

WEEK TWO

Chapter Six



THE CARTESIAN MASCULINIZATION OF THOUGHT AND THE SEVENTEENTH-CENTURY FLIGHT FROM THE FEMININE

[I]f a kind of Cartesian ideal were ever completely fulfilled, i.e., if the whole of nature were only what can be explained in terms of mathematical relationships — then we would look at the world with that fearful sense of alienation, with that utter loss of reality with which a future schizophrenic child looks at his mother. A machine cannot give birth.

Karl Stern, *The Flight From Woman*

PHILOSOPHICAL RECONSTRUCTION, ANXIETY AND FLIGHT

If the transition from Middle Ages to early modernity can be looked on as a kind of protracted birth, from which the human being emerges as a decisively separate entity, no longer continuous with the universe with which it had once shared a soul, so the possibility of objectivity, strikingly, is conceived by Descartes as a kind of rebirth, on one's own terms, this time.

We are all familiar with the dominant Cartesian themes of starting anew, alone, without influence from the past or other people, with the guidance of reason alone. The product of our original and actual birth, childhood, being ruled by the body, is the source of most obscurity and confusion in our thinking. As Descartes says in the Discourse, "since we have all been children before being men . . . it is almost impossible that our judgements should be so excellent or solid as they would have been had we had complete

use of our reason since our birth, and had we been guided by its means alone" (HR, I, 88). The specific origins of obscurity in our thinking are, as we have seen, the appetites, the influence of our teachers, and the "prejudices" of childhood. Those "prejudices" all have a common form: the inability, due to our infantile "immersion" in the body, to distinguish properly between subject and object. The purification of the relation between knower and known requires the repudiation of childhood, a theme which was not uncommon at the time. The ideology of childhood as a time of "innocence," and the child as an epistemological *tabula rasa*, had yet to become popular (Aries, 100-133). Rather, childhood was commonly associated, as Descartes associated it, with sensuality, animality, and the mystifications of the body.¹

For Descartes, happily, the state of childhood can be revoked, through a deliberate and methodical reversal of all the prejudices acquired within it, and a beginning anew with reason as one's only parent. This is precisely what the *Meditations* attempts to do. The mind is emptied of all that it has been taught. The body of infancy, preoccupied with appetite and sense-experience, is transcended. The clear and distinct ideas are released from their obscuring material prison. The end-result is a philosophical reconstruction which secures all the boundaries which, in childhood (and at the start of the *Meditations*) are so fragile: between the "inner" and the "outer," between the subjective and the objective, between self and world.

It is crucial to recall here that what for Descartes is conceived as epistemological threat — "subjectivity," or the blurring of boundaries between self and world — was not conceived as such by the medievals. Rather, the medieval sense of relatedness to the world, as we know from its art, literature, and philosophy, had not depended on "objectivity" but on continuity between the human and physical realms, on the interpenetrations, through meanings, of self and world. But locatedness in space and time, by Descartes's era, had inexorably come to the forefront of human experience, and the continuities and penetrations which had once been a source of intellectual and spiritual satisfaction now presented themselves as "distortions" caused by personal attachment and "perspective." Objectivity, not meaning, became the issue, and "so long as the human being is embedded in nature and united with it, objectivity is impossible" (Stern, 76). By the time of Kant, this "condition" for knowledge — the separation of knower and known — is philosophically apprehended. Human intelligence, Kant discovers, is founded on the distinction between subject and object. The condition of having an objective world, on the Kantian view, is to grasp

phenomena as unified and connected by the embrace of a discrete consciousness, capable of representing to itself its own distinctness from the world it grasps. But what Kant here "discovers" (and what came to be regarded as a given in modern science and philosophy) was a while in the making. For Descartes, the separation of subject and object is a project, not a "foundation" to be discovered.

