of articulation all forces are both affected and affecting: they unfold in the middle voice, eschewing the passive/active opposition. And it is precisely this modality of relation in the middle voice, predicated on a reciprocal enabling, that I refer to as power-free. *Lassen* signifies, therefore, an event in which forces are reactivated into an alternative modality of mutual enabling and becoming.

It is important to underscore here that this event in no way means leaving things as they are, because as they are, things are always already incorporated into the various layers and flows of power. Still, this sense of letting go and release indicates neither a forcible reshaping of forces within the nexus of power(s) nor a conferring of external identities upon them. Rather, letting go operates in the middle voice, neither active nor passive, neither forcible nor ineffective. This middle-voice tonality, as I show in chapter 1, does not refer to the ways in which power can change, produce, or reshape relations from both within and without—always inevitably into a new form of power—but rather to a new mode of relating, which emerges from the interaction and reciprocal shaping of forces. This alternative relationality is not some illusory beyond to power but instead indicates a critical inflection in the tonality of power, a change of momentum whereby forces become released from the circuits of power and are given a free space of occurrence. In this context, the artistic forcework can be seen as an enabling, transformative work, which radically changes the very momentum of relations. Artworks seek what Deleuze, commenting on Foucault, calls "a 'power of truth' which would no longer be the truth of power, a truth that would release transversal lines of resistance and not integral lines of power."[8] This power or, better, force of truth, which is no longer a truth of power, signifies, in my reading, a distinctive field of relationality, an event that grants forces, against the pervasive formative operations of power, a space for reciprocal shaping and becoming. This capac-

ity, transversing the workings of power without either becoming a party to power or being rendered powerless by power's domination, constitutes the "event" of art.

To further explain this characteristic capacity of art to exceed aesthetic parameters, I adapt the Greek notion of aphesis for the purposes of my argument. My use of the term "aphesis," which denotes a releasing, a letting be or a letting go, and even liberty, is an attempt to describe in positive terms this alternative mode of disposing the relations at work in art. The register of meanings brought into play by aphesis begins to outline the forcework through which art, while borrowing from social relations of power, acquires its capacity to desist. The aphetic character of forcework indicates that relations become disencumbered from both disciplining and generative power, which means that art frees forces into a becoming, which is apart from the habitual relations of representation, action, and knowledge that form and regulate social praxis. Gertrude Stein's writing is often aphetic in this sense: in her linguistic freedom and inventiveness, Stein does not negate grammar or the power of signification but rather releases words and meanings from their investment in the various forms of power existing on syntactical, semantic, or cultural levels. Stein's language is written "merrily" and for pleasure, beyond the intention "to spell or spend," beyond articulation and profit (of meaning and the power that accrues with it). Avoiding the well-known idiom of power (grammar, meaning, name, image, narrative, and so on), Stein finds a new way of writing—using such devices as the continuous present, composition as explanation, naming without names, to mention just a few—that remains within power and yet does not comply with it. Stein's work shows how the customary practices that shape forces into the operational nexus of power come undone, and how a possibility of a new occurrence is opened up. The term "aphesis," with its connotations of releasing and liberation, indicates here how art's force is not an alternative power but an alternative *to* power, which releases forces into the element of reciprocal free play and becoming.

It is in terms of this tension between *machen* and *lassen*, between power and aphesis, that I explain art's forcework as the space where power-oriented dispositions of forces into the practices of calculation and production become transformed into an alternative modality of relation, in which forces enable each other's becoming. The difficulty that such an

explanation entails is the impossibility of a positive translation or representation of art's forcework. Yet this "impossibility" is not at all negative; instead, it constitutes art's paradoxical capacity, its truly idiomatic force. Since art's forcework marks a critical inflection in power, it cannot be articulated in positive terms, for it would then enter the field of representation and become inscribed within the very flows of power that it reorients. But this (in)ability should not be misconstrued as a lack in art, as a moment of art's powerlessness or of negation of its power. Rather, it is a paradoxical capacity that art has to *not be* positive, or posited, and thus also to remain beyond the scope of negation. To be neither power-ful nor power-less is the enigmatic force of art. What Adorno calls "enigma" I redefine as a "third," in-between modality, which transverses the very essence of power. When social and cultural relations enter the "field" of art, art's "work" transforms their character, releasing them from the formative (either productive or restrictive) hold of power. Artworks instantiate an interface between the "external," social world and the "internal," artistic space, an interface that allows art both to be embedded in social praxis and yet to remain autonomous. It is this double character that endows art with critical and performative force. Art's forcework lets be by rupturing and displacing the patterns of power governing social praxis. As such, forcework defines the transformative dimension of art, which lies beyond the complicities with and/or resistances to regimes of power and ideologies that mark both the content and the formal aspects of artworks, and which also, so to speak, lies beyond power's ability to exercise and reproduce itself.

Whenever one claims a transformative potential for art, the question inevitably arises about the relationship between artistic transformation and radical political change. In response to such a question, I would like to make two claims. First, contra Adorno, I argue that the event of transformation is not a mere potentiality or semblance but that it occurs and has effects in the world. Second, I suggest that for this work of transformation to reach beyond the realm of art and not be subsumed into the matrix of power, it has to be continued by social and political transformation. This is how I propose to radicalize what Heidegger calls "preservation," understood as a continuous reactivation of the transformative work. And it is clear that such an ongoing reactivation of transformation requires radical democratic politics. Yet my task in this book is to articulate the specific

role that art can play in regard to this political process, and this is why I do not theorize the process itself.[9] To that effect, the conclusion of this book presents, through a discussion of Khlebnikov, Vertov, Baraka, and Wodiczko, a conception of revolt in art, one that sees art's import not in its political engagement or its subversion of aesthetic forms but in the radical nature of its forcework. In this context, the task is not simply to "preserve" the work of art but also to continuously reactivate its transformative force in political life. This is also how I inflect Benjamin's call for the politicization of aesthetics, the process that ultimately necessitates the move beyond aesthetics.

Adorno, in terms different from Heidegger's but in a similar spirit, claims that art, deploying the forms of domination constitutive of modern society, turns this domination against itself and, beyond the confines and ideological stakes of any politics, opens the possibility of freedom. Thus what is at stake in art's forcework is not simply freedom from specific political, cultural, or technological forms of domination but release from the more fundamental "domination," or mobilization, of forces in service of the overall "politics" of the continuous intensification of power. What art recognizes is that the very inscription of force relations into the operations of power, with this inscription's corollary endorsement of power as the characteristically and inescapably modern way of life, is the political gesture par excellence, a gesture that "politicizes" being beyond any ideology or political statement. Since forces, in the artwork, are no longer "in the service of power"—whether for positive or negative purposes—but instead become realigned, as it were, for the sake of freedom, art is an event of a different "political" praxis. This praxis radicalizes politics by undoing what I have described here as being's primary politicization in service to power. In this specific sense, art can be said to instantiate not only an alternative politics but an alternative *to* politics. Art can do so because it instantiates the event as free from the most fundamental and pervasive kind of domination: the originary mobilization and shaping of force relations for the sake of power. This critical distinction between mobilization/production and transformative forcework constitutes the pivot of my analysis, in chapter 2, of art's relation to modern technology and forms of power, from the twentieth-century avant-garde, especially Italian Futurism, to contemporary Web-based and genetic art.

Art's transformation of the notion of production is particularly

important to consider in the context of commodification, since it illustrates the way in which the redisposition of forces performed by art offers an alternative to the global commodifying effects of the productionist logic of modern power. As an aesthetic object, art is of course part of the production paradigm—that is, it is obviously formed and produced and thus already predisposed for commodification—but as forcework, it opens the different modality of an event, irreducible to a product. This event desists from power and constitutes an eminently political instantiation of transformative force. Performing a critique of the commodity culture, the event character of art, the forcework "at work" in it, is not reducible to the parameters of exchange. While the artwork's features as an object easily become inscribed into commodity exchange, art's dimension of forcework, its transformative "act," exceeds it. Thus, as I argue in chapter 3, art, in its forcework, escapes the logic of commodity, both its paradigm of exchange and its corollary tendency toward fetishization. Though it is increasingly important to nuance our understanding of how art comes to function as a commodity, and thus as an element in the global economy of power, it is even more vital to flesh out the way in which art calls this dominant practice into question and opens the possibility of a nonproductionist (in the widest possible sense) way of being.

Since the logic of power/production is inextricably linked to the subject-object dialectic, the notion of forcework displaces this model and its various heuristic roles in formalist, materialist, and cultural analyses. It delimits the scope of these approaches by pointing out that what makes art art—that is, its forcework—remains outside the scope of aesthetic and cultural critique. With such questioning of the subject, such corollary notions as pleasure, desire, aesthetic experience, judgment, the beautiful, and the sublime, though appropriate for aesthetic appreciation and critique of art, lose their binding relevance for the concept of art as forcework. Instead, the postaesthetic understanding of art approaches art as a certain type of transformation, engaging it on the level of the formation and redisposition of forces. In chapter 3, I discuss how this idea of art's forcework allows us, in the context of the work of Irigaray, Paul Gilroy, and Frantz Fanon, to rethink the notion of the subject after aesthetics. As Gilroy (in his analysis of race), Irigaray (in her thought on sexual difference), and Fanon (in his idea of "actional man") point out, the notions of production and labor cannot serve the emancipatory function in relation

to raced and/or sexed subjects, because the subject- and power-oriented paradigm of production is itself responsible for patterns of racial and sexual inequality and oppression. In very different ways, they point to poiēsis rather than to labor as a source of liberation.

It is in relation to the operations of modern capital and its practices of production that we need to examine the problem of revolt in art. As Adorno would say, such a possibility of revolt is not a question of political subversiveness or radical ideas but, instead, of a certain redesigning of the modes of relation, one that happens in art on the level of force.[10] In Wodiczko's projections and performative instruments there is a dimension of "revolt" underneath social and political critique, a revolt in the aphetic mode, whose radical nature lies precisely in desisting from power and enabling a different modality of relations: a modality that is poietic and transformative precisely by virtue of being nonproductionist and power-free. Thus where art "re-volts" or "turns" against the logic of power is not, as I argue in this book's conclusion, in its explicit proclamations or formal innovations and subversions but in the very event of transforming relations, which disallows the fluid grip of power on experience while letting forces issue into configurations free from power.

This approach questions the position of critics who, like Raymond Williams, offer a rather dismissive evaluation of what Williams calls the "once liberating Modernism" and reduce its radical art to a phenomenon of merely historical importance without much relevance for contemporary life. My view, by contrast, is that we have not yet sufficiently addressed the problematic of freedom and power as it has been redefined in avant-garde artworks. Consequently, we need to consider how the avant-garde—and I employ the term to refer both to the early-twentieth-century avant-gardes and to the continuing avant-garde radicalism in contemporary art and poetry—contests power and redefines freedom. To put it simply, the avant-garde does not simply endorse, by attacking the absence of freedom in bourgeois society, the liberal notion of individual freedom; rather, it tries to change, amidst the galvanizing technological developments of twentieth-century culture, the very notion of what it means to be free in the face of growing technologization. Disagreeing with those who see art as exhausted or finished, I contend that art has never been more significant than it is now. I see art's "marginalization" in our technological society not as a judgment on art's importance but, conversely, as a disquieting

confirmation of our narrowing and uncritical understanding of experience. A good example of this inverse relation is the video installations of Bill Viola—for instance, *The Crossing*, *The Greeting*, and *Migrations*[11]— which use the latest computer and video technology to show that experience cannot be reduced to a technoscientific calculus or, broadly speaking, to information. The force of radical art is, in my approach, its ability to call into question this restricted, technicist view of being, experience, and action.

The present volume, pointing to this revolt in art in relation to modern forms of technopower, constitutes a decisive departure from the current climate of discussions about avant-garde art. Against claims about the exhaustion and irrelevance of contemporary art, I postulate the growing importance of radical aesthetics in the face of the rapidly intensifying technologization of life, both in its global proportions and at the most basic level of genetic codes. The crucial point here is not just that art, in its most recent forms of electronic or transgenic artworks, and whether in critical or celebratory fashion, continues to be preoccupied with the most recent and culturally formative developments in science and technology and thus keeps pace with the "real" world. Rather, the point is also that art in its characteristic mode of existence, here called "forcework," remains centrally and critically engaged with the "nervous system" of contemporary forms of relationality: technicity and its evolving modalities of power. Elsewhere, I have underscored the continuing relevance of the modernist and postmodern avant-garde to our understanding of modern experience.[12] In *The Force of Art*, I offer a new conception of radical art as a transformative force in the midst of the globalizing work of power.

