

area roughly the size of France), the burning "is coupled with activities that compensate for its potentially destructive effects."²⁴ The result is actual enhancement of fertility (necessary given the peculiar conditions of the rain forest) and the provision of micro-ecosystems for rapid speciation.

Here humanity writes with its labor on the surface of the Amazon basin to bring forth new and richly varying life-forms. Far from being a congenital enemy of nature, then, humans can be a part of nature that catalyses nature's own exuberance. This ecologically creative activity is reserved, however, for those whose human ecology is closely configured to the varying natural ecologies with which it interacts, so that the combined human-natural ecosystem is integral and differentiated rather than disintegrated and split. It needs be realized that this kind of behavior requires that the earth not be treated as private property, or, what comes to the same thing, that the labor which undertakes it is freely differentiated, or as we will be calling it, freely associated. It is under such "original" conditions that human intelligence and consciousness learned to take an ecocentric form. This way of being creates people who differentiate nature and know the individual plant species one by one,²⁵ who live in the small, collectively managed communities that provide an immense range of opportunities for allopatric speciation, and who develop the existentially alive culture whose lessons are ours to learn.²⁶

6 | Capital and the domination of nature

The pathology of a cancer upon nature

What is the root of capital's wanton ecodestructivity? One way of seeing this is in terms of an economy geared to run on the basis of unceasing accumulation. Thus, each unit of capital must, as the saying goes, "grow or die"; and each capitalist must constantly search to expand markets and profits or lose his position in the hierarchy. Under such a regime the economic dimension consumes all else, nature is continually devalued in the search for profit along an expanding frontier, and the ecological crisis follows inevitably.

This reasoning is, I believe, valid, and necessary for grasping how capital becomes the efficient cause of the crisis. But it is incomplete, and fails to clear up the mystery of what capital is, and, consequently, what is to be done about it. For example, it is a commonly held opinion that capitalism is an innate and therefore inevitable outcome for the human species. If this is the case, then the necessary path of human evolution travels from the Olduvai Gorge to the New York stock exchange, and to think of a world beyond capital is mere baying at the moon.

It takes only a brief reflection to demolish the received understanding. Capital is self-evidently a possible outcome given the potentials of human nature, but despite all the efforts of ideologues to argue for its natural inevitability, no more than this. For if capital were natural, why has it only occupied the last 500 years of a record that goes back for hundreds of thousands? More to the point, why did it have to be imposed through violence wherever it set down its rule? And most importantly, why does it have to be continually maintained through violence, and continuously reimposed on each generation through an enormous apparatus of indoctrination? Why not just let children be the way they want

to be and trust they will turn into capitalists and workers for capitalists – the way we let baby chicks be, knowing that they will reliably grow into chickens if provided with food, water and shelter? Those who believe that capital is innate should also be willing to do without police, or the industries of culture, and if they are not, then their arguments are hypocritical.

This, though, only sharpens the questions of what capital is, why the path to it was chosen, and why people would submit to an economy and think so much of wealth in the first place. These are highly practical concerns. It is widely recognized, for example, that habits of consumption in the industrial societies will have to be drastically altered if a sustainable world is to be achieved. This means, however, that the very pattern of human needs will have to be changed, which means in turn that the basic way we inhabit nature will have to be changed. We know that capital forcibly indoctrinates people to resist these changes, but it is a poor and superficial analysis that would stop here and say nothing further about how this works and how it came about. Capital's efficient causation of the ecological crisis establishes it as the enemy of nature. But the roots of the enmity still await exploration.

A great deal of ink has been expended in trying to decide just what is the core of our estrangement from nature, but little of it has any real explanatory value. It is perfectly possible and quite desirable, for example, to identify, as do the Deep Ecologists, certain central and controlling ideas that define a pathological relation to nature, notably the "anthropocentric" delusion that sees nature, in all its intricate glory, existing like so many planets around the human sun. No understanding of the ecological crisis would be complete without such a dimension. But it is a dimension only, that outlines the subjective shape of an ecodestructive complex without connection to the objective side of things, and with no clue as to how it arose – nor, therefore, with how it can be overcome. A mental attitude explains no more than some of the internal circuitry of a phenomenon, and until its origins and relationships with the world are spelled out, is just an empty and vague abstraction.

Similarly, many authors are ready to talk of "technology," or "industrialization" as the active elements in the crisis, since it is obvious that it is through such means nature is being laid waste. But to stop at this point is not only incomplete, but also evasive and politically opportunistic, since it is patently the case that the industry in question, and the tools it uses, are instruments of capital accumulation, and have been so since the beginnings of the modern world.¹ No tool, nor any large-scale organization of technology, can exist in itself; industry, and all the qualities internal to it, are products and expressions of a given mode of social organization, and cannot be conceived apart from it. The world teems with brilliant innovations that deserve application as ways of checking the ecological crisis but will not be used because they run against the exigencies of accumulation. The same can be said for "science," also routinely hauled out as the culprit responsible for our estrangement from nature, which is said to be reduced "scientifically" to a mere object for dissection. Well, yes, this does happen, but the questions must again be posed: which science, in the service of which interests, and shaped by which social forces? No doubt, an estranged science plays a tremendous role in the domination of nature. But estrangement of this kind must itself be explained, and in the explaining, we push back the origins of domination.

Science, technology, and industry are today all subsumed into the capitalist system. Yet capitalism as we know it did not spring full-grown into the world. It combined many precursors, which took root in peculiar cultural soils. The economies that resulted were not the bearers of any particular essence, but reflected, like the personalities of individuals, specific integrations, some of which have been more deadly to ecologies than others. For example, our variety of ecodestructive capitalism was a peculiarly European concoction, and, as such, deeply influenced by the dominant Christian religion, spiritual edge of an extremely powerful and by no means ecologically friendly world-view.² The attitude of Christianity toward nature long predates capitalism, and extends from its Judaic roots, as in the passage in Genesis

(1-27) where Yahweh gives Adam "dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the earth, and over every creeping thing that creeps upon the earth" - all of which is not only compatible with but mandated by the belief that "God created man in his own image, in the image of God he created him" (28).

No other world religion, and certainly no tribal religion, incorporates the domination of nature so directly into its *Logos*. It bears emphasis that this attitude was strongly contested within Christianity - indeed, some of the greatest saints, Francis and Teresa of Avila being the most famous, are defined by rebellion against it, just as the Church itself would strive to contain the capitalist monster once it arose from European soil. Religions are dialectical; they express domination as well as the protest against domination, and even the release from domination. Nevertheless, there is a definite balance of forces at play; and for Christianity, the preponderance of these forces was expressed in what would have to be called an anti-ecocentric direction. This is best shown by the striking hatred of the body that marks the history of Christendom, along with its obsessive preoccupation with feelings of guilt.³

Many societies could have led the way into the capitalist era, including China and India, which were more highly developed by far than Europe in the fifteenth century, while being more at home with nature. It is impossible to say whether their accession to capitalism would have resulted in an ecologically friendlier outcome. But the luck was with Europe, which had its shipping lanes along the trade winds that led to the "undiscovered" Americas. And so the civilization whose previous development had primed it for the domination of nature became capitalist in the sense that we recognize the beast, especially after emergence into harsh and life-denying Calvinism.⁴

Yet this relationship does not entitle us to declare Christianity the villain of the piece, either, since the crisis is quite capable of being reproduced without it; indeed, in its current phase, virtually all traces of the religious origins of capital have been effaced. In

the final analysis, a religion is itself the ambivalent product of a certain kind of society. Thus the evocation of Christendom again raises the question of origins and pushes back the quest until it disappears into the mists of human beginnings. Here, however, we reach a ground that can enable a reasonably coherent - if highly attenuated and schematic - image of how the domination of nature arose, and what led it to mutate into capitalism. It goes without saying that what follows is adapted to the purposes of this work and does not represent a full rendition of the story and the many questions attached to it. The reader must decide for him- or herself whether the light it casts will compensate for the brevity of treatment.