As we saw in the preceding essay, the Cartesian reconstruction has two interrelated dimensions. On the one hand, a new model of knowledge is conceived, in which the purity of the intellect is guaranteed through its ability to transcend the body. On the other hand, the ontological blueprint of the order of things is refashioned. The spiritual and the corporeal are now two distinct substances which share no qualities (other than being created), permit of interaction but no merging, and are each defined precisely in opposition to the other. *Res cogitans* is "a thinking and unextended thing"; *res extensa* is "an extended and unthinking thing" (I, 190). This mutual exclusion of *res cogitans* and *res extensa* made possible the conceptualization of complete intellectual independence from the body, *res extensa* of the human being and chief impediment to human objectivity. The dictotomy between the spiritual and the corporeal also established the utter disjunction of the natural world from the realm of the human.² It now became inappropriate to speak, as the medievals had done, in anthropocentric terms about nature, which for Descartes is pure *res extensa*, "totally devoid of mind and thought." More important, it means that the values and significances of things in relation to the human realm must be understood as purely a reflection of how we feel about them, having nothing to do with their "objective" qualities.

"Thus," says Whitehead, in sardonic criticism of the "characteristic scientific philosophy" of the seventeenth century, "the poets are entirely mistaken. They should address their lyrics to themselves, and should turn them into odes of self-congratulation ... Nature is a dull affair, soundless, scentless, colourless; merely the hurrying of material, endlessly, meaninglessly" (1925, p. 54). For the model of knowledge which results, neither bodily response (the sensual or the emotional) nor associational thinking, exploring the various personal or spiritual meanings the object has for us, can tell us anything about the object "itself": *It can only be grasped, as Gillispie puts it, "by measurement rather than sympathy"* (p. 42). Thus, the specter of infantile subjectivism is overcome by the possibility of a cool, impersonal, distanced cognitive relation to the world. At the same time, the nightmare landscape of the infinite universe has become the well-lit laboratory of modern science and philosophy.

The conversion of nightmare into positive vision is characteristic of Descartes. Within the narrative framework of the *Meditations*, "dreamers, demons, and madmen" are exorcised, the crazily fragmented "enchanted glass" of the mind (as Bacon called it) is transformed into the "mirror of nature," the true reflector of things. But such transformations, as Descartes's determinedly upbeat interpretation of his own famous nightmare suggests, may be grounded in defense — in the suppression of anxiety, uncertainty, and dread. Certainly, anxiety infuses the *Meditations*, as I have argued through my reading of the text. I have tried, too, to show that Cartesian anxiety was a cultural anxiety, arising from discoveries, inventions, and events which were major and disorienting.

That disorientation, I have suggested, is given psychocultural coherence via a "story" of partition from the organic universe of the Middle Ages and Renaissance, out of which emerged the modern categories of "self," "locatedness," and "innerness." This partition was initially experienced as loss, that is, as estrangement, and the opening up of a chasm between self and nature. Epistemologically, that estrangement expresses itself in a renewal of scepticism, and in an unprecedented anxiety over the possibility of reaching the world as "it" is. Spiritually, it expresses itself in anxiety over the enclosedness of the individual self, the isolating uniqueness of each individual allotment in time and space, and the arbitrary, incomprehensible nature of that allotment by an alien, indifferent universe. We may speak here, meaningfully, of a cultural "separation anxiety."

The particular genius of Descartes was to have philosophically transformed what was first experienced as estrangement and loss — the sundering of the organic ties between the person and world — into a requirement for the growth of human knowledge and progress. And at this point, we are in a better position to flesh out the mechanism of *defense* involved here. Cartesian objectivism and mechanism, I will propose, should be understood as a *reaction-formation* — a denial of the "separation anxiety" described above, facilitated by an aggressive intellectual *flight* from the female cosmos and "feminine" orientation towards the world. That orientation (described so far in this study in the gender-neutral terminology of "participating consciousness") had still played a formidable role in medieval and Renaissance thought and culture. In the seventeenth century, it was decisively purged from the dominant intellectual culture, through the Cartesian "rebirth" and restructuring of knowledge and world as *masculine*.