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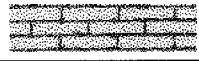
Ars Technica: From Futurism to Internet and Transgenic Art

The Technicity of Power

At stake in contemporary art is the question of power—not domination or oppression, or even subversion of the various forms of power/knowledge that regulate social praxis, but the possibility of a turn in power, which would open up the space of nonpower. Such a shift in the momentum of globally intensifying power is initiated in art by forcework, that is, by a redisposition of forces, which, calling into question the productionist impetus of modern relations, allows forces to assume in art valences no longer suffused with or augmenting power. Approached by way of forcework, artworks take on social relevance without necessarily having to deal explicitly with or portray a social problematic, for their importance for praxis is not in thematic critique or even in formal subversiveness but rather on the level of force relations, where artworks not only intervene or interrupt but also recode relations—rewire the connections, so to speak—and make it possible for the same forces that, within the social domain, are always already formed "in the image" of power, and *made* (that is, manipulated, calculated, and produced as) part of its intensification, to occasion a different force field. This distinctive force field, regulated by aphesis and not by power, I described in the previous chapter in terms of "nonpower" or the "power-free." But how are we to understand this peculiar sense of freedom, which comes from the transformative aphesis, and which, when conceived of on the level of force relations, that

is, as operating as a work or a field, cannot be confined to matters of personal or political freedoms, which themselves remain moored to the metaphysical notions of the subject, of individual or group agency, of (counter)power, and so on? The statement that this is a "deeper," ontological dimension of freedom, while correct, does not communicate the modality in which such freedom, opened up by art's forcework, operates. The field of such freedom, that is, an expanse of nonpower, has to be traced in relation to the essentially technical character of both the operations and the forms of modern power. To put the matter differently, the question of the possibility of a power-free mode of relating, as instantiated in art, brings us face to face with the problem of technology, of the technoscientific organization of the modern world, and, above all, of the technicity of power. That is why the question posed in this chapter is whether the work of art is explainable in terms of technicity—namely, whether its forcework is another instance of the technowork that today regulates our reality on the global scale.

The idea of the technicity of power is obviously linked to continuing rapid developments in science and technology, to the global operations of biopower and information technologies, and to the unprecedented scale of manipulation possible in today's world, from macroeconomics to microgenetics. Yet the intrinsic technicity of modern power is not to be confused with the power of technology; as powerful, commanding, and influential as technological discoveries and instruments are, the technicity of power refers to something else. It bespeaks the very modality in which power in contemporary society flows through institutions and forms of relations and regulates and mobilizes them toward further increases in power, both in reach and flexibility. After Heidegger and Foucault, the term "power" denotes the fluid array of modern productive technologies of power based on disclosure, ordering, and normalization. Power is, therefore, not a *what* but a *how*: a modality or, better yet, a disposition, that determines the value of relations among beings and phenomena in terms of production and manipulation, thus giving this relationality a distinctive momentum: an overall intensification of power. Seen this way, power circulates through different aspects of being and through various modes of relation, and this diffusion and circulation of power reflects the fact that everything that is—things, events, experiences—comes to be what it is through an accelerating mobilization of its being toward the

increase of power. Even production and self-creation come to serve this escalation of power, understood here as the defining momentum of modernity. In other words, power signifies a complex and shifting inter-lace of articulation, production, and mobilization, whose flexible circuits can absorb even forms of resistance and challenge to power structures and can rearticulate them as sites of a further magnification of power. In this distinctive sense, modern power produces itself as a certain technology, or, to distinguish it from the instrumental conception of technology, as tech-nicity or technics, whose fluid and expanding organization reflects the intensification of power itself.

The term "technicity" does not refer to what we commonly know as technology, whether by that word we mean modern production para-digms, instruments, and technologically produced objects, on the one hand, or technological know-how, on the other. Rather, technicity is what makes technology, in the usual sense, possible. Heidegger defines technic-ity as a mode of revealing, a certain manner of disposing or "tuning" (*stim-men*) relations, which tends to disclose what *is* as intrinsically calculable and as an available resource. Conceived in this way, technicity is the "power" that determines the scope and modality of relations in moderni-ty. Technicity is to be thought of, not in terms of specific types of relations or paradigms, but in terms of the power that effects, that is, brings into being and determines, the very forms that relationality takes. It refers, then, to the disposition of relations, to the technowork that determines the shape of being, experience, and history in modernity specifically as forms of power, where power is no longer understood as domination, manipula-tion, or even production. Instead, the issue of power has become much more important and complicated, since it now concerns the way in which power comes to constitute the very form that beings and their relations take. When beings come to be disclosed as "resources," natural, mineral, human, or otherwise, it means that they are constituted in their very essence *in terms of power*, that is, as intrinsically disposed toward being manipulated and (re)produced and thus articulated as part of the general flow of power, or, in other words, as preprogrammed to take a form or a value that "makes" them what they are by virtue of "making" them par-ticipate in the intensification of power. Earth is disclosed as, in essence, a "standing reserve" (*Bestand*) of resources, there to be exploited by human beings, while those very same human beings are themselves also deter-

mined in the first instance as a resource in the global economy, as both producers and consumers. Beings and the relations between them are dis-closed as intrinsically measurable, gauged in terms of their productive value, even when it comes to consumption, which is nothing more than the "production" of (the need for) further production.

Recent gains in genetic and information technologies have rapidly increased the possibilities for both productive and manipulative deploy-ments of power. Heidegger's term *Technik* (technicity) indicates that mod-ern power operates as an array of various technologies, in the manner that we know from Foucault's writings, but also reveals these modern modali-ties and circulations of power as technicist, namely, as producing being as inherently manipulable: "predisposed" to calculation, reworking, and dig-itization. Such technicity of being makes it possible to categorize experi-ence and social relations in terms of efficiency, commodification, and exchange. The abstraction of modern social relations that Adorno decries in his writings is technicist in essence: it dominates by rendering every-thing transparent in terms of calculability or informational content. Even when it appears to multiply differences, as in today's "multicultural" world, technicity is characterized by a tendency toward equalization of dif-ferences, exchangeability, and convertibility, whose most recent incarna-tion is the Information Age, with its increasing capability, desire, and need to digitize everything, and thus to turn being into a global, continuously modifiable and expandable data bank. In this context, virtual reality becomes the virtual presentation of absolute control over the "essence" of what is, and a simultaneous disclosure of this essence as computable, dig-itizable, and, as such, programmable in principle.

In our reflection on the present state of technicity, we need to mod-ify some of the terms that Adorno, Heidegger, and Foucault have used to diagnose it in their work: calculability has become computability; manip-ulability or instrumentality is now programmability; enframing has turned into formatting, mainframing, and Internetting; and resources and stand-ing reserves have become data banks. Finally, technicity itself has become digitality, disclosing the contemporary world as the unstable, global flow of information. If technicity, in Heidegger, refers to such a coming into being, which discloses beings as intrinsically subject to calculation and ordering, digitality goes deeper, as it were, revealing the essence of what is as digitizable in its structure, transferable to the realm of the virtual, and

open to reprogramming. Ecstatic invocations of the new world, freedom, and prosperity in the computer age, for all their truth, have to be taken with a grain of salt. It is undeniably true that electronic media, the Internet, and cyberspace have given us unprecedented freedom of access to information, new channels of expression, and ease of contact and exchange. Yet this fresh freedom is bound—dialectically, as Adorno would probably like to say—with unprecedented scope and exercise of power. While the cybernetic age has introduced a certain sense of fluidity, multiplicity, and fiberoptic speed into daily reality, it has also, and in a clearly unprecedented way, disclosed being as manipulable and programmable in essence. There seems to be nothing on this earth, or elsewhere, whose informational code, whether genetic or virtual, cannot be cracked open and reprogrammed. With the coming of the digital age, the control, reach, and saturation of power have simultaneously been extended to global proportions, penetrated to the microscopic level of genetic codes, and produced a new cyberspace mirror of reality. The freedoms that we enjoy via cyberspace are predicated on the ability to organize and digitize, that is, to convert experience, materiality, and being into a digital format. While there are clearly multiple forms of power, both creative and restrictive or negative, the fundamental conduit that renders modern being into increasingly intensifying power, power that belongs to no one and yet "powers" everything and everyone, can be described as digital. Since "to be" means today to be disclosable as, in essence, information, that is, as a code, this inherently digital disposition of being, its inclination to become convertible to digitized information and its systemic manipulability, produces modern being as saturated by power on microscopic levels. In the end, we no longer have a Platonic essence but a modern, informational one: our being becomes reducible to electronic impulses, data, and digital inscriptions. What is not convertible to information and mobilizable for the sake of power therefore appears as somehow deficient, undefinable, and lacking in being. This is why, in spite of the controversies that erupt here and there, art strikes us, especially the up-and-coming computer generation, as more and more unreal or simply as ideology.

The contemporary digital form of technicity, by disclosing everything as analyzable as information in its microelemental structures, and thus as intrinsically predisposed toward manipulation, reprogramming, (re)linking, and (re)transmitting, has allowed power an unprecedented

sweep, agility, and, consequently, intensity. The accent in the operations of technicity falls on the "re-," which marks the susceptibility of being, in the Information Age, to potentially endless repetition and machination. Digitality, then, is the contemporary "mode" of power, its instant flow, fiberoptic transmissibility, and global linkage. Power, having enmeshed the "real" world with its circuits, has now colonized a new territory of virtuality, a supralayer of linkages, relays, and unprecedented velocity. Since power, in the cyber realm, is both more agile and more flexible, it is only "logical," in accordance with the logic of power, that this dimension should become increasingly important, perhaps eventually assuming the rank of the "real" world, that is, the world where power is at its most efficient and thus "truly" what it is.

To the extent that power is equivalent to technicity, the question that the work of art poses in this context is whether and how, in a world saturated by power at its microlevels and on a global scale, nonpower can be instantiated. What needs to be thought about is whether nonpower is thinkable within the flexible matrix of technicity or whether it marks a critical turn within it. To pose the question another way, is the forcework enacted by artworks merely another instance of the malleable operations of technicity, an aesthetic technowork, or does the work of art constitute a site of a radical reworking of the technicity of power?

The Avant-Garde's Technologic

This question is not new, for, as I argued in *The Historicity of Experience*, the early-twentieth-century avant-garde was already fascinated, framed, and riven by it. Breaking with the widely accepted notion that the avant-garde is unequivocally "for" technology and scientific culture, I showed that the problem of art's confluence with modern technicity is posed explicitly as the critical issue in the avant-garde, that it underlies, for instance, Dadaism and, in particular, Duchamp's work in the readymades. To this extent, the avant-garde is still important for us, perhaps even increasingly so, as our society becomes more and more technological, as the technicity that underwrites and coordinates its praxis becomes even more taken for granted and "invisible," for the avant-garde in its fascination, often intoxication, with technology becomes the very question of whether art is a form of technowork, an extension of technopower, or an

autonomous and different "work," which interrogates the categorial determinations of modern being as technicist. In this way, the avant-garde allows us to keep thinking of technicity *as* a question and therefore to keep it *in* question.

Clearly, there is a pronounced tendency in certain avant-garde quarters toward an unequivocal intensification of being as a form of power, visible in particular in Italian Futurism, where being becomes expressly technicist in just this sense of mobilization. At the same time, though, there is a different current in the avant-garde, whether in Dadaism or in Gertrude Stein's writings, which takes us toward another sense of intensity, as disarticulation and release from power-oriented, technological production, and toward freedom. This current of the avant-garde represents the possibility of a turn within technicity, an arena where the technological determination of being in modernity comes sharply into view, becomes rapidly intensified but also, in the midst of this mobilization, begins to turn against itself. Side by side with the diverse political entanglements of the avant-garde "isms" and their fascination with power, what discloses itself in their artworks and proclamations—for instance, amidst the non sequiturs and contradictions of Tzara's manifestos—are forms of relationality that can be called "dispowered" or "power-free." "Dispowered" here does not refer to a utopian existence but to a turn within technicity toward relations that remain incalculable and "unworkable" and that disarticulate the very paradigm of production as the formative force of modernity. In this context, the disarticulacy of power describes an active sense of relating between forces, an event not only beyond domination but also beyond the production paradigm. Power-free occurrence signifies, therefore, neither powerlessness nor obliviousness to forms of power but rather an inversion of the technological and production paradigms that determine the history of being.