The gendered bifurcation of nature

The first map of the human species was drawn according to "him" and "her," in that produced configuration of sexuality known as *gender*. Gender is the original dividing line within humanity; and the constructions of humankind, whether within humanity or between humanity and nature, are inscribed by it. There is nothing more "material" (including the common origin of the words, *material* and *mother*). Sex is of the earth, and the primary dividing lines between genders were expressed in earth-transforming labor. Out of this matrix (there is that root again) arose the beginnings of domination; and all future dominations, including that effected by capital, are shadowed by that of male over female.

This is not an exercise in politically correct male-bashing. However, a candid look at the history of domination would be radically incomplete unless the role played in it by the construction of the masculine gender were acknowledged. The actual origins must remain shrouded in an impenetrably distant past. Nevertheless, everything that is known (though all-too-often ideologically denied) about the human species compels the reconstruction of the following, which we state baldly and according to the ideas already developed about human nature, so as to bring out the essential points:⁵

In the original, hunter-gatherer, phase of society, the first differentiation of labor occurs according to sex, generally speaking, with males hunting and females gathering – along, needless to say, with their work of reproduction. Note that this labor produces the gender itself, and that its origins were a genuine differentiation, with mutual recognition, fluid social relations, and self-determination. This can still be seen in the cultural remnants we have of these peoples, and by the reconstruction of the quality of self-experience derived from it: thus the “dream-time” of Australian first peoples, the wandering of souls, the manifestations of Trickster, and so forth.⁶ The phase encompasses the great span of human prehistory, and entails a great range of human–natural transformations, including the domestication of animals and the origins of agriculture. Though without domination, the original division of labor set forth males as the takers of life and females as life’s giver. Moreover, the death-dealing tools of the hunt, and the fact of its often being carried out by roving bands, prepared a way for something worse.

Here a sporadically occurring event may be postulated of whose existence we are certain even though no concrete first instance can be brought forward. Its agent was masculine, not as individual hunter, but as a subset of the collective: a group, or band of hunters; and its stimulus would vary, being composed, however, of subjective as well as external forces: the latter being, say, a threat to survival, like disease or drought, which compelled a search for new resources; while the former was a function of the psychodynamics of the male group. In any case, the event in question was a transformation of the hunt to a raid, with the object being now not the obtaining of food, skins, etc., from animals, but the expropriation of productive labor from other humans, i.e. taking not just the life of another creature, but the life-giving and building power of one’s own kind.⁷ This necessarily involved the seizure of women and children from a neighboring collective. We suppose a threefold violence: killing or driving off the males from

the attacked collective, denying the self-determination of the seized women and children, and the forcible sexual violation of the captives.

This act was a profound mutation in human being. It created a whole new conjuncture, which in time became a structure. First, the possibilities of exploiting another’s labor are introduced, always in the direction of male over female. Second, the potentials for enduring social divisions are grounded in this, again male over female; these are to extend from the hunting band, to the warrior band, and to the ruling class, with any number of intermediate and modern variations, e.g. the Vaican Curia, the NFL Superbowl champions, corporate boards of directors, the Joint Chiefs of Staff, the Politburo, secret societies like Yale’s Skull and Bones (in which George W. Bush participated). Indeed, there is a sense in which the whole world has been run by male bands since the beginnings of history. Third, the genders are further produced by this, with sharply opposed identities constituted by master and slave. And fourth, violence – physical force along with the culture glorifying this – had to become institutionalized in order to hold onto what had been stolen.

The structures imposed by the original seizure of female labor had dramatic expansive possibilities. Social violence entered the lists of the dangers to which societies are exposed, along with those of natural cause. The violence invited retaliation and/or defense; and it came to define ever-larger social aggregates with expansive dynamics, as each particular group underwent a compulsion to achieve power relative to others. Internally, the drive toward power caused struggles for leadership and social control. The result, after innumerable twists and turns we are unable to detail here, was the emergence of the Big Man, the Chieftain, the King, the Shiekh, the Emperor, the Pope, the Führer, the Generalissimo, and the CEO.

We would emphasize again that these principles would be variously applied across a vast range of situations. There is no

need, either, to imagine a single such event radiating outward to encompass the rest of humanity. But what has to be understood is the absolute dynamism of this event, and the fact that it amounted to a real mutation of human society as potent as anything from the realm of genetics. Out of the nexus of original male violence arose codified property relations, as a way of holding onto what had been taken: thus the notions of property and legitimacy follow that of violent seizure. Similarly, the institution of patriarchy emerged, as a system of apportioning women and assuring ownership and control over children – a never-ending dilemma for the man who sows his seed and moves on, as the Big Man must. Property in this sense is not primarily that which attaches to the self, like clothing or jewellery (though in stratified and wealthy societies, the control over personal consumption is quite significant); but rather the power of producing – and reproducing life – and the means for life. The control over labor originates civilization; and this originates in the forcible control over women.

The control over labour enables civilization to emerge and shapes it,⁸ and this means that a basic estrangement, or *alienation*, is introduced at the foundations of society – alienation being the reflex, at the level of human being, of ecosystemic splitting. The dominant male identity is formed in this cauldron. From the beginning, its reference point is the other males in the hunting/warrior group, with whom it associates and identifies; coordinatively, it comes to shun and deny recognition to the subordinated female. A purified male-Ego comes to define the dominant form taken by the self, which enters into the exfoliating system of splits constituting the emergent civilization. Subjectively, this alienation becomes inscribed as a progressive separation from the body, and from what the body signifies, namely, nature.⁹

A polarization between the human and the natural worlds ensues, with masculinity occupying the human (= intellectual, far-seeing, spiritual, powerful, and active) pole, and femininity the pole of nature (= instinctual, limited and body-based, inconstant, weak, and passive). The *gendered bifurcation of nature* has

been set going, to configure the relations between genders, and between humanity and nature, all the way to the ecological crisis once it takes capitalist form.

The path leading from the first violent expropriation of labor to the heights of capital passes through the solidification of property and the appearance of class as a defining element of society. Class institutionalizes property and emerges *pari passu* with the introduction of splitting into human ecosystems. Though violent expropriation is a necessary step in domination, it is insufficient in itself as a way of producing and reproducing life. Secondary forms of recognition become essential to hold the social ecosystem together and harness its forces. Class is one such, operating in the sphere of production as patriarchy does in that of reproduction. Class codifies the formal arrangements for the ownership of productive property and the control over labor. The rule of law is layered over that of violence, and internalizes violence. Labor has become unfree.