I will begin by exploring the mechanist flight from the female cosmos

(which Carolyn Merchant has called "The Death of Nature"). Then, I will

focus on the specifically epistemological expression of the seventeenth-century flight from the feminine: "the Cartesian masculinization of thought." Both the mechanist reconstruction of the world and the objectivist reconstruction of knowledge will then be examined as embodying a common psychological structure: a fantasy of "re-birthing" self and world, brought into play by the disintegration of the organic, female cosmos of the Middle Ages and Renaissance. This philosophical fantasy will be situated within the general context of seventeenth-century attitudes toward female generativity, as chronicled by a number of feminist authors. Finally, the relevance of these ideas to current discussions about gender and rationality, and to current reassessments of Cartesianism, will be considered in a concluding section of this chapter.

THE DEATH OF NATURE AND THE MASCLINIZATION OF THOUGHT

Discussion of "masculinity" and "femininity" is a new motif in this study. Yet gender has played an implicit role all along. For the medieval cosmos whose destruction gave birth to the modern sensibility was a mother-cosmos, and the soul which Descartes drained from the natural world was a female soul. Carolyn Merchant, whose ground-breaking interdisciplinary study, *The Death of Nature*, chronicles the changing imagery of nature in this period, describes the "organic cosmology" which mechanism overthrew:

Minerals and metals ripened in the uterus of the Earth Mother, mines were compared to her vagina, and metallurgy was the human hastening of the living metal in the artificial womb of the furnace . . . Miners offered propitiation to the deities of the soil, performed ceremonial sacrifices . . . sexual abstinence, fasting, before violating the sacredness of the living earth by sinking a mine (p. 4).

The notion of the natural world as *mothered* has sources, for the Western tradition, in both Plato and Aristotle. In Plato's *Timaeus*, the formless "receptacle" or "nurse" provides the substratum of all determinate materiality. (As noted in essay four, it is also referred to as "space" — *chora* — in the dialogue.) The "receptacle" is likened to a mother because of its receptivity to impression; the father is the "source or spring" — the eternal forms which "enter" and "stir and inform her." The child is the determinate nature which is formed through their union: the *body* of nature (51).

In this account, the earth is not a mother, but is itself a child of the union of "nurse" and forms. The notion that the earth *itself* mothers things,

for example, metals and minerals, required the inspiration of the Aristotelian theory of animal reproduction. In that theory, the female provides not only matter as "substratum," but matter as sensible "stuff": the *catamenia*, or menstrual material, which is "worked upon" and shaped by the "effective and active" element, the semen of the male (729a–729b). In the fifteenth and sixteenth centuries, this account of animal generation was "projected" onto the cosmos. A "stock description" of biological generation in nature was the marriage of heaven and earth, and the impregnation of the (female) earth by the dew and rain created by the movements of the (masculine) celestial heavens (Merchant, 16).

The female element here is *natura naturata*, of course — passive rather than creative nature. But passivity here connotes receptivity rather than inertness; only a living, breathing earth can be impregnated. And indeed, for Plato most explicitly, the world has a soul — a female soul — which permeates the corporeal body of the universe. In the seventeenth century, as Merchant argues, that female world-soul died — or more precisely, was *murdered* — by the mechanist re-visioning of nature.

This re-visioning of the universe as a machine — most often, a clockwork — was not the work of philosophers alone. Astronomy and anatomy had already changed the dominant picture of the movements of the heavens and the processes of the body by the time the *Meditations* were written. But it was philosophy, and Descartes in particular, that provided the cosmology that integrated these discoveries into a consistent and unified view of nature. By Descartes's brilliant stroke, nature became *defined* by its lack of affiliation with divinity, with spirit. All that which is God-like or spiritual — freedom, will, and sentience — belong entirely and exclusively to *res cogitans*. All else — the earth, the heavens, animals, the human body — is merely mechanically interacting matter.