In the previous chapter, I showed that forcework constitutes the force of art, that is, its specific capacity for reworking the categorial determinations of reality into a transformative event. But this force is, in a certain way, distinctive of modern times, since the specifics of what makes up art's forcework become discernible only against technicity's determining of modern reality. The problem of the intensification of being arises as the central issue for the avant-garde movements and becomes multiply reflected in their complicated relationship to the aesthetic tradition, technology,

and political power in modern society. A quick glance at the rhetoric employed by avant-garde manifestos and writings reveals a clear fascination with what might be called an intensification or radicalization of being, seen as the determining factor of modernity. This interest in the intensification of existence is reflected in some of the emblems of radical aesthetics: speed in Futurism, the "Dada" intensity and illogic of life in Dadaism, dreamscapes in Surrealism, the distorted and exaggerated imagery of Expressionism or, as already mentioned, the "intense existence" of things in Gertrude Stein's writings. What often remains ambiguous is the direction of such intensification and the role that art comes to play in disclosing it. Does such intensification result in an enhancement of being, a certain burst of nonpower or freedom, in which the other is "let be" more *as* other? Or, as is often the case, particularly in Italian Futurism, does this intensification instead produce a mobilization of being, an increase of power, that releases the destructive element within force, which is all too easily mistaken for transformation, as happens, for instance, in Marinetti's aesthetic glorification of the purifying power of war?[1] Examples of such increase or mobilization of force are numerous in modernist aesthetics; perhaps one of the most vivid is the machinist aesthetic of the Russian Proletcult poet Aleksei Kapitonovich Gastev. Borrowing from the machinist aesthetic of Constructivism and Berlin Dada, Gastev merges organic and technological imagery to produce a machinist aesthetic within which all forces become mobilized for the purpose of social engineering, producing an aesthetic blueprint for "the formation of the future world and the man who inhabits it."[2]

The distinction between intensification as enhancement and intensification as increase or mobilization may help us account in part for the complex alliances between some avant-garde movements and artists with totalitarian politics. At the same time, this distinction illustrates on what level avant-garde aesthetics can remain resistant to the formation of relations in terms of power. I am less interested here in tracing historical connections than in examining the conceptual junctures at which the aesthetic forcework of Russian and Italian Futurisms, often at the time in the 1920's when those movements themselves were no longer really in existence as artistic orientations, seemed to become coextensive with the political, if often aestheticized, mobilization of force, characteristic of the engineering of society in National Socialist Germany and Soviet Russia. There

is a common thread that runs through radical modernism and the political "revolutions" of this period: the conjunction between revolutionary change and a certain radicalization or intensification of being. It may be somewhat less pronounced in political ideologies than it is in avant-garde artworks, but it is nevertheless easily detected there as well. The racist vision of Germany in National Socialism, or the Fascist rearticulation of Italy and even Maurras' idea of fascist Europe operate on the principle of strictly defining and intensifying a certain mode of being. They all constitute versions of identity thinking, which produces the fiction or the myth, as Philippe Lacoue-Labarthe and Jean-Luc Nancy refer to it,[3] of a strong, pure identity, which sustains itself by excluding or suppressing what remains different and other. To effectively accomplish such a mobilization, as Foucault points out in his analysis of fascism, fascist ideology joins the "ancient" idea of power, as the law of blood, to modern technologies of disciplining and normativity: "Nazism was doubtless the most cunning and the most naïve (and the former because of the latter) combination of the fantasies of blood and the paroxysms of a disciplinary power."[4] The modality of relations at work in such a mobilization is that of increase, in which the total body of a nation and its identity become constituted through disciplining and forming all its members in accordance with the "national" norm, thanks to which each individual in turn becomes empowered, is given a "forceful" identity. If technicity operates with a view to global mobilization of reality as a resource, in fascism such operations have a national or racial base. In both cases, forces become disposed with a view to an increase in power, and power explicitly constitutes the aim of such mobilization. While enhancement lets what is other be more in being, intensification as increase of force, in conjunction with identity thinking, can produce national or racial essentialism (biologism) and can lead, through technological disciplining and norms, to the fashioning of aesthetic-organic totalities capable of exercising, on an unprecedented scale, a form of what Foucault would call biopower, or a disciplinary power over life.[5]

Both options, enhancement and increase, are at work in many avant-garde movements, but they come to a particularly interesting and complex articulation in Futurism, even though Marinetti often blurs the distinction between them, collapsing the liberating rupture into the affirmation of power. When Marinetti, in the 1920's and 1930's, identified his idea of

Futurism with aspects of Fascism, the ambiguity and possibility of two different kinds of disposition of forces seemed to disappear from Futurism: the "revolutionary" thrust of Futurism was no longer directed toward enhancement of being but aimed at its mobilization into those forms of power that we know as fascist. We have to remember, though, that by that time Futurism no longer existed in the shape it had in the early 1910's, and that its radical aesthetic rupture was largely confined to the years before and during World War I. As Giovanni Lista argues at length in his recent study *Le Futurisme*, Marinetti's nationalism had its roots in the nineteenth-century Italian movement of Risorgimento, and his firmly anticlerical idea of national unity found its expression in the notion of Futurism, understood as a complex cultural revolution aimed at radically changing and modernizing Italian society in ways similar to those in which Futurist artworks revolutionized art and aesthetics. Thus, even with respect to the 1910's, Marinetti's nationalism should be distinguished from the conservative positions advocated by the Nationalist Party. It also needs to be remembered in this context that Marinetti always advocated an international, even transatlantic conception of the avant-garde, inclusive of various orientations and aesthetics aimed at revolutionizing modern art and culture. Equally significant for understanding Futurism is the fact that Marinetti's bellicosity and his form of nationalism, whose subsequent differences from and confluences with the emerging Fascist movement Lista carefully examines, were opposed almost unanimously by the other artists in the movement, who had largely leftist and anarchist leanings.[6] In effect, any simple identification of Futurist art with the glorification of war is historically inexact and simplifies beyond recognition the complex Futurist aesthetics of dynamism, depriving it of its most radical avant-garde momentum. An examination here of the complexities of force relations within the Futurist rupture, of the tensions and alliances between art and technology as they took shape within Futurist aesthetics, allows us to flesh out more concretely the possibility of distinguishing forcework from the technowork of modern power, and to make this distinction pivotal for thinking about art's alternative force.

There is a two-pronged desire in Futurism: to make art technological, to make it speak the dispassionate, mechanical language of technical inventions; and, conversely, to render technology artistic, to have it acquire the vitality of life and the vibrancy of art. A quotation from Mari-

netti's 1912 "Technical Manifesto of Futurist Literature," which he frames as a dictation he took from a plane propeller while flying over the chimney pots of Milan, provides a good illustration of this tension: "We want to make literature out of the life of a motor, a new instinctive animal whose general instincts we will know when we have learned the instincts of the different forces that make it up."[7] What "dictates" modern literature, what it should listen to and follow, is the rhythm or the life of the machine. Getting fresh energy and guidance from technology and the new forces it brings into existence, modern art should destroy the *I* or the subject in art, "to substitute for human psychology, now exhausted, the lyric obsession with matter."[8] Interestingly, technology is not opposed to nature or human subjectivity but supersedes them, takes into itself their forms of life and reformulates them into a thoroughly modern, technic organization of forces. Marinetti presents the motor on which Futurist literature is to be modeled as a new animal, a force that, although different from natural forces, acquires a "biological" dimension of its own, a technological life, so to speak, with new kinds of instincts and powers.

Such examples of the animization of technology in Marinetti's manifestos could easily be multiplied, which suggests that, consciously or not, underneath the insistent rhetoric of the glorification of technological progress, these texts approach technology beyond the worn-out oppositions of nature and culture or nature and technology. This "naturalization" of technology in Futurism is never just a reflection of the modernist mixture of the modern and the antimodern, the technological and the natural—for instance, the simultaneous fascination with technology and with Russian and Asian folk tales and myths in Velimir Khlebnikov's work—which later became so characteristic of fascist aesthetics.[9] In Futurist texts, technology signifies more than the technoscientific revolution and its effects on the modern world, since it points also to a new force, or, better, to a new disposition of forces across both the natural and the cultural-historical spheres. Underneath the often childlike fascination with technological inventions and gadgets, underneath the "automobilism" for which Wyndham Lewis so forcefully chided Marinetti, Futurist works begin to draw out a new, unprecedented understanding of the mobilizing, disciplining, but also transformative, impetus of technology. Ultimately, it is not just the question of modern dynamism, or of technological imagery and vocabulary, that gives distinctness to the Futurist preoccupation with

technology. In fact, Futurism provides a glimpse of something like the technicity that Heidegger sees as the force of revealing, which is constitutive of being in the modern world. When Marinetti suggests depsychologizing literature, he wants to substitute a lyric (poietic?) preoccupation with matter for the idea of expression, which implies that Futurism never simply idealizes technology but sets out to reformulate both the natural and the social world in terms of a certain technicity and dynamism of forces. As Lista argues, "Carrà, Boccioni, and Russolo want to evoke the live intensity of the phenomenon, even its emotional and lyrical dimension, and not just devote themselves to a simple optical reconstruction of movement."[10] Futurist dynamism never simply foregrounds the intensity of movement and the speed of modern life with its multiplying technological inventions but discloses the vitality inherent in phenomena. The intensification and acceleration of experience brought about by technology reveals being in both its "natural" and "produced" realms as essentially a field of energy, as vibrations of forces. Understanding phenomenality in terms of force fields leads Futurist painters toward a denial of the fixity, materiality, and limits of objects, in the name of a continuous flux of being. Their paintings aim toward an abstraction motivated not merely by painterly considerations but also by an attempt to reflect being as an "abstract" configuration of the relations and pulsations of forces beyond their momentary, and illusory, immobilization into things and phenomena.[11] Thus, in Futurist art, technology brings out the technic dynamism, the energy field, intrinsic in being. In Lista's words, it materializes the infravisible by reconstructing optically the becoming of form in space.[12] For Futurism, in the end, nature—itself a form of technē and an intensification of forces—is as technic as technology and modern social praxis. One of the corollaries of this approach is the critique of anthropocentrism, that is, of the central role and power of the human subject conceived as the master of being. Technicity, which manifests its force in the triumphs of technological progress, functions for Marinetti as a release from the "binds" of the human subject and his domination of the world, as an opening onto a new "numerical sensibility" that would reflect the "universal vibration" of forces on the level of microrelations, "expressing the infinitely small and the vibrations of molecules."[13] Paradoxically, in Marinetti's manifestos, technology does not signify the culmination of human power but rather the recovery of an intrinsic technicity of being,

of which humans, aspiring in their art to the mechanical, technic rhythm of being, become a part. Technology is not just a tool at the disposal of the human subject but an emblem of transcendence beyond the subject and the anthropocentric notion of being, and toward technicity conceived as the determining ground of modernity, its future, and its power.