Class is not grounded in physical difference or biological plan like gender, but in the formalization of the productive core of human being. Since the free exercise of transformative power expresses human nature, class is a violation of human nature, and with it, of nature itself, even if it is not grounded in the physical body. Class relationships never appear in pure, unadulterated form, however, as the splits they impose would tear society apart. They occur, rather, embedded in a further institutional turn, which emerges and takes the form of the state. It is the class-state nexus that comprises the decisive leap between archaic society and what we call civilization. With this, history as such begins, and the cyclical, differentiated time of original society is transformed according to the hierarchical ground plan of class. Now society has a controlling agency to tell its story to itself – a story, however, given over to conflict because of the institutionalization of class. States impose writing, through their cadres of technicians; and they impose universalizing religions like Christianity through their cadres of priests;¹⁰ and they impose laws through their judges and courts; and they impose violence and conquest

with their armies, and also the legitimization of violence and conquest. Everything thereafter is marked with contradiction, stemming from the state's original dilemma, that it stands over the whole of society, but is for society's ruling classes.

States carry forth all those notions we call "progress." They also, however, implement the domination of nature, in all the forms taken by nature – women certainly; but also, the other peoples conquered by those states which achieve imperial status. As enslaved and dominated peoples become incorporated into the domain, they acquire the status of Other – barbarians, savages, human animals, and, eventually (with the growth under capital of science), ethnicities and races – all of which categories cluster with the female at the "nature" end of the bifurcation within humanity.

This discussion may help clarify a vexing issue on the left, namely, as to the priority of different categories of what might be called "dominative splitting" – chiefly, those of gender, class, race, ethnic and national exclusion, and, with the ecological crisis, species. Here we must ask, priority in relation to what? If we intend, prior in *time*, then gender holds the laurel – and, considering how history always adds to the past rather than replacing it, would appear as at least a trace in all further dominations. If we intend, prior in *existential* significance, then that would apply to whichever of the categories was put forward by immediate historical forces as these are lived by masses of people: thus to a Jew living in Germany in the 1930s, anti-semitism would have been searingly prior, just as anti-Arab racism would be to a Palestinian living under Israeli domination today, or a ruthless, aggravated sexism would be to women living in, say, Afghanistan. As to which is *politically* prior, in the sense of being that which whose transformation is practically more urgent, that depends upon the preceding, but also upon the deployment of all the forces active in a concrete situation; we shall address this in the last section of this work, when we deal with the politics of overcoming the crisis.

If, however, we ask the question of *efficacy*, that is, which

split sets the others into motion, then priority would have to be given to class, for the plain reason that class relations entail the state as an instrument of enforcement and control, and it is the state that shapes and organizes the splits that appear in human ecosystems. Thus class is both logically and historically distinct from other forms of exclusion (hence we should not talk of "classism" to go along with "sexism" and "racism," and "speciesism"). This is, first of all, because class is an essentially man-made category, without root in even a mystified biology. We cannot, in other words, imagine a human world without gender distinctions – although we can imagine a world without domination by gender. But a world without class is eminently imaginable – indeed, such was the human world for the great majority of our species' time on earth, during all of which considerable fuss was made over gender. Historically, the difference arises because "class" signifies one side of a larger figure that includes a state apparatus whose conquests and regulations create races and shape gender relations. Thus there will be no true resolution of racism so long as class society stands, inasmuch as a racially oppressed society implies the activities of a class-defending state.¹¹ Nor can gender inequality be legislated away so long as class society, with its state, demands the super-exploitation of woman's labor.

Class society continually generates gender, racial, ethnic oppressions, and the like, which take on a life of their own, as well as profoundly affecting the concrete relations of class itself. It follows that class politics must be fought out in terms of all the active forms of social splitting. It is the management of these divisions that keeps state society functional. Thus though each person in a class society is reduced from what s/he can become, the varied reductions can be combined into the great stratified regimes of history – this one becoming a fierce warrior, that one a routine-loving clerk, another a submissive seamstress, and so on, until we reach today's personifications of capital and captains of industry. Yet no matter how functional a class society, the profundity of its ecological violence ensures a basic

antagonism which drives history onward. History is the history of class society – because no matter how modified, so powerful a schism is bound to work itself through to the surface, provoke resistance (i.e. “class struggle”), and lead to the succession of powers. The relation of class can be mystified without end – only consider the extent to which religion exists for just this purpose, or watch a show glorifying the police on television – yet so long as we have any respect for human nature, we must recognize that so fundamental an antagonism as would steal the vital force of one person for the enrichment of another cannot be conjured away.

The state is what steps forward to manage this conflict so that the ruling class gets its way without causing society to fly apart. It is the state's province to deal with class contradiction as it works itself out in numberless ways – to build its armies and use them in conquest (thereby reinforcing patriarchal and violent values), to codify property, to set forth laws to punish those who would transgress property relations, and to regulate contracts, and debts between individuals who play by the rules, to institutionalize police, courts and prisons to back up those laws, or to certify what is proper and right in the education of the young, or the marriage of the sexes, or establish the religions that justify God's ways to mere man, or to institutionalize science and education – in sum, to regulate and enforce the class structure, and to channel the flux of history in the direction of the elites. The state institutionalizes patriarchy as well as class, and hence maintains the societal ground for the gendered bifurcation of nature. Furthermore, inasmuch as the modern state is also a nation-state, it employs the attachment of a people to its land as a source of legitimation, and thus incorporates the history of nature into myths of wholeness and integrity. All aspects of the domination of nature are in fact woven into the fabric by means of which the state holds society together, from which it follows that to give coherence to this narrative and make a difference in it, we have to attend to the state and its ultimate dependence upon maintaining the class structure. All of this is to play a basic

role in the unfolding of contemporary ecological struggles, as we discuss in the next section.

The rise of capital

Capitalism only triumphed when it becomes identified with the state, when it is the state.¹²

Class relationships separate people from their vital power. Capital goes further: it separates our vital power from itself, and imposes a double estrangement. The arena within which this occurs is the labor market, and the instrument of its occurrence is that most strange and interesting concoction of the human mind: money.

As the saying goes, money makes the world go round. But there are three different aspects to money, which ascend in mystery, though all are bound together in reality.¹³ The first, simplest, and most rational as well as the most ancient, would be money as an instrument of exchange and trade. We say, rational, because without some independent element that enables goods to be compared to each other, economic activity, indeed, society itself, would remain paleolithic. At this level, the money-function allows raw materials, instruments of production and finished goods to be brought together from varied sources, making a wider human intercourse possible.

The second way we know money is as a commodity, something that can be acquired, traded, and, crucially, accumulated. There is, from this angle, a history of money that passes from common concretions like shells or exchangeable possessions like cattle,¹⁴ to metallic coin, to the abstraction into paper notes of one kind and another, onwards into the ever-increasing dematerialization taken by the money-form until today, in the digital age, it covers the globalized world with a shower of bytes. To explore these aspects would distract us from the task at hand. However, one of them, namely, the propensity for dematerialization, is of absolute importance, as it leads to the third and most puzzling, as well as most relevant, aspect of money.