The seventeenth century saw the death, too, of another sort of "feminine principle" — that cluster of epistemological values, often associated with feminine consciousness,³ and which apparently played a large and respected role in hermetic philosophy and, it might be argued, in the prescientific orientation toward the world in general. If the key terms in the Cartesian hierarchy of epistemological values are clarity and distinctness — qualities which mark each object off from the other and from the knower — the key term in this alternative scheme of values might be designated (following Gillispie's contrast here) as *sympathy*. "Sympathetic" understanding of the object is that which understands it through "union" with it (Stern, 42–43), or, as James Hillman describes it, through "merging with" or "marrying" it.

To merge with or marry that which is to be known means, for Hillman, "letting interior movement replace clarity, interior closeness replace objectivity" (*The Myth of Analysis*, 293). It means granting personal or intuitive response a positive epistemological value, even (perhaps especially) when such response is contradictory or fragmented. "Sympathetic" thinking, Marceuse suggests, is the only mode which truly respects the object, that is, which allows the variety of its meanings to unfold without coercion or too-focused interrogation (p. 74).

Barfield's and Berman's discussions of medieval "participating consciousness," Bergson's notion of "intellectual sympathy," Jasper's "causality from within," all contain elements of what I have here called "sympathetic thinking." The deepest understanding of that which is to be known comes, each argues, not from analysis of parts but from "placing oneself within" the full being of an object, as Bergson puts it, (at which point it ceases to be an "object" in the usual sense) and allowing it to speak.

An emphasis on the knower's *passivity* is shared by this ideal of knowledge and the Cartesian ideal. But whereas passivity for Descartes (and for Bacon) meant yielding to the authority of the object's "own" nature, for sympathetic thinking, the objective and subjective merge, participate in the creation of meaning. The most inspired and articulate contemporary advocates of what I am here calling "sympathetic thinking" are Carol Gilligan (1982) and Evelyn Fox Keller (1985), each of whom speaks forcefully to the need for integration of such thinking into our dominant conceptions of rationality. This does not mean a rejection, but a *re-visioning* of "objectivity": Keller's conception of "dynamic objectivity" is especially relevant here:

Dynamic objectivity is . . . a pursuit of knowledge that makes use of subjective experience . . . in the interests of a more effective objectivity. Premised on continuity, it recognizes difference between self and other as an opportunity for a deeper and more articulated kinship. The struggle to disentangle self from other is itself a source of insight — potentially into the nature of both self and other. It is a principle means for divining what Poincaré calls "hidden harmonies and relations." To this end, the scientist employs a form of attention to the natural world that is like one's ideal attention to the human world: it is a form of love (p. 117).

In contrast to the conception of "dynamic objectivity," Descartes's program for the purification of the understanding, as we have seen, has as its ideal the rendering *impossible* of any such continuity between subject and object. The scientific mind must be cleansed of all its "sympathies" toward

the objects it tries to understand. It must cultivate absolute detachment. Recognizing the centrality of such ideals to modern science has led writers like Sandra Harding to characterize modern science in terms of a "super-masculinization of rational thought."⁴ Similarly, Karl Stern has said that "[what] we encounter in Cartesian rationalism is the pure masculinization of thought" (p. 104). The notion that modern science crystallizes masculinist modes of thinking is a theme, too, in the work of James Hillman; "The specific consciousness we call scientific, Western and modern," says Hillman, "is the long sharpened tool of the masculine mind that has discarded parts of its own substance, calling it 'Eve,' 'female,' and 'inferior'" (*The Myth of Analysis*, 250). Evelyn Fox Keller's *Reflections On Gender and Science* systematically explores various perspectives (including developmental perspectives) on the connection between masculinity and modern science. It must be stressed that descriptions of modern science as a "masculinization of thought" refer to what these authors view as characteristic cognitive and theoretical biases of male-dominated science, not the fact of that male dominance itself, or science's attitudes toward women. Science has, of course, a long history of discrimination against women, insisting that women cannot measure up to the rigor, persistence, or clarity that science requires.