It is therefore easy to paint a one-sided picture of Futurism as unequivocally embracing and propagating the blessings and revitalizing force of modern technology, and as insisting on an even faster and more radical reconstitution of art and life on the model of the overall technicity of being. One should not, however, downplay the internal ambiguity that both fuels and complicates this Futurist idea of technicity: is "futurist" art to be simply a reflection of technicity, which has already come to the fore in scientific discoveries and modern technologies, or is art itself supposed to perform such a reformulation of forces? Is art's forcework technic, a mobilization and maximalization of all forces, whether "natural" or "technological," or does it take the form of poiēsis, as the idea of "the lyric obsession with matter" seems to indicate? Very often Marinetti's texts tilt decisively toward what looks like a technic intensification of force, a production of a new futurist life of power, and yet these texts almost immediately counter themselves—for instance, when Marinetti proposes that poetry "should be an uninterrupted sequence of new images," which would infinitely forestall such a closure. Even as Marinetti's artistic manifestos concern themselves with revolutionizing art so that it might disclose the modern "life of matter,"[14] his polarized, simultaneously vitalistic and mechanistic rhetoric continues to raise the issue of whether modern life unfolds as a technic disposition of forces. The texts seem to leave open, almost in spite of themselves, the possibility that modern, "futurist" art can point to that volatile aspect of relating where forces could work as aphesis, where, instead of producing orders of power that determine "the life of matter" as a technologically calculable and available resource, they would "capture the breath, the sensibility, and the instincts of metal, stones, wood, and so on. . . ."[15] Marinetti's call for a machinist aesthetic aims, in fact, to reach beyond technology and science and to invert itself into a specifically artistic or poietic "grasp" of forces, into a new relation to the materiality of being: "matter whose essence must be grasped by strokes of intuition, the kind of thing that the physicists and the chemists can never do."[16] The way in which Marinetti's works gather and dispose

forces does not ultimately form a technowork, for the logic it follows turns technicity inside out, strangely transforming it into a futurist "poiēsis" of matter. Giovanni Lista remarks that Futurist dance, in exalting "the impersonal and geometrical pulsations of machines," aimed not only to exclude human subjectivity but to dematerialize or "surmaterialize" experience, thus disclosing the rhythm of movements and forms, in a sort of an ontological dimension of dance linked to universal dynamism.[17] Marinetti's words-in-freedom behave like unsyntaxed forces and reflect a modern dynamic of being that cannot be grasped by technoscientific means. It is as though modern technology, whose praises he continuously sings, had participated in Marinetti's attempt to free being from the kind of technological mobilization of forces described earlier. Marinetti's futurist imagery contains that unmistakable moment when the "lyric obsession with matter" ruptures the increasing technologization of being, changes its vector, and gives it a new, nontechnic intensity. A parallel with certain aspects of Gertrude Stein's *Tender Buttons* and its "intense existence" of things seems unavoidable here.

Among Futurist literary forms, Khlebnikov's revolutionary transformations of literary language into *zaum* constitute a kind of culmination of the tension between the technic and poietic formations of forces. *Zaum* is the idea of an extended, "transrational" poetic language, generated by Russian Futurists, primarily Khlebnikov and Alexei Kruchenykh, but also practiced in somewhat different inflections by a lesser known poet, Iliazd (Ilia Zdanevich). *Zaum* is a compound composed of the Russian preposition *za* (beyond, behind) and the noun *um* (mind, reason), and indicates a space or a modality of thinking beyond reason or understanding. The adjective *zaumnyi* derived from this compound noun is often paired with the word for language, *yazik*, and has been translated as "beyonsense" language: a field of language in which relations take place otherwise than in the conventional sense, or beyond its scope. As practiced by Khlebnikov, *zaum* is a language in a different key, neither representational nor determinative. It is a language that becomes disposed, not with a view to the production of meaning and understanding in accordance with the dominant rules of sense, but with a view to transformation. In *Zangezi*, Khlebnikov's most complex work, the elements of *zaum* constitute a language of forces outside the play of signification, a language that spaces and builds relations: "Planes, the lines defining an area, the impact of points, the god-

like circle, the angle of incidence, the fascicule of rays proceeding from a point or penetrating it—these are the secret building blocks of language."[18] *Zaum* describes, then, the temporal (non)ground of all relations, the event whose temporal "language" marks the openings of freedom in the midst of the finite materializations of history—the field of nonpower. In *Zangezi*, Khlebnikov recasts language so that its primary disposition, its *Stimmung*, if you will, becomes a nexus of transformative language relations, which keeps opening words, letters, and grammatical paradigms to combinations and inflections that remain foreclosed in normative language uses, including uses associated with aesthetic and literary conventions. To this extent, it is possible to see *zaum* as the exploration of the aphetic, releasing key of language, a beyond-rational discursive remapping of relations.

But, as in Marinetti, there is a strong countercurrent to this direction of *zaum*, a constant struggle in Khlebnikov's work to scientifically determine the forces of history and language, to give them a calculative, mathematizable form. His notorious calculations from *Tables of Destiny* attempt to construct, with the help of mathematical equations, a calculative picture of the temporal relations between the major events and forces of history, a kind of a calculus of being. Such a calculus, Khlebnikov leads us to believe, would be a version of *zaum*, a transrational *mathesis* of being and historical forces, a technicity beyond the scope of anything made possible by the technoscientific revolution. These calculations find their literary counterpart in a strain of Khlebnikov's linguistic speculations on the possibility of constructing what could be called a translingual language of alphabetic verities, a system of meaningful units recognizable across various languages: "The goal is to create a common written language shared by all the peoples of this third satellite of the Sun, to invent written symbols that can be understood and accepted by our entire star. . . ."[19] As idiosyncratic as Khlebnikov's mathematical and linguistic calculations may be, they articulate something of the ambiguously shifting and self-erasing internal divide between the two faces of technē. As Khlebnikov pushes the technē of his mathematical-historical and linguistic calculations toward what seems at times to be reminiscent of a Platonic, atemporal form of reality, its grand mathematicolinguistic equation, the makeup of forces that he brings into play changes from calculative to poietic. The calculations, the master patterns, and the language verities become retuned,

thrown off into a different pitch by the unexpected reverberations and continuously transformative extensions of *zaum*. What emerges in *Zangezi* is a modern work of art constituted as intrinsically transformative, a work that embodies not aesthetic ideals or mathematical orders but the transformative force of temporality. Forces, in Khlebnikov—and his discourse about history and meaning in *Zangezi* is explicitly articulated in terms of forces—become composed into a transformational event of the *zaum* language, whose forcework is its ability to extend language and work beyond its technoinstrumental modalities.

Khlebnikov's inversions of technicity into artistic forcework are symptomatic of a much larger twentieth-century artistic phenomenon, known as radical, experimental, or avant-garde aesthetics. These aesthetic ruptures, which continue to reverberate today despite the often bland eclecticism of postmodern art and a powerful return of the realist aesthetic, should never be construed simply as a rebellion against worn-out aesthetic and literary conventions, for they also, perhaps even primarily, constitute a response to the parallel phenomenon of an increasing mathematization of being in modernity. The technic constitution of being finds its most powerful expression not in information technology but in the underlying determination of being as intrinsically "informatizable": the modern tele-electronic incarnation of "essence" as information. Anything can be transformed into, and its essence faithfully captured as, information because each being, occurrence, or phenomenon, natural or artificial, organic or inorganic, has an informational core, a kind of ontological genetic code. This "code" provides a blueprint for an intrinsically technic, orderable and manipulable, disposition of forces. I would argue that aesthetic "experiments" like Khlebnikov's concern the possibility of inflecting just such a technic disposition of modern reality, an attempt to unfold experience in the aphetic valence of its forces, which necessarily remain *za*, behind or beyond, their technic determinations. At issue is the disposition of forces, the *Stimmung* or pitch of experience and of what counts as real in it.

This explicit interest in presenting reality and reconceiving the space of representation in terms of forces constitutes perhaps the most characteristic feature of Futurism, which sets it apart from other avant-garde orientations. In one of the polemics between Italian Futurism and Cubism, the Futurists, responding to an attack that claimed the superiority of

Cubism in achieving pure, timeless representation, accused the Cubists of clinging to the idea of the object and continuing to paint a static, frozen, and motionless reality.[20] If Apollinaire's remark that Cubism attains a transcendence of time in a presentation of pure forms is correct, then Futurism would indeed constitute something of an opposite of Cubism, since its main preoccupation is the dynamic of the forces that constitute modern reality. Sometimes the Futurist representation of force remains on the literal level of portraying the dynamic of movement, as in Balla's painting of a dog in motion, in which the dog's legs reproduce the circular motion of a plane propeller in a way that resembles slow-motion photography. But in Umberto Boccioni's two versions of the triptych *States of Mind,* force is no longer just a matter of speed or physical movement but reflects the complex temporal dynamic of experience. It represents the Futurist idea of the complementarity of images, the interpenetration of the temporal and spatial planes and lines of forces, through which painters express the dynamism of matter.[21] Harking back to Impressionism, the triptych presents the force lines constitutive of modern reality by way of depicting the experience of a train station, one of the favorite modernist icons of technological revolution. The first version of the triptych is more fluid, and its repetitive and rhythmic articulation of lines, from the swirling lines in *State of Mind I: The Farewells* to the horizontal lines in *States of Mind II: Those Who Go* to the vertical, undulating lines in the third painting, *Those Who Stay*, produces what Butler calls "dynamic Impressionism."[22] The second version reintroduces some mimetic elements and uses abstract, Cubistlike planes and structures so that, as Boccioni comments, "the mingled concrete and abstract are translated into *force lines* and rhythms in quasi musical harmony."[23]

Even though Apollinaire claims that Futurist paintings, unlike the pure Cubist forms, remain bound to the idea of subject matter, Boccioni's triptych, rather than portraying a specific modern theme, that is, the train station, tries to present experience in terms of the flow of forces. What predominates in Boccioni's paintings are the force lines that figure the rhythm of happening, the coursing of force through the various modern "states of mind" or forms of experience, reflected through the prism of the train station. The title *States of Mind* appears to indicate a collective psychological experience of modern society but also has a transhuman connotation. Marinetti's call for depsychologizing art indicates that Futurism

abandons individual or collective psychology for a portrayal of the modern disposition of forces, of the "matter" of modern existence. In Boccioni's triptych, the force lines that organize the representational space of the paintings flow through the contoured human figures as they do through the abstract and incomplete planes of the train, the platform, the rising steam, and so on. The kinetic arrangement of these lines suggests more than the celebrated dynamism of technological change, which the middle painting of the second version remarks in the prominent geometrical contour of the engine and its number: 6943. The dynamic these paintings bring forward is that of the temporalization of experience, which is certainly heightened and highlighted by the speed of modern life and reflected in its modernist emblems: trains, automobiles, and planes. But, like Marinetti's manifestos, *States of Mind* also raises the question of the disposition of the forces whose lines it traces: technological, social, psychic. The rhythm that metamorphoses through the paintings is, as Boccioni remarks, musical, and the force lines that choreograph their space impart intensity to the scene: they literally draw out and enhance the temporal contours of the event that the triptych describes. The German term *Stimmung,* which Heidegger uses to describe the disposition of forces in his comments on Nietzsche's notion of intoxication, indicates that enhancement should be understood in terms of a disposition or a pitch. Boccioni's comments point to a similar way of thinking about art in terms of how it "tunes" or disposes the lines of forces, of what kind of pitch force is granted in the artwork. As emblematic of modernity and technology as the train station is in modernism, Boccioni's force lines work in a different key, projecting "states of matter" that release or enhance what is: the force-work in his triptych instantiates not the mobilization characteristic of technicity but also aphesis. The differences between the shapes of the force lines in each painting, playing off the limited palette and often largely monochromatic tones of large sections of the paintings, suggest an intrinsic diversity of configurations. In each case, however, such diversity registers the rhythm of happening: a general disposition or type of relationality according to which specific forces—psychic, technological, social, artistic—unfold.

In Futurism of course, and in other avant-garde movements, there was a lot of enthusiastic and sometimes naive aestheticization of technology, which later easily spilled over into aesthetic glorification of the tech-

nological organization of modern life in totalitarian states, in the form of parades, mass rallies, militaristic discipline, monumental architecture, and gigantic labor projects. And the aesthetic and vitalistic pull of such a totalizing mobilization of forces into revolutionary "modern power" drew Marinetti to embrace fascism, as, on the other side of Europe, it led the early Futurist Vladimir Mayakovsky to become, at least for a while, a fervent supporter of Soviet Russia. The disciplined "marching" of Mayakovsky's verse, so different from his early poems in the way in which it tries to evoke the euphoria and pathos that accompanied the engineering of a new socialist Russia, can be seen as a reflection of that moment when the Russian revolution turned against its own emancipatory manifestations and began indiscriminately to mobilize everything into a giant resource for building a totalitarian state. What came with it, as was also the case later in fascism, was the elimination of avant-garde art, whose aesthetics the Soviets used to advertise their revolutionary transformation and spread their power across Russia. Because of this tangled aesthetic and political history, there will always be something problematic about Futurism, but problematic also in a "good" sense because Futurism problematizes the technicity of modern being itself and points toward the possibility of a different disposition of forces. To forget or simplify this ambiguity that traverses Futurism is to annul the most worthwhile aspect of this avant-garde movement. More important, it is to risk covering over the problem of the two faces of the intensification of force, which insistently signals itself through the belligerent Futurist rhetoric. This would mean foreclosing what seems to me a crucial point of entry into the problematic of modern art, of its historical raison d'être vis-à-vis the intensifying technicity of being in modernity. Without acknowledgment of this ambiguity, art often ends up represented as *forceless*—socially isolated and condemned, or forcefully and disingenuously kept alive as an expression of political critiques and aesthetic fancies.