What installs our system as the enemy of nature is the property of money as the repository of value. The notion of value, so difficult to grasp, yet so compelling for civilization, provides a window onto the pathology of power. Where money is concerned, value is an abstraction of the exchange function: thus from the particulars of exchanging one item for another, we arrive at "exchangeability-in-general." But it is also the convergence of exchangeability with desire. Value is the projection of human want into nature – including human nature and the qualities of the self. It is the setting up of an alternative, monetized world, with no fixed connection to the original world.¹⁵ Thus value does not exist in nature, though the creature who devises it does. As Georg Simmel put it in his magisterial work on money:

The series of natural phenomena could be described in their entirety without mentioning the value of things; and our scale of valuation remains meaningful, whether or not any of its objects appear frequently or at all in reality ... Valuation as a real psychological occurrence is part of the natural world; but what we mean by valuation, its conceptual meaning, is something independent of this world; is not part of it, but is rather the whole world viewed from a particular vantage point.¹⁶

There are distinct universes of value, by no means all economic. The infant values the breast, the child her dolls, the Buddha, contemplation, the ecocentrically minded, the biosphere, the fetishist, a stiletto heel, and so forth. Nor are all abstractions evil, to say the least, else we would regard mathematics as a crime, or the abstracting of Marx when he developed his notions of value in order to emancipate labor. Abstractions – including quantification – need not be pathological so long as there remains a differentiated path back to the sensuous-concrete, such as we see in fruitful science; or when, as in the case of "pure" mathematics, abstractions are bracketed away from the external world. That is, the mathematician does not confuse his abstractions with reality – unless he is psychotic, and even if he is psychotic, he lacks the means to bring reality under the sway of his abstraction. Not so

for capital, which converts the sensuous world into abstraction for the purpose of value. Since the sensuous world remains in touch with the plenum of nature, this conversion can become a splitting of devastating proportion and leads to a new order of domination.

Whatever is produced tends to serve some purpose, even if this be frivolous, destructive, or fantastic. Thus a kind of value adheres to all made objects according to the needs these meet, or, to choose another word, their utility. For produced things, use-value represents the conjugation of labor and nature, and occupies the boundary between human nature and nature at large. And because human nature entails participation of the imagination, there is no use-value that does not include some subjective and imagined dimension – whether this be the coziness of a good blanket, the taste of wine, the anticipation of the potential life lying embedded in a seed, and so forth.

Use-value is essentially concrete; it is a qualitative function, composed of sensuous and intellectual distinctions with other aspects of the world, including other use-values. Being qualitative, it retains the essential feature of differentiation, that distinct elements can recognize one another and form links and associations. Use-values can be deformed when they come to express alienated ways of being – what else can be said, after all, about use-values such as are expressed by a TV game show, or any of the commodities that reflect false needs – sports utility vehicles, lite beer, fashion magazines, hand guns, and so on. But because they are also concrete, they can be restored, as a "used" article can be mended and made to shine. Indeed, the mending of the ecological crisis requires precisely such a restoration.

Not all use-values are attached to commodities. However, all commodities have a use-value, since no one would purchase anything or exchange it for something else unless it has some utility.¹⁷ But they also have another kind of value, arising from the fact of exchangeability that attaches to all commodities: exchange-value. Here, in sharp contrast to use-values, the sensuous and concrete are eliminated by definition and *a priori*. All that is

retained as the mark of exchangeability is quantity: this item, *x*, is exchangeable for so many of *y*, which in turn is exchangeable for so many of *z*, and so forth, with no intrinsic end. Any concrete quality will break the chain: only number suffices, and money becomes the embodiment of that number. Hence money is fundamentally quantity, which becomes its use-value. Simmel again: "The quantity of money is its quality. Since money is nothing but the indifferent means for concrete and infinitely varied purposes, its quantity is the only important determination so far as we are concerned. With reference to money, we do not ask what and how, but how much."¹⁸

There is nothing else in the universe like it. Use-values require the participation of nature, but exchange-values are made by quantifying nature. The ascension of quantity over quality gives these relations the capacity for evil once the value function is advanced to the center of the social stage, as in capitalism. In this loss of the sensuous and concrete, the abstracting function is abandoned to the delusions of power. Precisely because nature has been detached, with its limits and inter-relations, in short, its ecosystems, there is no longer any internal limit to the value function. It can expand effortlessly. Pure quantity can swell infinitely without any reference to the external world, even though the quantity-using creature remains very much in that world. And if there is some will-to-power in the creature who makes for himself this value function, carried forward from traditional modes of domination, then that, too, can go to infinity.

Along the way, possibilities for recognition are sundered. Simmel points out two aspects: that valuation takes place in the human being, i.e. "part of the natural world," and that it is not the world in itself, but "rather the whole world viewed from a particular vantage point." The abstraction into money sets loose these two formally distinct parts of value to wander their separate ways – and the creature who subsumes both those ways, *Homo oeconomicus*, or the capitalist personification – is split internally and from the world. Hence the value that stalks forth in the economy is also the route that turns our differentiation

from nature into a regime of splitting, which is to say, into one of self-perpetuating ecodisintegration.

The transformation of capital from an ancient part of the economic system into the world-devouring monster reproduced by capitalism occurred when the value function became attached to labor itself. For this to have taken place, an extensive series of prior developments, affecting the history of money as well as labor, was necessary.

Long before capitalism arose as such, rulers appreciated the power of money and foisted it upon the masses – who proved significantly reluctant to take the bait. In a far cry from Adam Smith's ideological notion, that the species has an innate propensity to barter, truck and exchange (in other words, that capitalism is part of human nature), the use of money was distinctly an acquired habit, often requiring coercion. With regard to Europe, which as the cradle of the capitalism we know deserves special attention, Alexander Murray has pointed out a kind of turning point occurring around the first millennium, in which a society not simply unacquainted with money but actually resistant to it was converted into one whose wheels were to become increasingly lubricated with lucre.¹⁹ In Carolingian times, coins were introduced from above into a matrix that had no "use" for their exchange-value, and where they were treated primarily in their second function, as a commodity to be exchanged along with others. Many coins were melted down for bullion, others were given directly to the poor, others were converted into ornaments and silver chalices, while others still have been found unused in various storage sites. Fines and penalties such as flogging had to be imposed to rouse the people of the "Dark Ages" into the glories of exchange. Murray concludes that money was considered "strange and suspect," and holds "psychic inertia" responsible. But I would think that said inertia was grounded in an intuition of the wreckage inherent in the strange function of value, a prescience, shared for a time by the Catholic Church, that the same money could become a wedge breaking down the integrity of communal life-worlds. In any case, there can be no doubt that medieval monetarism eventually

speeded up economic activity and prepared the way for capitalism. By facilitating exchange, money increased its own value, fostered avarice, led to usury, and created demand for its own accumulation. The production of money surged – thus England had ten mints in 900, and seventy a century later – and banking – which first occurred to people in the ancient era – came into Europe with the founding of the Bank of Venice in 1171.