It also has its share of explicitly misogynist doctrine, as does its ancient forefathers, Aristotle and Galen. But the most interesting contemporary discussions of the "masculinist" nature of modern science describe a different, though related, aspect of its "masculinism": a characteristic cognitive style, an epistemological stance which is required of men and women working in the sciences today. In the words of Evelyn Fox Keller:

The scientific mind is set apart from what is to be known, i.e., from nature, and its autonomy is guaranteed . . . by setting apart its modes of knowing from those in which the dichotomy is threatened. In this process, the characterization of both the scientific mind and its modes of access to knowledge as masculine is indeed significant. Masculine here connotes, as it so often does, autonomy, separation, and distance . . . a radical rejection of any commingling of subject and object (p. 79).

It is in this sense that the dominant scientific and philosophic culture of the seventeenth century indeed inaugurated "a truly masculine birth of time," as Francis Bacon had proclaimed it (Farrington). Similarly and strikingly, Henry Oldenberg, secretary of the Royal Society, asserted in 1664 that the business of that society was to raise "a masculine philosophy" (Easlea, 152). In her penetrating and imaginative study of sexual metaphors in the history of epistemology, Keller pays very serious attention to such historical

associations of gender and "cognitive style," which we might have thought to belong to a peculiarly contemporary mentality, but which in fact crop up frequently in Royal Society debates. As Keller reads them, the controversies between Bacon and Paracelsus become an explicit contest between masculine and feminine principles: head versus heart, domination over versus merging with the object, purified versus erotic orientation toward knowledge, and so forth (43–65). Bacon's own deepest attitudes, Keller suggests, were more complicated and ambivalent than his oft-reproduced and notorious images of male seduction, penetration, and rape of nature may indicate. But what emerges with clarity, despite any subtleties in the attitudes of individual thinkers, is that the notion of science as "masculine" is hardly a twentieth-century invention or feminist fantasy. The founders of modern science consciously and explicitly proclaimed the "masculinity" of science as inaugurating a new era. And they associated that masculinity with a cleaner, purer, more objective and more disciplined epistemological relation to the world.

The emergence of such associations, in an era which lacked our heightened modern consciousness of gender as an issue, is remarkable. They suggest that the contemporary notion that thought became "super-masculinized" at a certain point in time is not merely, as some might argue, a new, fashionable way of labelling and condemning the seventeenth-century objectivist turn — a turn, many would say, which has already been adequately described, criticized, and laid to rest by Whitehead, Heidegger, and, more recently, Richard Rorty. Bacon's metaphor, rather, urges us in the direction of confronting a profound "flight from the feminine" at the heart of both Cartesian rationalism and Baconian empiricism. To appreciate the dimensions of that "flight," however, necessitates a return to the insights of developmental psychology.

THE CARTESIAN "REBIRTH" AND THE "FATHER OF ONESELF" FANTASY

Descartes envisages for himself a kind of rebirth. Intellectual salvation comes only to the twice-born.— Frankfurt, Demons, Dreamers, and Madmen

* Psychoanalytic theory urges us to examine that which we actively repudiate for the shadow of a loss we mourn. Freud, in *Beyond the Pleasure Principle*, tells the story of an eighteen-month-old boy — an obedient, orderly little boy, as Freud describes him — who, although "greatly attached to his mother," never cried when she left him for a few hours.