This excursion into the aesthetics of Italian and Russian Futurisms brings to the fore the link between radical avant-garde aesthetics and forcework. The ambiguities that criss-cross Futurism, and its different manifestations in various European countries, reflect the fundamental equivocation still discernible at the heart of modern technology, that is, an equivocation recognizable, if often just barely, as the effect of art's forcework. This equivocation concerns the character of technicity as the con-

temporary modality of power, its mobilizing and intensifying momentum, and the possibility of a different forcework, which I have explained as aphesis, that is, as an interesting inversion of manipulation and making into a release and a letting be that allow relations to register as power-free. Futurism thus marks the possibility of thinking about the artwork otherwise than as technowork, and of designating an alternative momentum, which art grants to forces that otherwise would remain in-formed by power within social reality. This alternative impetus of avant-garde work becomes even more pronounced in the works of Dadaism, particularly in their emphasis on the tangibly nontechnicist form of the event that temporality assumes in them. The protohappenings, the nearly instantaneous configuration of Dadaist works that underscores the irreducible singularity of each moment, mark the eloquent force with which Dadaist art calls into question the calculative, globally connective, and desingularizing momentum of technicity. It is thanks to the avant-garde that we have this alternative to both the glamorization of technology and its opposite, demonization, which often produces a sentimentalized, naive escape from the operations of modern technopower. The avant-garde does not fall under either of those categories but instead maintains in its artworks, throughout the twentieth century, a critical and transformative tension between forcework and technowork.

The *Gesamtelewerk,* or the Avant-Garde in the Twenty-first Century?

The critical importance of the avant-garde lies in preserving, against the progressing saturation of all aspects of modern reality by technopower, the possibility of what I have termed an "aphetic forcework." The avant-garde forcework thus allows us to formulate the parameters of the question about art's role in an age when power in-forms being to such an extent that everything that *is* becomes disclosed in its microstructures as information, which is characterized by being analyzable, calculable, and repeatedly processable. Today power discloses its potency and elasticity as the informational structure of being, as the digital technicity of existence, where all that is has become intrinsically penetrable, comprehensible as information, and thus exposed not only to compression as data and to global transmissibility but also to seemingly boundless manipulation and

reprogramming. The end of the last century saw an exponential quickening of the accessibility of information technologies and of their influence on the daily commerce of society. Art began to respond with comparable alacrity, swiftly extending beyond video- and computer-assisted art to enter the domain of the Internet and, most recently, genetics, and thus to establish new realms of aesthetic interactivity and transgenic art—potentially new fields for avant-garde activities. Though it is hard to evaluate these new directions opened for art by advances in information technologies, it is clear that the World Wide Web, in addition to providing a disseminating and interlinking function, has given art an unprecedented flexibility with respect to involving potential audiences not just in appreciation but, above all, in collaboration. Thus it is no surprise than most of what might go by the name of Web or Internet art, whether the Web projects of Seiko Mikami, Ken Goldberg, Knowbotic, Eduardo Kac,[24] or many other artists who construct their Web sites and programs either solo or through multiply expandable linkages with other artists and collaborators, has been—so far, at least—predominantly interactive in nature. Thus, for instance, the description of the virtual spider in Mikami's *Molecular Clinic* project on the Web places the emphasis specifically on the creative role of Internet viewers who also become the participants in the ongoing evolution of the cyberspace project:

The SPIDER functions as an interface of cyberspace. Users can, from various angles, zoom in to view SPIDER on the molecular level; select an "atom" and download it, in the sense of peeling off a piece of skin, to one's own computer; and then users can move the transformed molecule back to its original place. Affected as they are by such manipulations, the body of SPIDER, as well as the whole space, are transformed.[25]

This is no doubt not just a new form of art but perhaps even an entirely new direction for art as a collaborative and interactive, rather than individual-oriented, medium. While it is too early to pass such judgment, it is important to keep this problematic of collaboration/partnership and interaction/participation as a key component of the critical optics for the barely emerging art of the twenty-first century. In basic terms, this "inter" orientation of new art has to do with the changing notion of agency, which implicates not just group or interlinked authorship but also open-ended and collaborative projects, often involving, as in the case of Mikami's *Molecular Clinic,* nonartists interested in art and even "accidental tourists."

Art thus becomes intrinsically opened not only to boundless accessibility and transmission but, above all, to random participation by unknown audience-artists. In its most interesting manifestations, as in Eduardo Kac's Web/museum project *Teleporting an Unknown State,* the Internet enables, in Kac's words, "a new sense of community and collective responsibility."[26] This "biotelematic interactive installation," as Kac calls it, became the venue where participants could access photons registered by cameras at remote sites and transmit them, via the Internet, to a gallery where a seed had been planted in a dark installation space. The teleported light was then re-emitted onto the seed by a projector, making possible the germination and slow growth of a plant. In this work, Kac set the parameters for a potentially Webwide audience, whose communal effort and coordination became indispensable to the plant's existence. With works like Kac's, or like Goldberg's *The Telegarden,* it becomes clear that never before has any medium allowed for such a wide scope, and such a degree of unpredictable interaction and modification, as has become possible with artworks installed on the Web, using programming that allows the audience to participate in the evolving artwork. Likewise, never has the line between reception and creation been so thin and easily crossed. No doubt these and other changes associated with art's going digital will call for new ways of thinking about artworks, reception, creativity, interpretation, and so on. Without playing the game of anticipation with regard to future directions of art, it is still possible, and important, to examine whether these quickly evolving parameters of art, in addition to allowing for the introduction of new artistic forms and the modification of traditional ones—for instance, "visual" Web poetry, with moving, disappearing, and flashing words[27]—are affecting the avant-garde problematic of art's relation to technicity.

Beyond the obvious expansion into animation, video, digital processing and programming, interactivity, and global linkage networks, the question is whether the relation of art to technology has undergone a substantial change since the days of the early avant-gardes and, further, how such a change affects the way in which we can (re)conceptualize contemporary art in its aesthetic and social dimensions. Through the last century, technology has expanded and evolved in evident ways; as I suggested in the previous section, technicity can now be thought of in terms of digitality, to underscore the expanded reach and elasticity of power flows and

formations immanent to contemporary social praxis. And yet the momentum characteristic of technicity—intensification of power—has not changed; it has only increased its pace geometrically, a pace that has become reflective of the speed with which humans today calculate, transmit, and manipulate. Thus the question has, in many respects, remained the same: can art affect the power momentum of the society of which it is itself a product and in which it most often plays the function of an aesthetic object and/or commodity, and, if so, how can it do this? While it is impossible to quickly gain an overview of Web-fueled developments of art—this arena is, like the Web itself, simply too large and too rapidly growing and metamorphosing—some of the tendencies mentioned above are clear. Perhaps the most intriguing aspect of "Internet art"—it remains to be seen how viable this term will prove to be—and of the continuing opening of possibilities associated with the World Wide Web is the notion of a telematic artwork, a notion often linked with the tendency to resuscitate the old dream of the synthesis of art, of the notion of the total work of art. Inspired by Wagner, this notion of a new Web-based *Gesamtkunstwerk*, integrating not only various media but also artists and audiences, appears to represent one of the most prominent directions facilitated by the new technologies. This development should come as no surprise, since such an integrationist concept of the artwork stems directly from the unprecedented degree of interconnectedness and "real time" interactivity made available by information technologies, a concept that is both a product of and a new global circuit facilitating the increase of technopower.

To understand the relationship between the idea of the telematic artwork and the technicity of power, I propose to examine here the collectively produced Web document, revealingly titled *The Telematic Manifesto: A Hypertextual Collectively-Generated Net Document Organized by Randall Packer*, available at http://www.zakros.com/manifesto/index1.html. The manifesto has multiple links and becomes a labyrinthine text, impossible to survey here. The introductory page has eight hyperlinks, marked in red on a black background and titled as follows: DISEMBODY, which leads to AGENCY, which in turn branches into SYMBOL, AUTOPOIÉSIS, and ZERØ, with three additional links to the right, namely, MONADOLOGY, RHIZOME, and GESAMTELEWERK. This matrix of links leads to various interconnected pages generated either collectively or by individual

artists and employing many quotations, paraphrases, and references to twentieth-century art. Two aspects of this hypertext are of particular importance for considering the relationship between contemporary art and technicity: the manifesto's claim to revitalize and recontextualize the ambitions of the avant-garde, and the idea of telematic art developed in the manifesto. The link called AGENCY guides one to the page that "advertises" the concept of telematic art as having collective agency, which inherits and rearticulates the radical aesthetics of the twentieth-century avant-gardes in the context of contemporary technological and communicational developments. The text I quote below is framed by quotations from El Lissitzky, Ma Group, Pierre Lévy, and Douglas Engelbart:

Telematic Art as Collective Agency for Cultural Transformation
Call-to-Action

The Telematic Manifesto is a participatory, collectively-generated Net Document that articulates a vision for the future of Telematic Art as a socio-cultural force in the twenty-first Century. This project investigates Telematic Art as the synthesis of art, culture, and global telecommunications, and its promise for a revitalized artistic expression resulting from an inherent interconnectedness catalyzing aesthetic, technological, philosophical, and cultural transformation.

The Telematic Manifesto recontextualizes the ideologies and ambitions of aborted avant-garde movements whose efforts to bring about artistic, cultural, and political change through collective action—from the Italian Futurists to the Surrealists, from the International Faction of Constructivists to Fluxus—lay dormant as unfinished business at the close of the Century.

History has also shown that the evolution of computer science has tended towards collective action: the dream of a free exchange of information and new forms of human and technological collaboration. From Norbert Wiener's seminal theories on the science of "Cybernetics" to J. C. R. Licklider's research in "Man-Computer Symbiosis," to Douglas Engelbart's creation of a networked information space designed for the "Augmentation of Human Intellect" that would "Boost the Collective IQ," these visionary scientists laid the groundwork for an emerging medium that is now transforming every aspect of human expression.

In an effort to define and engage these artistic, scientific, and cultural forces of change, the Telematic Manifesto serves as a conceptual framework articulating the collective, cross-disciplinary ideologies of a group of artists, theorists, critics, curators and scientists at the transition into the Millennium.

Throughout the ZKM Net_Condition exhibition, an email list and threaded discussion introduced a series of themes intended to frame historical, philo-

sophical, technical and aesthetic issues surrounding Net Art. The email dialogue was uploaded daily into an automatized writing space/bulletin board viewable by exhibition visitors on the Web.

The resultant texts have been organized, archived and published as the Telematic Manifesto, a hypertextual, Web-based Net Document that provides a Millennial record and collective statement proclaiming the future implications of Telematic Art: its transformative properties, aesthetic issues, virtualizing forces, historical significance, and potential for generating a new artistic sociopolitical ethic in the broad context of a rapidly evolving networked culture.

Much like the avant-garde manifestos we know, *The Telematic Manifesto* is a call to arms, to the technological arms of the almost instant, real-time communication and transmission of information. The global networks of such transmission and communication become the interlinking grid for new collective aesthetic action, with social and historical implications. The manifesto advertises telematic art as the engine behind the new twenty-first-century art, which claims as its inheritance the "ideologies and ambitions of the aborted avant-garde movements," from Futurism and Dadaism to Fluxus, Situationism, and Pop Art. As was the case in Italian Futurism, *The Telematic Manifesto* testifies to the artistic desire to keep abreast of and develop the means of communication offered by the new technologies, looking toward the future in which experience is becoming changed by global and instantaneous relays of communication and interaction.