The expansion and centralization of trade, banking functions, and urbanism fostered rationalization and technological progress. As the location of Europe's first bank in Venice suggests, this side of the process was advanced in the Mediterranean and mostly in the Italian city-states. Venice, along with Genoa and Florence, became the leading centers of the early manifestation of finance. Later the Luso-Hispanic plunder of the Western hemisphere (opened by the Genoese Columbus) provided bul- lion for the finance capital that allowed Europe, whose economy had remained backward with respect to Asian centers until the mid-eighteenth century, to buy its way into hegemony.²⁰

As for the labor relation, this was furthest developed in North- ern Europe and especially through agricultural transformations in England. Here the critical factor became the separation of the worker from the means of production – which in precapitalist society meant the land above all else, and, more generally, nature. In one of Marx's many summaries of this he puts it as follows:

One of the prerequisites of wage labour and one of the historic conditions for capital is free labour and the exchange of free labour against money, in order to reproduce money and to convert it into values, in order to be consumed by money, not as use value for enjoyment but as use value for money. Another prerequisite is the separation of free labour from the objective means of its realisation – from the means and materials of labour. This means above all that the worker must be separated from the land, which functions as his natural laboratory ... the relationship of the worker to the objective conditions of his labour is one of ownership: this is the natural unity of labour with its material pre-

requisites. [Under these circumstances] the individual is related to himself as proprietor, as master of the conditions of his reality. The same relation holds between one individual and the rest.²¹

The separation required violent expropriation.²² The rate of dispossession began accelerating after the mid-sixteenth century, as bullion from the Americas began entering the European economies. It took place most systematically in England in the form of the "enclosure" of the commons, i.e. of commonly owned land; it took place elsewhere in Europe as the precondition for the coming of capitalism to that subcontinent; it took place throughout the "New World" and Africa as millions upon millions became dispossessed so that the great capitalist enterprises and slave trades could fatten; and it continues to take place today, with the expropriation of community gardens in New York City, or wherever peasants stand backwardly in the way of accumulation, as, for example, in Mexico, where NAFTA fosters their being driven by cheap imports of corn off the *ejidos*²³ and into the *maquiladoras* or across the border – and also across that half of the world which lies vulnerable to globalization. The separation of peoples from the means of production and their communal heritage transfigures the notion of property and creates the social foundation of the capitalist mode of production; it is a gesture continuously reproduced as capital penetrates life-worlds. Separation in this regard has two aspects: the physical and juridical removal of producers from the appropriation of their own lives; and alongside this, the alienation or estrangement between the worker and the product made, the method of work employed, relations with other workers (and, by extension, all social relations), and, finally from their own human nature. The fourfold sense of alienated labor was drawn by Marx in his early philosophical writings; later, in the mature synthesis of *Capital*, it became amplified as the famous concept of commodity fetishism, an insight into the way value-driven production mystifies the nature of things, so that commodities relate as persons, and persons as things, in a veritable frenzy of estrangement.²⁴

Separation/alienation/splitting is the fundamental gesture of capital. It applies to the expropriation of peasants, but also forcefully to the industrial system, where technological prowess in the service of value-expansion puts the finishing touches to the domination of nature. The industrial revolution brought in its wake work-discipline, as individual human labor had to become integrated with machinery and coordinated on an ever-expanding scale. Just as early-medieval people were coerced into accepting the logic of money, so were early-modern people coerced into accepting the logic of the bound time of accumulation. Wages are convertible to capital only if placed in a rigid schema of linear temporality, inasmuch as an abstract interval is the only way of computing the exchange-value of labor-power, or of measuring the surplus value wrung from it. For this computation, technology in the form of clocks was required, along with new modes of socialization and a religious and moral culture to put it all together and justify the whole arrangement in the eyes of God.²⁵ Science, technology, and industry, therefore, are all bundled together with the dominant religion and, under the aegis of capital, come to express its powers of splitting. In capital's early phase, the inner connection to the gendered bifurcation of nature was strikingly revealed in the great witch crazes of early-modern Europe, and through ideologues of science like Francis Bacon.

As the system matured, its latent powers of ecodestruction would

come to the fore under the aegis of industrialization.²⁶ Industrialization is not an independent force, then, but the hammer with which nature is smashed for the sake of capital. Industrial logging destroys forests; industrial fishing destroys fisheries; industrial chemistry makes Frankentfood; industrial use of fossil fuels creates the greenhouse effect, and so forth – all for the sake of value-expansion. Most important, the technically driven production of the industrial order demands an expanded energy supply, for purpose of which fuels such as coal, natural gas, and petroleum are by far the most likely candidates. Such fuel represents past ecological activity: numberless residues of chemical bonds developed by living creatures in interaction with

sunlight over hundreds of millions of years, now turned to heat energy to propel the instruments of industrial society. Each drive to the mall to buy wasteful plastic junk made from fossil fuel degrades eons of ecological order into heat and noxious fumes. I have read somewhere that in a single day the industrial world consumes the equivalent of ten thousand years of bioecological activity, a ratio, roughly, of 3–4 million to one. With this squandering, and the associated tossing about of materials of every sort, the entropic potentials inherent in social production reach levels of eco-destabilization on an expanding scale. The staggering pace of entropic decay has only become noticeable recently because the earth is sizable enough to have buffered its effects until the past thirty years or so, since when we have had a clogging of the "sinks" along with an ever-rising level of production.

The phenomenon of separation expresses the core gesture of ecodisintegration, for separation in the physical and social sense corresponds to splitting in the ontological sense. Splitting extends the separation of elements of ecosystems past the point where they interact to create new Wholes – or, from another angle, to the point where the dialectic that constitutes ecosystems breaks down. It follows that the ecological crisis is not simply a manifestation of the macroeconomic effects of capital, but reveals also the extension of capitalist alienation into the eco-sphere. And as this alienation, and the whole structure of the system, is grounded in the relation between capital and labor, it also follows that the ecological crisis and capital's exploitation of labor are two aspects of the same phenomenon.

The historical matrix for this occurred when persons of the nascent ruling class subjugated labor into the system of exchange-value, turning human transformative power into a commodity on sale for a wage. The wage-relation, in which one's capacity to work is given a money equivalent and sold on the market, is much older than capitalism itself, nor was it the only form of labor within emerging capitalist markets,²⁷ nor, needless to say, is it a necessary evil in each and every instance where it appears. But its generalization into the means by which capital itself is

produced permanently alters the landscape of human being in an anti-ecocentric direction.

Capitalism became a full-blown system when the political, economic, legal, and cultural conditions were finally put together into a self-expanding machine for turning human beings into salaried workers on the fertile plains of labor markets. There were many turns in this road, but the definitive one came when the class of capitalists took full control of the state during the various bourgeois revolutions. Then all the state functions mentioned above were subsumed into the purposes of capital. The goal of production became accumulation of value, use-values became subordinated to exchange-values, surplus-value production became the alpha and omega of the economy, and ecological relations were abstracted away from their mutual differentiation and fragmented. In its latest, neoliberal-globalized stage, increased gender exploitation becomes the rule for the great masses of humanity, even as upper-class women within the metropolis achieve substantive gains within the bourgeois order. Racial and ethnic schisms persist alongside of, and as a defense against, the ultimate atomization which is capital's telos. Non-recognition of fellow creatures is built into society, which thereby undergoes a motion toward nihilism; human nature becomes separated from itself, and what has been only a logical potentiality has become a historical actuality whose logical outcome is the complete submission of the globe to the regime of value.