This good little boy, however, had an occasional disturbing habit of taking any small objects he could get hold of and throwing them away from him into a corner, under the bed, and so on, so that hunting for his toys and picking them up was often quite a business. As he did this he gave vent to a loud, long-drawn-out 'o-o-o-o', accompanied by an expression of interest and satisfaction. His mother and the writer of the present account were agreed in thinking that this was not a mere interjection but represented the German word 'fort' ('gone'). I eventually realized that it was a game and that the only use he made of any of his toys was to play 'gone' with them . . . [The complete game [was] disappearance and return . . . The interpretation . . . became obvious. It was related to the child's great cultural achievement — the instinctual renunciation (that is, the renunciation of instinctual satisfaction) which he had made in allowing his mother to go away without protesting. He compensated himself for this, as it were, by himself staging the disappearance and return of the objects within his reach . . . Throwing away the object so that it was 'gone' might satisfy an impulse of the child's, which was suppressed in his actual life, to revenge himself on his mother for going away from him. In that case it would have a defiant meaning: 'All right, then, go away! I don't need you. I'm sending you away myself' (33-35).

The "fort-da" game and Freud's interpretation of it places the Cartesian facility for transforming anxiety into confidence, loss into mastery, in a striking new perspective. Within the context of the cultural separation anxiety described in this study, Descartes's masculine "rebirthing" of the world and self as decisively separate appears, not merely as the articulation of a positive new epistemological ideal, but as a reaction-formation to the loss of "being-one-with-the-world" brought about by the disintegration of the organic, centered, female cosmos of the Middle Ages and Renaissance. The Cartesian reconstruction of the world is a "fort-da" game — a defiant gesture of independence from the female cosmos, a gesture which is at the same time compensation for a profound loss.

Let us explore the interpretation proposed above in more detail, turning again to developmental theory for insight. The project of growing up is to one degree or another (depending on culture and child-raising practice) a project of separation, of learning to deal with the fact that mother and child are no longer one and that gratification is not always available. Social and personal strategies for the child's accomplishing this are varied; every culture no doubt has its own modes of facilitating the separation of mother and child, to the degree that such separation is required by the culture. Psychoanalytic theory has focused on internal mechanisms, describing the different responses — longing, mourning, denial — that the child may have to separation. The mechanism of denial is of particular interest for my

purposes. Although the dream of total union can persist throughout life, another, contradictory project may be conceived, psychoanalytic thinkers have suggested, centered around the denial of any longing for the lost maternal union. Instead, the child seeks mastery over the frustrations of separation and lack of gratification through an assertion of self against the mother and all that she represents and a rejection of all dependency on her. In this way, the pain of separateness is assuaged, paradoxically, by an even more definitive separation — but one that is chosen this time and aggressively pursued. It is therefore experienced as autonomy rather than helplessness in the fact of the discontinuity between self and mother.

One mode of such self-assertion is through the fantasy of becoming the parent of oneself, of "rebirthing" the self, playing the role of active parental figure rather than passive, helpless child. Such a notion of "rebirth" or "reparenting" the self figures in both Freudian and object-relations frameworks. Building on Winnicott's concept of the "transitional object" (a blanket, toy, or stuffed animal which eases the child's accommodation to and ultimate mastery over the process of separation from the mother), Ross argues that such objects function, symbolically, as the child himself. In cuddling and scolding the object, the child is actually playing at self-parenting, at being his own baby. Such self-parenting allows the child to feel less precariously at the mercy of the mother, more in control of his or her own destiny (1977).

Working from a more Freudian framework, Norman O. Brown reinterprets the Oedipal desire to "sexually" possess the mother as a fantasy of "becoming the father of oneself" (rather than the helpless child of the mother) (p. 127). Sexual activity here (or rather, the fantasy of it) becomes a means of denying the actual passivity of having been born from that original state of union into "a body of limited powers, and at a time and place [one] never chose" (deBeauvoir, 146), at the mercy of the now-alien will of the mother. The mother is still "other," but she is an other whose power has been harnessed by the will of the child. The pain of separateness is thus compensated for by the peculiar advantages of separateness: the possibility of mastery and control over that person on whom one is dependent. Melanie Klein (writing in 1928, much earlier than Brown) emphasizes the aggressive, destructive, envious impulses which may be directed against parts of the mother's body — particularly against the breasts and reproductive organs — in the child's effort to achieve such control (pp. 98-111).