As the manifesto defines it, "To be telematic, is to be embedded within a network semiotic composed of abrupt information transfers and instantaneous, more or less, communications." And on another page: "Telematic can be understood as a reference to the popularization of cultural codes having to do with acceleration and the industrialization of perception, as described by Virilio. It is a rather poor indexical term for categorizing technology enterprise or anything else for that matter. Telematic is a descriptor to the function of language, not things." What constitutes the backbone of telematic art is the ability to communicate and interact in nearly real time, made possible, maintained, and developed by networks of telecommunications technologies. In other words, at the core of telematic art lies technicity in its most contemporary incarnations: information, telecommunication, global reach. As the second quotation indicates, the term "telematic" describes the "language" of this new art: not expression,

representation, or meaning but the instantaneity of communication and interaction. What underlies much of the text of *The Telematic Manifesto* is indeed the notion of enabling communication in its global reach and instantaneous realization. The new telematic "workings" of art, as David Ross remarks, reopen the possibility for the telematic art form to be

the harbinger of a set of radically innovative social structures and practices—all of which are within a set of technologies evolving at an unprecedented and unpredictable pace even in an age defined by its passion for velocity and unpredictability. It is an integral set of production and distribution tools directed by aesthetic propositions, varying from hyper-hermetic, ontological concerns to the overtly political, to the broadly comic and self referential. An art form evolving within a system that is so fully totalizing and global that it contains within it every other known mass medium on the planet.[28]

In his clearly optimistic picture, Ross may well be right that the telematic artwork can indeed become the harbinger of new forms of social praxis, with its emphasis on telecommunications speed and global distribution. Interestingly, though, the words that appear with notable frequency on the various pages of the Net manifesto are "global" and "totalizing." In fact, one of the pages goes so far as to propose that telematic art might become the total telework of the twenty-first century:

Telematic Art: Gesamtelewerk for the Twenty-first Century?

The Gesamtelewerk proposes a resurgence of the optimism of previous efforts to formalize the Gesamtkunstwerk (Total Art Work), to devise an integrated medium which blends all the arts and engages all the senses. Introducing telematics into the equation suggests an art that in addition seeks a global embrace, a collective vision to which the artwork, artist and viewer aspire. This aspiration has gradually [taken] form as a matrix of interaction in the wake of recent networked art: from the satellite works of the 1970s to the experiments in collaborative telematics of the 1980s to the emergence of Internet art in the mid-1990s. The latter is now advancing at a prodigious rate, forcing the establishment artworld to take notice of a rapidly developing new movement.

Will Internet artists revive the hopes of previous avant-garde with the power to distribute their message instantaneously and globally?

Does the notion of a *Gesamtelewerk* suggest the possibilities for social transformation resulting from forms of collective art that engage audiences through involvement, inclusiveness and participation?

Can the *Gesamtelewerk* serve to defragment cultural separatism, specializa-

tion, and the isolationist tendencies within our institutions, encouraging rather a cross-disciplinary interaction between individuals in all fields and walks of life?

The questions asked here seem largely rhetorical, indicating, in fact, the revival of the hopes and ambitions of the twentieth-century avant-gardes, reenergized and strengthened now by the "power to distribute their message instantaneously and globally." Emblematically enough, this text appears between two columns of quotations, the two most telling ones in this context coming from Wagner (on the total work of art) and Deleuze (on rhizomatics). Without engaging here the question of whether rhizomatics might be compatible with the notion of *Gesamtkunstwerk*, one quickly notices the outspoken tendency toward globalization and totalization, much in agreement, one might say, with the trends in economy, capital, and power. I have no intention of downplaying the indisputable possibilities, on the aesthetic, social, and political levels, that Internet art appears to offer for the future. What interests me, however, is the extent to which the very concept of Internet art, its "essence" as a telematic work, implicates itself in the increasing technicity of contemporary being. When the manifesto claims that telematic art revitalizes the hopes and ambitions of the avant-garde, one might ask which ones: are we talking here about the increase of power (even the power to communicate, interact, cocreate) or about aphetic enhancement? In other words, what kind of forcework takes place in telematic art?

The terms employed by *The Telematic Manifesto* identify the work done by twenty-first-century telematic art specifically with its telematic character: instant interlinking, communication, and interactivity. What underlies such aesthetic telematics, then, is the power of information technologies, their global ability to link and communicate instantly. It is therefore not surprising that among the chief characteristics of the telematic artwork are globalization and totalization: a kind of absolute connectivity and inclusion. What seems to become, for the first time, possible in telematic art is a complete and total gathering of all differences, a kind of global inclusion. As thrilling as this possibility truly is, Adorno would most likely want us to examine the other side of the "web": the unprecedented reach and access of power on a global scale, an essential element in the planetary intensification of power. The Internet may be, paradoxically, the great dream of communication, but one in which links between all possible differences become frighteningly actual as the instantiation of the

uncontrollable global expanse of power. The latter appears to be the reverse of the former. The telematic work triumphantly signals the revival of the Wagnerian dream of the integration of all art forms, now possible on an unprecedented scale and with instantaneous communication and even interactive input. But this dream seems to forget Nietzsche's warning about the manipulation intrinsic to the concept of Wagnerian artwork, the admonition so important to Deleuze, for the total—or, should we say, "global"—work of art appears to be the mirror image of the totalizing technicity diagnosed in the twentieth century by Heidegger, Adorno, and Foucault.

Interestingly enough, *Gesamtelewerk* loses *Kunst*, that is, art, from its makeup, emphasizing its other components: totalization, telematics, and work. This linguistic slip may indicate precisely that what is being eliminated from the telematic work is nothing less than art itself: art not defined aesthetically but understood in terms of forcework. There is a distinct possibility that in the telematic (art)work, the artistic merges without difference and thus disappears, as such, into the technical: art becomes indistinguishable from technicity. If the "essence" of telematic work is speed of communication and interaction, then it is just another instantiation of technicity. As such, it is capable, as Ross suggests, of developing new forms of social structures and practices, but such a praxis, Adorno would probably say, would be only a novelty and not truly anything new that could thus become critical of what has been. In other words, what telematic art may make possible would be proliferations of "new" forms, links, interactions, and so on, yet all these forms, even if nonexistent before, would be actualizations of an ever-expanding technicity and its increasing flows of power rather than a critique and negation of categorial determinations of social relations.

The analyses of Adorno and Raymond Williams have already diagnosed the merging of the aesthetic and the technological, evoked again in our different circumstances by telematic art, as characteristic of modernist art. Instead of the revolution that the avant-garde intended to bring about in the social domain, avant-garde aesthetics became incorporated, with time, into the mass commodification characteristic of late capitalism, which effectively closed the gap between *aisthesis*, or sensory experience, and use value.[29] In an effort to continuously create new demand and to supply ever more products, the practice of the culture industry is to erase

the distance between *aisthesis* and use value, between aesthetics and consumption, since its products and marketing practices effectively assimilate avant-garde techniques to a whole range of mass-produced commodities. This progressive integration of the avant-garde into the very culture it has tried to oppose inevitably blunts the critical edge of radical aesthetics, turning the transformative avant-garde praxis into the parameters of consumer appeal. At the bottom of this assimilation of the avant-garde for the purposes of the intensification of commodity culture, as is already evident in Adorno's thought, are a certain technologization and instrumentalization that structure modern experience and form the practices of everyday life. As a result of the intensification of technicity, the shock and dislocation characteristic of avant-garde art has been subsumed and neutralized by the shocklike aesthetics of popular culture, which, especially with the advent of the new electronic media, has become the standard of what might be called the electronic paradigm of representation: multiple frames, mobile and constantly alternating advertising images, collagelike electronic surfaces, new and sometimes unexpected but always multiple hyperlinks. In such an electronic environment, dislocation, newness, and freedom of the unexpected become, paradoxically, inverted into the very principle of linking, of ever-increasing reach and interconnectedness. Difference, strangeness, and alienation become transformed into the obverse side of a global network of connections and relays and come to be used as the negatively energized engine of expansion and ever-nuanced marketability. It is no wonder, then, that the avant-garde, on the one hand, and telecomunications and popular culture, on the other, appear, in fact, as Williams suggests in *The Politics of Modernism*, as the two faces of the same modernism:

Thus the very conditions which had provoked a genuine Modernist art became the conditions which steadily homogenized even its startling images, and diluted its deep forms, until they could be made available as a universally distributed "popular" culture.

The two faces of this "modernism" could literally not recognize each other, until a very late stage.[30]

Radical Modernist art thus finds itself, against its own revolutionary impulse, complicit with the powers that be, at play in the technoinformational age. Doubts and dissatisfaction with the avant-garde, frequent proclamations of the death of the avant-garde, and the general inability to

think differently about its art are symptoms of what Williams calls "the long and bitter impasse of a once liberating Modernism."[31]

Telematic art claims to reenergize, with the help of new technologies, the aspirations of the avant-garde and radical modernism, to recharge its drive toward transformation and the new. Yet the parameters of the telematic artwork, its "essential" telematic technicity, indicate that the new in the "total telematic art work" may end up being a quantitative addition rather than a qualitative change, for the telematic work understands transformation as the vector of new information technologies and electronic communications, as changes brought about through the widening scope of technicity rather than as a transformation in the very momentum of technicity toward the intensification of power. If this diagnosis were (unfortunately) correct, then telematic work would confirm the "corporate merger" of art with technology, of artistic technē with technopower. As such, it would also fuse avant-garde art with technology, erasing the tension between art and technicity that is so fundamental to avant-garde artworks, their fascination with technology notwithstanding.

In an interview published several years ago in *Le Monde*, the French performance and body artist Orlan made a remark that captures very well this trend in contemporary art and its relation to technological forms of power: "The avant-garde is no longer in art, it is in genetics."[32] In the interview, Orlan makes the case for locating the radical avant-garde momentum no longer in art, as was apparently the practice in the twentieth century, but instead in the latest developments in genetics and information technology, thus giving priority to recent genetic and telematic art. In other words, Orlan, reflecting, perhaps even magnifying, the sentiment implicit in *The Telematic Manifesto*, announces a certain sense of the end of art by postulating that art, in order to preserve any sense of radical momentum, has to merge with and follow technology. Despite Orlan's claim, there is, on one level, nothing new in her statement, granting, of course, the newness of the recently developed forms of genetically based or telematic art. As attested by the work of Eduardo Kac—for instance, his *GFP Bunny* (the acronym stands for "green fluorescent protein") or his more recent project, *The Eighth Day*[33] (which presents genetics as the eighth day of creation)—what we are seeing now is the next, undoubtedly radically innovative, chapter in the story that is at least as "old" as the early-twentieth-century avant-garde, which, in Francis Picabia's words,

claimed the identity of art and technology, for the unspoken assumption underlying Orlan's statement says precisely this: poiēsis is technē, art is technology, the avant-garde is genetics. But in what sense, exactly, could one pose a sign of equivalence between art and technology? What makes Orlan's remark possible is the fundamental idea running through the history of art: that art is equivalent to making, that poiēsis is a form of production or creation. And if art is a genre of making, then the most radical and innovative form of making in modernity is technology, and, currently, genetics. Hence the conclusion becomes possible that it is in genetics, and not in art, that the contemporary avant-garde is located. It does not matter, ultimately, whether we examine the work of a Kac or of an Orlan from the point of view of "high" aesthetics or postmodernism, or in terms of the historical, material, and cultural situatedness of artworks; while those approaches remain recognizably different and bring to light distinct important aspects of art, what remains uninterrogated, in all those cases, is the fundamental idea, surfacing in Orlan's claim, that poiēsis works the way technē does: that what takes place in the work of art constitutes a form of making, production, or manipulation. This idea is a correlate of the broader notion that firmly links aesthetics to metaphysics and technology, namely, that being is, in its essence, preformatted for making, remaking, and manipulation. The correlation between being, conceived in this way, and the forms of technology developing in modernity constitutes the index of rapidly intensifying power as the emblem of modern civilization. Thus, in spite of the various claims made either by artists or by critics, of poststructuralist, postmodern, or cultural studies provenance, we have not really advanced, nor have we somehow radically improved on the horizon of questioning opened up by Heidegger and Adorno. Rather, what we are seeing, whether Information Age technology, the Internet, telematic art, or genetics and genetically based art, is a much more visible and palpable confirmation of the fundamental technicity at work at the basis of modern culture.