Philosophical interlude

No more than an extended set of notes, really, since to do justice to the topic requires another volume, while to ignore it completely leaves too many threads of the argument dangling. In fact, we have been intervening throughout in philosophical debates, without explicitly saying as much; here we need only say a little further, so as to round matters out before launching into the question of how to transform capitalism.

The Australian eco-philosopher Arran Gare develops the notion of a kind of "wrong turn" taken by civilization, one manifestation

of which was the postulation of a higher realm of being over the world of mere matter. We might call this the philosophical reflex of the domination of nature. That it took at first the shape of Neoplatonism, that is, at the cradle of Christianity, is less important for us than the fact that an idea of this sort keeps reproducing itself according to specifics of different epochs. This was the mutation that engendered Christianity's flight from the body, leaving in its wake a space of abstraction from which the line to capital can be drawn. As Gare's account makes clear, offshoots of this attitude remain active in many non-religious intellectual ideologies, for example, as *mechanical materialism*, which enshrines the deadening of matter by neglecting nature's formativity, or *Social Darwinism*, which naturalizes capitalist competition, seeing it as a fundamental principle of life.²⁸

While it is nonsense to reduce ideas to material interests (after all, material interests include ideas and are shaped by ideas), it is necessary to regard all thinking as conjunctural, as no philosopher can do other but try to make sense out of the world as he or she has been thrown into it. All thinkers have positions, and take positions, of which their philosophies are necessarily expressions. Before there was Neoplatonism there was Platonism, which first elaborated the idea of essences; and we know enough about Plato to recognize the impulse behind his thought to establish philosophers as rulers, in the meantime subduing the common people with a strong state that condensed class relations into abstract principles while mystifying them with propaganda. Wherever, then, there is postulated a "higher reality" standing over mere reality, we may expect the thinker in question to have somewhere in mind, the installation of a class system with higher people over mere helots, needless to say, with himself on the side of the rulers. This went for Plato and, in recent times, for the great Martin Heidegger, whose ontology cannot – and more to the point, should not – ever be separated from his explicit Nazism.²⁹ Heidegger is of special importance, as his thought is regarded very seriously by deep ecologists, particularly in regard to the critique of technology, where he even takes to task the notion of

efficient cause.³⁰ He asks: is not the notion of efficient cause itself a concomitant of technological domination? Does it not therefore perpetuate the estrangement from nature and ultimately the ecological crisis? For Heidegger, the efficient cause does not stand apart from the instrumental cause, but is essentially instrumentally writ large.

Why, he argues, seek a "*causa efficiens*" which "brings about the effect that is the finished [product]," and that becomes "the standard for all causality," but at the same time drowns out the other Aristotelian causes: the *causa materialis*, or material out of which a thing is made; the *causa finalis*, the end to which it is put? To Heidegger, the authentic technological attitude does not privilege any aspect of causality, but rather sees all four as "the ways, all belonging at once to each other, of being responsible for something else." From another angle, Heidegger posits a much more intimate and nonlinear relation between cause and effect than is conveyed in the notion of efficient cause, seen as a kind of demijurge standing behind the world and moving it.

The notion is developed in relation to a silver chalice made as a sacrificial vessel. Using terms such as "indebtedness," "considering," and "gathering," Heidegger conveys how a tool-using human can take responsibility for the "bringing-forth," or *poiesis*, of new being. In his later period (this essay was first composed as a lecture in the early 1950s), Heidegger saw the truth of being as a "presenting"; hence, "Every occasion for whatever passes beyond the nonpresent and goes forth into presenting is *poiesis*, bringing-forth." Far from being anti-technological, then, Heidegger sees technology as, ideally, an elementary form of the "coming into being" that is the human contribution to the real; it is to be set alongside nature's bringing-forth, or *physis*, by which is meant "the arising of something out of itself," like the "bursting of a blossom into bloom."

Bringing forth gathers the four modes of causality; hence revealing, or presenting, is the highest mode of technology. Following the Greek sense, Heidegger locates this true meaning as

techné, and groups the technical approach to reality with "the arts of the mind and the fine arts."

Whoever builds a house or a ship or forges a sacrificial chalice reveals what is to be brought forth, according to the terms of the four modes of occasioning. This revealing gathers together in advance the aspect and the matter of ship or house, with a view to the finished thing envisioned as completed, and from this gathering determines the manner of its construction. Thus what is decisive in *techné* does not lie at all in making and manipulating nor in the using of means, but rather in the revealing mentioned before. It is as revealing, and not as manufacturing, that *techné* is a bringing-forth. (295)

Under conditions of our estrangement, things have not worked out this way: "the revealing that holds sway throughout modern technology does not unfold into a bringing-forth in the sense of *poiesis*." Instead, it is a "challenging . . . which puts to nature the unreasonable demand that it supply energy which can be extracted and stored as such." The earth is now reduced to a repository of resources; and this degrades both mineral and agricultural practice. It is an "expediting" directed toward "driving on to the maximum yield at the minimum expense." There is a "monstrousness that reigns here," for the description of which Heidegger sets out another set of ontological terms, to go along with challenging: "setting-upon," "ordering," and "standing reserve" (this being a kind of hypostasis, in which "everything is ordered to stand by, to be immediately on hand, indeed to stand there just so that it may be on call for a further ordering.")

Heidegger integrates this critique in the term, "en-framing" (*Ge-stell*). This accounts for the dependence of modern technology on physical science; more deeply, it suggests the way in which being is frozen and constrained under the spiritually desolate condition of modernity. From this point, Heidegger derives many of the phenomena inherent to this way of technical being, from the reduction of God to a mere *causa efficiens*, to the self-estrangement of "man." "Where this ordering holds

sway, it drives out every other possibility of revealing." Thus, enframing technology becomes hegemonic, and the very possibility of truth withers.

Heidegger concludes his essay optimistically: there is a "saving power" growing in the midst of the danger posed by enframing. For there is a "granting," too, in the midst of technology, and this can be gathered as a saving power. How? If we "ponder this arising," and, in recollection, "watch over it." In this way we can get beyond the notion of technology as an instrument, not through "human activity," but by "reflection": we can "ponder the fact that all saving power must be of a higher essence than what is endangered, though at the same time kindred to it." Specifically, Heidegger calls for the enhancement of an artistic dimension, not for aesthetic purposes alone, but as his Greeks did, for the purpose of revealing: "The closer we come to the danger, the more brightly do the ways into the saving power begin to shine and the more questioning we become. For questioning is the piety of thought" (317).

Taking his cue, let us question Heidegger, though perhaps not with piety. Begin with the question of universality. A thinker of Heidegger's magnitude, one of the philosophical luminaries of the twentieth century, must, one should think, stand for the whole of humankind if he is to command respect. And indeed he claims to do just this, if only through his continual reference to "man" as the subject and object of his discourse, viz: "Who accomplishes the challenging setting-upon through which what we call the real is revealed as standing-reserve? Obviously, man. To what extent is man capable of such a revealing?" (299). We may translate this: who is the agent of the pathological relation to technology that is causing the ecological crisis? The answer to this is, self-evidently, man. At this point the questioning of Heidegger may commence. For the usage of an undifferentiated "man" as the subject of technological degradation is a highly dubious way to confront the ecological crisis.