Certainly, the famous Baconian imagery of sexual assault and aggressive overpowering of a willful and unruly female nature (she must "be taken by

the forelock" and "neither ought a man to make scruple of entering and penetrating these holes and corners," etc.⁵) makes new psychocultural sense in the context of these ideas. More subtly, the Cartesian project of starting anew through the revocation of one's actual childhood (during which one was "immersed" in body and nature) and the (re)creation of a world in which absolute separateness (both epistemological and ontological) from body and nature are keys to control rather than sources of anxiety can now be seen as a "father of oneself" fantasy on a highly symbolic, but profound, plane.⁶ The sundering of the organic ties between person and nature — originally experienced, as we have seen, as epistemological estrangement, as the opening up of a chasm between self and world — is reenacted, this time with the human being as the engineer and architect of the separation. Through the Cartesian "rebirth," a new "masculine" theory of knowledge is delivered, in which detachment from nature acquires a positive epistemological value. And a new world is reconstructed, one in which all generativity and creativity fall to God, the spiritual father, rather than to the female "flesh" of the world. With the same masterful stroke — the mutual opposition of the spiritual and the corporeal — the formerly female earth becomes inert matter and the objectivity of science is insured.

"She" becomes "it" — and "it" can be understood and controlled. Not through "sympathy," of course, but by virtue of the very objectivity of the "it." At the same time, the "wound" of separateness is healed through the denial that there ever "was" any union: For the mechanists, unlike Donne, the female world-soul did not die; rather the world is dead. There is nothing to mourn, nothing to lament. Indeed, the "new" epistemological anxiety is evoked, not over loss, but by the "memory" or suggestion of *union*; "sympathetic" associational, or bodily response obscures objectivity, feeling for nature muddies the clear lake of the mind. The "otherness" of nature is now what allows it to be known.

THE SEVENTEENTH-CENTURY FLIGHT FROM THE FEMININE

The philosophical "murder" of the living female earth, explored in the preceding section as a reaction-formation to the dissolution of the medieval self-world unity, must be placed in the context of other issues in the gender politics of the sixteenth and seventeenth centuries. Thanks to the historical research of such writers as Carolyn Merchant, Brian Easlea, Barbara Ehrenreich, Dierdre English, and Adrienne Rich, we have been enabled to recognize the years between 1550 and 1650 as a particularly gynophobic cen-

tury. What has been especially brought to light is what now appears as a virtual obsession with the untamed natural power of female generativity, and a dedication to bringing it under forceful cultural control.

Nightmare fantasies of female power over reproduction and birth run throughout the era. Kramer and Sprenger's *Malleus Maleficarum*, the official witch-hunter's handbook, accuses "witches" of every imaginable natural and supernatural crime involving conception and birth. The failure of crops and miscarriages were attributed to witches, and they are accused both of "inclining men to passion" and of causing impotence, of obstructing fertility in both men and women, of removing the penises of men, or procuring abortion, and of offering newborns to the devil (Lederer, 209).

Such fantasies were not limited to a fanatic fringe. Among the scientific set, we find the image of the witch, the willful, wanton virago, projected onto generative nature, whose scientific exploration, as Merchant points out, is metaphorically likened to a witch trial (169-170). The "secrets" of nature are imagined as deliberately and slyly "concealed" from the scientist (Easlea, 214). Matter, which in the *Timaeus* is passively receptive to the ordering and shaping masculine forms, now becomes, for Bacon, a "common harlot" with "an appetite and inclination to dissolve the world and fall back into the old chaos" and who must therefore be "restrained and kept in order" (Merchant 171). The womb of nature, too, (and this is striking, in connection with Melanie Klein) is no longer the benevolent mother but rather the *hoarder of precious metals and minerals*, which must be "searched" and "spied out" (Merchant, 169-70).