Undoubtedly, as Orlan suggests, contemporary art has to take account of the rapid transformation in genetic and information technologies and their effect on everyday life and culture, but this does not necessarily mean that art employing the most recent technologies—multimedia, informational, telematic, or genetic—is, by virtue of these technologies, somehow more important or avant-garde than more traditional forms

of art—say, avant-garde poetry or music. Obviously, such new forms of art utilize recently acquired technologies to affect and transform experience, sensibility, and consciousness. Art has always used, and will use in the future, newly available materials, production processes, and technologies in constructing innovative forms of artworks that will be, for those reasons, unprecedented. Indeed, telematic and transgenic artworks undoubtedly change radically the way art is done, disseminated, and received, and our critical discourses have not yet quite caught up with the rapid changes such developments have been introducing into the world of art, literature, and, more broadly, into culture. *Aisthesis* in the broadest sense has been profoundly affected by them, and, as a result, aesthetics has been evolving as well, with new types and forms of aesthetic experience initiated by art that uses computer, Internet, or genetic technologies. Yet, though such technologies are new and unprecedented, their impact on art forms is, in a way, parallel to the manner in which the technologies of speed, film, recording, and radio revolutionized art and culture at the beginning of the twentieth century, producing the first wave of avant-garde manifestos, artworks, and performances, or the way in which video and computer programs influenced visual arts and music in the 1950's and 1960's. To put it very simply, technological novelties translate into new art forms and a variety of fresh and innovative aesthetic experiences. Thus, if we pose the question of telematic and transgenic artworks in aesthetic and technological terms, the answer will clearly be that such art is new and different, and that it uniquely expands and modifies the horizon of aesthetics, introducing—through interactivity, telematics, and genetic manipulation—creative and contemporary genres of aesthetic experience. And these new genres are absolutely critical to the further historical development of art and to the continuation of art's critical function in modern society. Similarly, theoretical and philosophical reflection on art and literature needs to keep pace with these developments to be able to understand if and how such new forms of art retain or alter the transformative force of art brought to the fore by the twentieth-century avant-garde. But this is also why it is insufficient to pose only in aesthetic and sociocultural terms the question of the new trends in contemporary art that are taking shape at the intersection of art with science and technology. Aesthetically and culturally, such art forms are historically transformative and innovative; yet the question of the transformative momentum of contemporary art

needs to be asked on another level: are the works that employ new technologies, whether they involve multimedia, technoperformances, telematic, or genetic works, indeed transformative, not just of the aesthetic rules and cultural practices associated with art's function in society—almost always the case when new technologies, materials, or communication channels are employed—but of technicity itself, that is, of the ways in which relations and forces today tend to become increasingly disposed and formed into constellations of technopower? In other words, do the changes in the very forms of art introduced by telematic and genetic artworks also signify a turn in the technicist momentum of the relations that are formative of modernity?

Re-turning Technē

The distinction between novelty and transformation is the matter of art's forcework. In *Aesthetic Theory*, Adorno keeps gesturing toward the possibility of such a different, nonproductionist and violence-free forcework: "The critique exercised a priori by art is that of action as a cryptogram of domination. According to its sheer form, praxis tends toward that which, in terms of its own logic, it should abolish; violence is immanent to it and is maintained in its sublimations, whereas artworks, even the most aggressive, stand for nonviolence."[34] Both action and production, the cornerstones of social praxis, reflect in their operations the "secret" and deeply ingrained patterns of domination and violence subtending modern instrumental rationality. Thus any counteraction, if still exercised within the paradigms of power, simply rechannels and remaps domination without changing its overall principle of mastery. This is why the telematic call to action appears to be more of an extension and reformulation of the rapidly growing telematic technicity underpinning and structuring social practice. As such, it would carry over in its practices, no matter how new or innovative they become, the stamp of domination, for contemporary domination is exercised not so much by oppression as, in most developed and democratic countries, through the ways in which telematic technicity organizes, facilitates, and connects everything into a total work of power. Establishing new networks of "informational" freedom, telematics in the same move constitutes itself into the modern conduit of power. The paradox of telematics, and thus also of telematic art, is that this kind of free-

dom (on personal, group, and perhaps even social levels) becomes, on the plane of force relations, coextensive with the flow of power: new possibilities, links, and interactions are always already co-opted into the expanding network of informational power, confirming and instituting being as information. The notion of such freedoms is called into question by the fact that what remains unexamined in the idea of telematic art is the way in which communication itself has already been implicated in domination and power. Adorno had already contended that contemporary art, in order to "communicate," has to call communication into question and thus "speak" through its own silence. Communication, and certainly the means and conduits of today's telecommunication industry, reflect and put into practice the determination of being as, in essence, information, basing itself on the convertibility of experience into data, which ensures the possibility of its calculability and reprogramming. The multiplication of differences, the introduction of new forms of (hyper)links and channels of interaction, does not as such disagree with or alter the informational matrix of relations underwriting today's society. Since difference has itself become globalized and commodified, it not only does not call into question technopower but also often serves to ensure its spread and investment in regions, structures, and practices hitherto inaccessible to capital and the flow of modern power.

What is needed, therefore, is a radical questioning of the very form—technic, digital, telematic, and so on—that power has assumed in the contemporary world: questioning on the model of forcework that I have developed in the preceding chapter. With the help of this notion, I have sketched out the terrain and the terms on which we need to address the problem of the force of art at the turn of the new millennium. Some of these terms—those involving aesthetics, technology, power, and freedom—are not new, but their configuration changes substantially within the optics opened up by avant-garde art. Aesthetics is no longer thought of in terms of sensibility, pleasure, subjective expression, or the twin logics of production and consumption but instead is understood as an event that transforms relationality beyond the terms of power. If the term "technopower" describes the matrix of relationality that remains characteristic of modernity, then the term "poiēsis" refers to an event in which the vector of technicity changes from power to freedom. Adorno describes this turn when he claims that "art mobilizes technique [*Technik*] in an

opposite direction than does domination."[35] Freedom, as the transformative relation between techne and poiēsis that encodes the relation between the social and formal aspects of art, becomes a matter not of an amplification and expansion of technicity but of a continuous and critical turning of technicity against itself. Within this turn, the poietic is not simply the opposite of technicity but rather a way of disarticulating technicity from within—not an escape, but a transformation. This turning is also not a dialectical reversal or negation but instead a fold that marks an opening of a beyond to technicity within the technological organization of power. Thus this beyond or "otherwise" is neither post-technological nor outside the reach of technology but constitutes a certain "outside within," whose force consists in manifesting the poietic modality of relating within the technic paradigm of modernity.

Such a transformative shift is at work, for instance, in Karlheinz Stockhausen's *Helikopter-Streichquartett,* one of the latest instances in which the work of art undertakes a certain reformulation of technology into a musical composition. What is interesting about Stockhausen's rather unusual quartet, with the use of four helicopters in which the separated quartet members play their respective parts, is that it does not use the sound of the helicopter blades as background sound/music or as musical material that becomes incorporated and rewoven into the string composition. In other words, the *Helikopter-Streichquartett* is not just one more repetition in the well-known mantra of the aestheticization of technology/experience; instead, it is something of a reversal in what has been happening with aesthetics' gradual incorporation and disappearance into technicity. The *Helikopter-Streichquartett* incorporates the sound of the four helicopters as that sound enters the cabins in which the members of the Arditti String Quartet are playing. The piece literally works with the technological sound, or the sound of technology, beginning to draw out its melody, to bring out and rework the musical structure embedded in the technological noise. The notes played by the musicians pick up on the technological noise, reshape it, and turn it into notes, disclosing a musical, aesthetic structure at work in technology. Drawing out a poietic techne from the by-product of technological progress, that is, noise, the complex play between the helicopter and the quartet sounds opens up a beyond within the technological techne, a poietic techne, rephrasing and remodulating the technic relationality into the poietic relationality of an artwork.

Among the most recent developments in technologically facilitated and inspired artworks, it is the transgenic art of Eduardo Kac that explicitly renders visible, plays with, and questions the increasingly thin and problematic boundary between art and technology. While most discussion of Kac's recent work has focused on the social and ethical implications of genetic manipulation, what is most significant about his projects from the point of view of aesthetics is his exploration of the fluctuating, sometimes vanishing, boundary between art and technology. At the same time that some of his works appear to fuse art and technology, to erase the border between aesthetics and science, they also, on other levels, reopen this very debate and remark all the more forcefully the significance of this difference. At its most "extreme," Kac's art renounces the ideas of representation and mimesis and moves toward associating artistic with biological creation. In fact, Kac goes so far as to end his essay describing the parameters and goals of his *GFP Bunny* by equating the creativity of the new art with the literal creation of life: "At last, transgenic art can contribute to the field of aesthetics by opening up the new symbolic and pragmatic dimension of art as the literal creation of and responsibility for life."[36] The "artistic" production of Alba, Kac's "green fluorescent protein bunny," genetically engineered through transfer of the gene responsible for fluorescence from a jellyfish into an albino rabbit, therefore seems (notwithstanding Kac's insistence that the key element of the artwork is the important social and ethical discussion generated by Alba's creation) indistinguishable from the scientific, technological deployment of the powers of genetic engineering in the service of creating new, transspecies forms of life. The social, ethical, and aesthetic issues raised by transgenic art are far too numerous and complex to address here; there has already been a flood of essays, articles, and responses to Kac's provocative works and statements, both in artistic journals and in the popular media. The discussion so far does indeed testify to the importance, innovation, and suggestive character of Kac's *GFP Bunny,* but it is quite telling that most of it has centered on ethical and social questions regarding integration of and respect for new, transgenic forms of life, as opened up by the breeding of a unique, fluorescent rabbit. That is, the "aesthetic" question—the question of whether and how *GFP Bunny* is (or is not) a work of art—has been relegated to the background instead of occupying a central place. One could also ask whether art is actually needed in order to generate the kind of discussion, no doubt crucial and imperative, that has been going on around

Kac's work, or whether those questions do not in fact arise from the very premises, objectives, and capabilities of genetic technology. Kac's work has clearly energized and accelerated the pace of such discussion, and it has contributed new insights that the scientific community itself perhaps would not have provided, but this in itself does not make *GFP Bunny* a work of art. Where *GFP Bunny* remains indisputably critical is in its manifestation of the fragility of the boundary between technology and art, between technoscientific and artistic powers. In a way, Alba is a new icon for the possibility (inevitability?) of art's fusion with technology, which was already tantalizing the Italian Futurists almost a century ago.

In the context of this thinning boundary, it seems legitimate and necessary to ask whether and to what extent transgenic art is complicit with the manipulative flows of power or whether, on the contrary, it exposes, complicates, or perhaps even contests them. In *Aesthetic Theory* and other writings, Adorno analyzed the complicity with and contestation of commodification by modernist art. Now that art has moved directly onto the level of genetic manipulation, the question of its complicity/contestation has been transferred into the heart, so to speak, of contemporary technical manifestations of power. Is the awareness of the uniqueness of the "created" animal, the context of its social needs, a complication or a contestation of the very manipulation the artist used to create Alba? To make the engineering marvel into an artwork, is it enough to debate, in the context of *GFP Bunny*, the significance of interconnections, social acceptability, and intersubjectivity?[37] Is the rapprochement between art and science/technology in Kac's work dissimilar from the momentum of Duchamp's ready-mades? Obviously, the technology is notably different—from mass-produced objects to the possibility of mass production of engineered/altered life forms—and so are the ethical and political dilemmas associated with it. Yet, aesthetically speaking, are we not still within the horizon of avant-garde questioning about whether the forcework at stake in art—in spite of, or perhaps because of, art's fascination with modern technology—remains different from and critical of the technological deployment of power that is regulative of modern life? Without adjudicating these questions, I would like to focus the discussion on the boundary between art and technology, and on the possible turn within technicity intimated by Kac's work. Kac's art remains critically important here because, even beyond the explicit intentions stated in his texts on *GFP*

Bunny and *Genesis* (discussed below), it keeps this question open and thus keeps technicity in question by pointing to the intrinsic possibility of a turn within it.