Who is this "man"? Logically, it is either somebody or everybody, and if the latter, it is either all of us as an undifferentiated

mass, or all of us in some kind of internal relation – a hierarchy like patriarchy or class, in other words, some articulation of the social world.

The articulated view opens onto an effective understanding of the crisis. But it is not the one chosen by Heidegger, who, instead of articulating the real character of humanity, splits it into two equally unsatisfactory moieties. Manifestly, he speaks for an undifferentiated notion of "man"; concretely and practically, however, he speaks only for the Northern European elites. Heidegger really speaks just for some people, but as this would absolutely violate the spirit of his discourse and the supreme abstraction of his language, he ascends into the fuzzy realm of a falsely universalized subject.

How do we know that Heidegger speaks just for the dominant classes of Northern Europeans? There is the matter of his personal history, which was only evaded and never repudiated during the years when this essay was gestated. The younger Heidegger was acutely aware that philosophical syntheses are reflective of real struggles and cannot be fulfilled unless the philosopher intervenes in these struggles. In this spirit he connected his philosophical project of curing the malaise of modern society to National Socialism, and saw the Nazi Party as capable of healing this lesion by taking state power in Germany.³¹ The Nazi career of Heidegger was one of the great intellectual scandals of the twentieth century, and the shame of it undoubtedly contributed to a certain gnomic tendency in his later thought, such as we see in essays of this kind, where elliptical phrases, neologisms, and scurrying through the language of antiquity for authenticity, maintain the illusion that no specific program for transformation need be enunciated. But Nazism was nothing if not a specific project. Whatever else can be said about the Third Reich, there can be no doubt that whoever signed up to its principles (and Heidegger was a party member and a major official at Freiburg, one of Germany's leading universities) affirmed a radically racist view of the world, within which, of course, the Northern European elites occupied the master role.

We can see directly within the present text how Heidegger refuses to define a specific agent for the crisis, however much its logic may demand this – and also why the question of efficient cause is distasteful to him, as this methodology, used faithfully, would disclose his dreadful partiality. And so Heidegger talks movingly of the revealing expressed in the making of a silver chalice, but glosses over the reality that has degraded craftsmanship and its spiritual associations. For who makes chalices any more? Why not address the people who make Barbie dolls, or methyl isocyanate, or overpriced sneakers, or cluster bombs – and who can stop doing so if they are willing to starve, or lose their health insurance, or not make the mortgage payments on the house?³² Are not the real conditions of their labor the causal elements in the deterioration of their *techné*?

Heidegger talks elsewhere of the “forester” who no longer “walks the forest path in the same way his grandfather did” because he is “today ordered by the industry that produces commercial woods” thus making him “subordinate to the orderability of cellulose.” Yes, yes, excellent to talk of this, but why not go on to the “industry” as a causal mover – not because of the essence of “industrialization” that it bears, but because it is going to serve the lord of capital that reduces trees to cellulose? Nor should this be talked of in strictly metaphorical terms: Who is this industry? There are real people involved, who personify the great forces of the capital system yet must also be held morally, politically, and legally responsible, as the management of Union Carbide should have been held responsible for Bhopal.

Similar reflections are in order for the peasants whose downfall Heidegger laments – and who fell, and continue to fall all over the world, because of the encroachment of the same profit motive. And of course, the same goes for one of his most important insights, that there is something active at work in the world which “puts to nature the unreasonable demand that it supply energy which can be extracted and stored as such.” Does this something simply arrive, like Athene, from the head of its father? Or is it the product of a vast transformation only understandable

in terms of the inexorable force of capital? Is it the self-generated exfoliation of an original estrangement, carried out without any mediations in the real world? Well, then, one still has to explain the many forms of said mediations, like stock exchanges, oil pipelines, credit cards, police, and armies.

If one draws all the appropriate inferences that point to such a conclusion, but refuses to name it as such, then one is mystifying, and as with all mystifications, supporting the status quo. It is striking how closely Heidegger's critique of technology can be applied to the capital system, yet never bridges across to this most obvious point. This is not to deny that his critique runs far beyond the ordinary insights derived from political economy. Heidegger's insights are, as he intended, profound: they advance our view of what is wrong and what has to be done to right it in a way that no political-economic analysis of the ecological crisis can touch. But what is merely profound swims at an inaccessible and meaningless depth. More, it can be used for malignant purposes. We dwell on Heidegger not just because of his philosophical eminence, but essentially because reasoning of this sort has been repeatedly used for malignant purposes. Behind the discourse of “ecology” can lurk, therefore, a specter of fascism. We return to the theme below.

Philosophy can and should be an active force extending the reach of political economy. In this regard, it seems to me necessary to postulate a methodological principle that embodies the paramount goal of reintegrating ecosystems. We have seen how the world of capital is riddled with the sequelae of splitting, and how ecosystemic integrity is critically dependent upon differentiation. It follows that we need to overcome splitting with differentiation, in thought as well as practice. We need, therefore, a method incorporating the notion of differentiation.

Let us recall some conditions for this. A differentiated relationship is one in which elements of an ecosystem are brought together in a process of mutual recognition that respects their wholeness and integrity. There are three terms here, each needing explanation: the elements are presumed different, yet capable of

entering into a relationship; the entering upon this relationship requires the specific activity of an agent; and, finally, the mutual recognition implies identity-in-difference: entities are what their being is, yet this being is defined in the relationship to the other. In this case, we are speaking of bringing different ideas together, and, as we have seen for other aspects of differentiated production like gardening, holding them so that the life within them can be expressed as the formation of an integral whole.

A moment's reflection will tell us that we have been speaking here of a process broadly defined as *dialectical*. And since we may claim some lineage from the ancient Greeks too, we may recall that for these progenitors of philosophy, dialectic meant the bringing together of different points of view for the purposes of argument, and in the interests of arriving at truth.³³ Dialectic was not a mere pluralism but a consciousness of the radical unfulfillment of the merely individual mind, or ego, and of the hidden relationships of differing points of view. Dialectics recognizes both the limits and powers of the mind: that we are limited in our knowing, owing to the unfathomable reaches of nature which can be grasped intuitively at best, and owing, also, to the peculiarities and illusions of human selfhood, with its "dialectic" of separation and attachment ... but it also recognizes that we are powerful because of the capacity of the imagination to remain open to nature and to its shape in other human beings. Hence dialectics as practice is the bringing together of minds in a dialogical spirit of open discourse – a process the fulfillment of which requires a free society of associated producers, that is, a society beyond all forms of splitting, in particular, those imposed by class and gender or racial domination. Without this, the genius of those forced into the subaltern position will wither into ignorance, superstition, and apathy, while the logic of the masters will be fatally corrupted by power.

There is, in addition to dialectics as practice, the question of dialectics as logic, which we can only barely pursue here, except to say that it must be an abstraction from practice that remains in contact with practice – i.e. differentiated and not split-off from it.

Here the prime dialectical category is *negation*, as that which both is and is not itself. In line with this, dialectic must be capable of guiding practice as well, so that for dialectical realization, theory is practical, and practice is theoretical – a condition known generically as *praxis*.³⁴

Finally, in this highly compressed account, we need to inquire as to the "dialectics of nature."³⁵ It is plain, first, that any such notion cannot privilege the "higher reality" over mere being, as this aggrandizes ecosystemic splitting into a metaphysic. The notion of dialectic is grounded in the formativeness of nature – it is, one might say, nature's formativity refracted through the human mind, the flux of nature, its absencing and presence-ing, made word. As differentiated ecosystems will tend to bring forth life, so is dialectic the location of human creativity. But we do not project the laws of dialectical logic into nature, for the twofold reason that these laws are abstracted from *human* practice, and that human practical activity, including the workings of thought, is conducted at a great remove from the ultimate workings of the universe. For the great majority of humankind, there is simply no elaboration of this into consciousness beyond a sense of awe – although it must be said, and left at that for now, that the greatest minds, including a considerable number of modern physicists, assert the participation of their thinking in the great reaches of the cosmos and the fine grain of matter and energy.³⁶

The precondition of an ecologically rational attitude toward nature is the recognition that nature far surpasses us and has its own *intrinsic value*, irreducible to our practice. Thus we achieve differentiation from nature. It is in this light that we would approach the question of transforming practice ecologically – or, as we now recognize to be the same thing, dialectically.

On the reformability of capitalism

The monster that now bestrides the world was born of the conjugation of value and dominated labor. From the former arose the quantification of reality, and, with this, the loss of

the differentiated recognition essential for ecosystemic integrity; from the latter emerged a kind of selfhood that could swim in these icy waters. From this standpoint one might call capitalism a "regime of the Ego," meaning that under its auspices a kind of estranged self emerges as the mode of capital's reproduction. This self is not merely prideful - the ordinary connotation of "egotistical" - though under capitalism it certainly exhibits *hubris*; more fully, it is the ensemble of those relations that embody the domination of nature from one side, and, from the other, ensure the reproduction of capital. This Ego is the latest version of the purified male principle, emerging millennia after the initial crime and reflecting the absorption and rationalization of gender domination into profitability and self-maximization (allowing suitable "power-women" to join the dance). It is a pure culture of splitting and non-recognition: it recognizes neither itself, nor the otherness of nature, nor the nature of others. In terms of the preceding discussion, it is the elevation of the merely individual and isolated mind-as-ego into a reigning principle.³⁷

Capital produces egoic relations, which reproduce capital. The isolated selves of the capitalist order can choose to become personifications of capital, or may have the role thrust upon them. In either case, they embark upon a pattern of non-recognition mandated by the fact that the almighty dollar interposes itself between all elements of experience: all things in the world, all other persons, and between the self and its world. Hence nothing really exists except in and through monetization. This setup provides an ideal culture medium for the bacillus of competition and ruthless self-maximization. Because money is all that "counts," a peculiar heartlessness characterizes capitalists, a tough-minded and cold abstraction that will sacrifice species, whole continents (viz Africa) or inconvenient subsets of the population (viz black urban males) who add too little to the great march of surplus value, or may be seen as standing in its way, or simply are suitable objects of demonization to distract the masses. The presence of value screens out genuine fellow-feeling or compassion, replacing it with the calculus of profit-expansion. Never has a holocaust

been carried out so impersonally. When the Nazis killed their victims, the crimes were accompanied by a racist drumbeat; for global capital, the losses are regrettable necessities or collateral damage.

The value-term that subsumes everything into the spell of capital sets going a kind of wheel of accumulation, from production to consumption and back, spinning ever more rapidly as the inertial mass of capital grows, and generating its force field as a spinning magnet generates an electrical field. This phenomenon has important implications for the reformability of the system. Because capital is so spectral, and succeeds so well in ideologically mystifying its real nature, attention is constantly deflected from the actual source of eco-destabilization to the instruments by which that source acts. The real problem, however, is the whole mass of globally accumulated capital, along with the speed of its circulation and the class structures sustaining this. That is what generates the force field, in proportion to its own scale; and it is this force field, acting across the numberless points of insertion that constitute the ecosphere, that creates ever-larger agglomerations of capital, sets the ecological crisis going, and keeps it from being resolved. For one fact may be taken as certain - that to resolve the ecological crisis as a whole, as against tidying up one corner or another, is radically incompatible with the existence of gigantic pools of capital, the force field these induce, the criminal underworld with which they connect and, by extension, the elites who comprise the transnational bourgeoisie. And by not resolving the crisis as a whole, we open ourselves to the specter of another mythical creature, the many-headed hydra that regenerates itself the more its individual tentacle-heads are chopped away.

To realize this is to recognize that there is no compromising with capital, no schema of reformism that will clean up its act by making it behave more greenly or efficiently. We shall explore the practical implications of this thesis in our final section, and here need simply to restate the conclusion in blunt terms: green capital, or non-polluting capital, is preferable to the

ecodestructive breed on its immediate terms. But this is the lesser point, and diminishes with its very success. For green capital (or "socially/ecologically responsible investing") exists, by its very capital-nature, essentially to create more value, and this leaches away from the concretely green location to join the great pool, and follows its force field into zones of greater concentration, expanded profitability - and greater ecodestruction.

There are crises within capitalism, which both generates them and is dependent upon them. Crises are ruptures in the accumulation process, causing the wheel to slow, but also stimulating new turns; they take many shapes, have long or short cycles, and many intricate effects upon ecologies. A recession may reduce demand and so take some of the load off resources; recovery may increase this demand, but also occur with greater efficiency, hence also reduce the load. Thus economic crises condition the ecological crisis, but have no necessary effect on it. There is no singular generalization that covers all cases. James O'Connor summarizes the complexity:

Capitalist accumulation normally causes ecological crisis of certain types; economic crisis is associated with partly different and partly similar ecological problems of different severity; external barriers to capital in the form of scarce resources, urban space, healthy and disciplined wage labor, and other conditions of production may have the effect of raising costs and threatening profits; and finally, environmental and other social movements defending conditions of life, forests, soil quality, amenities, health conditions, urban space, and so on, may also raise costs and make capital less flexible.³⁸

But capital gets nature whether on its way up or its way down. In the United States, the boom-boom Clinton years witnessed grotesque increases in matters like the sowing of the ecosphere with toxic chemicals;³⁹ while the sharp downturn that accompanied the advent of George W. Bush's presidency was immediately met by rejection of the Kyoto Protocols. From the standpoint of ecosystems, the phase of the business cycle is considerably

less relevant, then, than the fact of the business cycle, and the wanton economic system it expresses.

Economic problems interact with ecological problems, while ecological problems (including the effects of ecological movements) interact with economic problems. This is all at the level of the trees. For the forest, meanwhile, we see the effects on the planetary ecology caused by the growth of the system as a whole. Here the dark angel is the thermodynamic law, where mounting entropy appears as ecosystemic decay.⁴⁰ The immediate impacts of this on life are what energizes the resistance embodied in the environmental and ecological movements. Meanwhile, the economy goes on along its growth-intoxicated way, immune to the effects of ecosystem breakdown on accumulation, and blindly careening toward the abyss.

The conclusion must be that, irrespective of the particulars of one economic interaction or another, the system as a whole is causing irreparable damage to its ecological foundations, and that it does so precisely as it grows. And since the one underlying feature of all aspects of capital is the relentless pressure to grow, we are obliged to bring down the capitalist system as a whole, and replace it with an ecologically viable alternative, if we want to save our species along with numberless others.