This questioning, as already suggested, is evident in *Genesis,* another of Kac's transgenic artworks.[38] *Genesis* uses a constructed "art" gene to interfere with and literally illuminate the process and the powers at work in genetic engineering. To "create" his "art gene," Kac took the famous statement from the biblical book of Genesis about human domination over the world—"Let man have dominion over the fish of the sea, and the birds of the air, and all creatures that crawl upon the land"—and translated it through a double process into a DNA sequence. First he transposed the sentence into Morse code, and then, converting the Morse code into its equivalents in the genetic alphabet of Adenine, Guanine, Cytosine, and Thymine, he retranslated the passage into a DNA sequence. The "art gene" was then inserted into fluorescent *E. coli* bacteria living in a petri dish, whose mutation was further influenced by Internet users who could turn on and off a light source illuminating the dish. The dish was then placed in an art gallery, with its magnified projection on one wall, the DNA sequence of the "art gene" displayed on another, and the biblical passage quoted on a third.[39] An Adornian question posed to Kac's *Genesis* would probably read like this: does the "art gene" create/mutate in a way that undoes the domination and manipulation at the very basis of genetic technology? No doubt Kac's gene, much like the techniques of genetic engineering itself, "creates" a new being, but in its manner of creation it also discloses technoscientific manipulation and even calls it into question. Since the "art" gene is produced from the biblical quotation that gives humans the directive to control, manipulate, and exploit "nature," Kac's *Genesis* begins to function as a parody of the anthropocentric conception of being, with the manipulative power placed at the center of existence. Moreover, Kac's gene cannot help recall Tristan Tzara's idea, from his Dada manifestos, that Dada is a virgin microbe. For Tzara, Dada was the invasion of a radical avant-garde poiēsis into rationality and logic, an outbreak of a-logicality which called Enlightenment rationality into question, interacted with it, and transformed it beyond recognition, thus "freeing" life from its "organic disease"—logic. Kac's "art gene" is art literally inserted into genetic material, "illuminating" it (through the fluorescence of the bacteria and the projected lighting) and transposing it from within. While

Dadaism tried to alter the very momentum of relationality, transforming the overly "logical" and "rational" charge of experience, *Genesis* literally "manipulates" and modifies the technological manipulation of being. It demonstrates and enacts the extreme closeness between the power of information technologies and genetic engineering, on the one hand, and artistic power, on the other. At the same time, the "art gene" not only lays bare but also, using literal genetic transposition as its conduit, alters the very modality of power that makes possible and operates *in* genetic engineering, giving genetic power a different momentum. In a way, the power is still the same—it is the power to transfer genes and engineer transgenic life forms—and yet its momentum appears to be different: geared no longer just to manipulation, that is, to further intensification of the reach of power into the microelements of being, but rather to the possibility of a different, "artistic" disposition of forces. The most important and interesting aspect of Kac's work is this constant highlighting/erasure of the boundary between artistic and technical technē, between genetic engineering and the "art gene," which, beyond the celebration, excitement, and fears brought about by the information and genetic "revolutions," keeps alive—literally, in the case of *Genesis*—the possibility of a critical turning, which remains intrinsic to technicity even in the midst of its modern, seemingly limitless, deployments of power.

What is at stake in this turn are the mode or valence of relation and, more specifically, the question of whether such relationality has the momentum of power. To engage with this problem, I reformulate Heidegger's question about technology in the following way: do relations in the technological age take—necessarily, as it seems—the form of power relations and thus participate in the continuing intensification of being's manifestation as power, or do they point to a turn in technicity toward a different disposition of relations, one that withdraws from the productionist logic of power and does not contribute to its increase? The key, if undeveloped, element in Heidegger's reflection on technicity is the idea of a fold or turn within technē itself. Heidegger's notion of technicity does not refer to what we know as technology, such as instruments or technological means of production, but to a mode of revealing that discloses what *is* as intrinsically calculable and available as a resource. When beings come to be disclosed as "resources," natural, mineral, human, or otherwise, it means that they are constituted in their very essence *in terms of power*, that

is, as inherently manipulable, and thus subject to calculation, reworking, and numerification. Technicity makes it possible to categorize experience and relations in terms of efficiency, commodification, and exchange. Technicity's most recent incarnation, characterized by the tendency toward simultaneous multiplication and equalization of differences, exchangeability, and convertibility, is the Information Age, with its increasing capability to digitize and turn being into a global, continuously modifiable data bank.

In this context, I propose to think of art as the possibility of a turn in technicity, and to argue that art is "real" as a transformative event in which technical relationality comes to reflect upon itself and calls itself into question. Art's forcework would then be not a matter of modifying or reworking telematic relations but of calling into question the power momentum instantiated by them. Relations in the contemporary world are no longer just abstract, as Adorno analyzed them in conjunction with abstract art, but "infomatic," that is, based on reducibility and on conversion to information, and on the instant transmission of such information. Therefore, the work of art needs to be thought of precisely in relation to the informational paradigm increasingly dominating modern life: never limited to celebrating the opening of new artistic possibilities associated with the new information media, as much of Internet art seems to be doing, but interrogating the momentum that this informational paradigm is giving to praxis. If this momentum, as seems to be the case everywhere, amounts to a new "telematic" agility and expansiveness of power, then the artwork needs to disclose the formation of modern relations into power on the level of infomatics and telematics, and to call this paradigm into question. Such a way of rethinking the relation between art and technē emerges from "The Question Concerning Technology," where Heidegger indicates that the possibility of a turning in technicity depends on a rethinking of modern art beyond aesthetics and the notion of production:

There was a time when it was not technicity alone that bore the name *technē*. Once the revealing that brings forth truth into the splendor of radiant appearance was also called *technē*.

There was a time when the bringing-forth of the true into the beautiful was called *technē*. The *poiēsis* of the fine arts was also called *technē*.[40]

❧   Technē is characterized by the ambiguous play of two faces—a technical technē and a poietic technē, I would add, by the tension between

technopower and aphesis. If technicity, for Heidegger, is a mode of revealing that "challenges forth" (*Herausfordern*), calculates, orders, and organizes being into resource, poiēsis, by contrast, is a transformative event that changes relations into an "unproductive" modality of letting be. Like technicity, art, too, disposes relations but, as Adorno remarks in *Aesthetic Theory*, with a radically different result: "Through the domination of the dominating, art revises the domination of nature to the core. In contrast to the semblance of inevitability that characterizes these forms in empirical reality, art's control over them and over their relation to materials makes their arbitrariness in the empirical world evident. As a musical composition compresses time, and as a painting folds spaces into one another, so the possibility is concretized that the world could be other than it is."[41] Following the patterns of domination and power at work in technicity, art takes over the relations between forces in society and transposes them into its own force field. But this transposition changes the vector of relations between forces away from domination, commodification, or exchange of information.

It is in terms of such a turn in technicity that I would like to propose here, by way of closing, a few observations on Bill Viola's remarkable video installation titled *The Crossing*.[42] My question here is whether the crossing in Viola's installation represents a transformation in technicity or a turn within the same. In the video, two elements, fire and water, are portrayed as destructive and at the same time transforming: the fire consumes, or purifies; the water drowns, or cleanses. In both cases, the crossing has to do with the disappearance of the subject, enacted by a male figure that vanishes into the flames and the cascading water. That *The Crossing* hinges on this ambiguity between annihilation and transformation is of crucial importance to my argument. It manifests, in a way, the double valence of force that I discussed earlier, the ease with which forces can take the form of power and violence or enable release and freedom. This metamorphosing of force depends on how it comes to be disposed, on what kind of relationality it draws out—in other words, on whether forcework becomes disposed artistically or in terms of power. *The Crossing* draws out relations in terms of stillness: between the dark background and the figure advancing in slow motion; between the figure's raised hands and the rest of the body, as well as the unilluminated background; between the slowly moving body and the flames and water that engulf it. But this still-

ness, underscored by slow-motion photography and articulated through the contrast between the movement of the body and the motion of the flames and water, is not mute. The aim, in Marjorie Perloff's words, is "to slow down the viewer's attention and witness what has always already been there but never quite seen."[43] As a result, what has always already been there begins to articulate itself to our eyes and ears; it speaks, precisely in the sense in which Heidegger invests language with the ability to speak. Language speaks not so much in words as between words, through a form of relationality that opens the space for and disposes words. Beyond signification, words, and images, it is forcework, the key in which relations unfold and become disposed, that speaks in Viola's work.

For Viola, video art looks for "an image that is not an image" and makes us dwell within what does not enter the scope of visibility: the temporality of experience. The slow motion in Viola thus "tells" time, or "says" temporality itself, which, irreducible to calculation and measurement, to information and the telematic forms of its circulation, comes into focus, as it were, in the blurred movements of the body. The sequenced running of *The Crossing*, though itself programmed, repeatedly communicates the importance of the turn in increasingly programmable experience, the importance of being's irreducibility to a programming or informational code. Viola, using the latest technology to manipulate time—to "dominate" it, as Adorno would say—turns this artistic disposition of forces against technicity, specifically against the foreshortening of the irreducibly futural projection of temporality to processable and programmable information. Against the backdrop of measurement and digital manipulation, *The Crossing* opens experience up into its transformative futurity, the futurity that marks the present and expands its "here" beyond the linear dimension of presence. Employing digital technology as a counter to technicity, Viola's art "makes visible" a fold within technicity between its increasingly power-ful deployment of calculative/digital relations and its power-free poetic sculpturing of experience. Instead of a telematic, total work of art, Viola redeploys forms of modern technology to free the event from its increasing compression into the informational paradigm. Viola's works point the way to a transformation within the "infomatic" operations of contemporary technicity: the models and means of disciplining being into informational streams and exchanges are invoked in his works in order to perform a "crossing" into noninformational, power-free event.

In the approach I am proposing here, art's force is its ability to bring us face to face with the power at work in technicity. This power operates beyond the obvious power of the new technologies, since it constitutes the very momentum of how the complex of relations forming modernity develops and becomes an intricate and differentiated matter of power. Art's importance, in this context, lies in its work on the possibility of the turn within technicity and power. The forcework characteristic of art shows the other face of technē, marked in modern technicity as the possibility of a different future. This tension within technē, which is internal to art, recodes the dialectic between formal, "aesthetic," and social aspects of art, reformulating their continuing conflict in terms of forcework and its transformative turn within technicity. Modern technē reveals its face as manipulative technicity, which unfolds the world in terms of a programmable and manipulable network of relations, as a kind of global computer matrix. Technicity, manifesting itself in the form of multiplying informational relays and the increasing reach of digital technology, discloses the essence of being as an informational code, thus intensifying the global sense of power. Art, by contrast, shows technicity its other, "ethical" face, as a revealing that could "let be" and enable relations to unfold free from power. Perhaps the critical difference here is between the character of modern technicity, "in essence" manipulative and programming, and the enabling technē, or forcework, of art. The power of art, the transformative force of its rupture, lies in opening up a nexus of power-free relations. To put the issue differently, what becomes transformed in art is power itself as it is changed into what perhaps can no longer even be referred to as power, since the forcework at stake in art, though it is a kind of force, does not contribute to the intensification of power. Letting be, it undermines the power formation of relations in the modern world, changes their momentum, and opens up a certain "otherwise" to power. My suggestion here is that this turn or change marks the avant-garde vector of art.

3

Beyond the Subject-Object Dialectic

PART I: ART "OBJECTS"—FROM COMMODITY AESTHETIC TO PUBLIC EVENT

> The immanence of society in the artwork is the essential social relation of art, not the immanence of art in society.
> —Theodor W. Adorno, *Aesthetic Theory*

In contemporary discussions there are two main lines of thought concerned with the social function of art: the first, the post-Heideggerian/Nietzschean approach, in its attempt to move beyond the "economic" understanding of power, focuses on the broadly conceived technologies of power, where technology stands for the dominant paradigm of social relations; the second, represented by different versions of Marxist thought and the Frankfurt School, in its attempt to diagnose historical mutations of capital, gives priority to commodification and exchange as the dominant forms of power. The difference between these two orientations lies primarily in their respective understanding of power: technologies versus economies of power, and not necessarily in their conceptions of art. By shifting attention to art's transformative force, this book examines art's social function vis-à-vis both of these notions of power, showing their convergence and collusion in modernity with its signature technoeconomy of power relations. In the previous chapter I discussed art's position in relation to technology; in this chapter I will focus primarily on the problem-