There were the witchhunts themselves, which, aided more politely by the gradual male takeover of birthing, and healing in general, virtually purged the healing arts of female midwives.⁷ The resulting changes in obstetrics, which rendered women passive and dependent in the process of birth, came to identify birth, as Bacon identified nature itself, with the potentiality of disorder and the need for forceful male control.⁸ So, too, in the seventeenth century, female sexuality was seen as voracious and insatiable, and a principle motivation behind witchcraft, which offered the capacious "mouth of the womb" the opportunity to copulate with the devil.⁹

The ideology of the voracious, insatiable female may not be unique to the sixteenth and seventeenth centuries. But it is not historically ubiquitous. By the second half of the nineteenth century, medical science had declared women to be naturally passive and "not much troubled by sexual feeling of any kind" (Vicinus, 82). Peter Gay suggests that this medical fantasy was a reaction-formation to that era's "pervasive sense of manhood in danger" (p.

93), brought about by its own particular social disruptions in gender relations and the family. I would suggest, along similar lines, that key changes in the seventeenth-century scientific theory of reproduction functioned in much the same way, although in reaction to different threats and disruptions.

Generativity, not sexuality, is the focus of the seventeenth century's fantasies of female passivity. Mechanist reproductive theory ("happily," as Brian Easlea sarcastically puts it) made it "no longer necessary to refer to any women at all" in its "scientific" descriptions of conception and gestation (Easlea, 49). Denied even her limited, traditional Aristotelian role of supplying the (living) menstrual material (which, shaped by the individuating male "form" results in the fetus), the woman becomes instead the mere container for the temporary housing and incubation of already-formed human beings, originally placed in Adam's semen by God, and parcelled out, over the ages, to all his male descendants.¹⁰ The specifics of mechanistic reproductive theory are a microcosmic recapitulation of the mechanistic vision itself, where God the father is the sole creative, formative principle in the cosmos. We know, from what now must be seen as almost paradigmatic examples of the power of belief over perception, that tiny horses and men were actually "seen" by mechanist scientists examining sperm under their microscopes.

All this is only to scratch the surface of a literature that has become quite extensive over the last decade. Even this brief survey, however, yields striking parallels. The mechanization of nature, we see, theoretically "quieted" the "common harlot" of matter (and sanctioned nature's exploitation) as effectively as Baconian experimental philosophy did so practically. Mechanistic reproductive theory successfully eliminated any active, generative role for the female in the processes of conception and gestation. And *actual* control over reproduction and birth was wrested away from women by the witch-hunters and the male medical establishment. Something, it seems, had come to be felt as all too powerful and in need of taming.

What can account for this upsurge of fear of female generativity? No doubt many factors — economic, political, and institutional — are crucial. But I would suggest that the themes of "parturition" and "separation anxiety" discussed in this study can provide an illuminative psychocultural framework within which to situate seventeenth-century gynophobia.

The culture in question, in the wake of the dissolution of the medieval intellectual and imaginative system, had lost a world in which the human being could feel nourished by the sense of oneness, of continuity between all things. The new, infinite universe was an indifferent home, an "alien will,"

and the sense of separateness from her was acute. Not only was she "other," but she seemed a perverse and uncontrollable other. During the years 1550–1650, a century that had brought the worst food crisis in history, violent wars, plague, and devastating poverty, the Baconian imagery of nature as an unruly and malevolent virago was no paranoid fantasy. More important, the cruelty of the world could no longer be made palatable by the old medieval sense of organic justice — that is, justice on the level of the workings of a whole with which one's identity merged and which, while perhaps not fully comprehensible, was nonetheless to be trusted. Now there is no organic unity, but only "I" and "She" — an unpredictable and seemingly arbitrary "She," whose actions cannot be understood in any of the old "sympathetic" ways.

"She" is Other. And "otherness" itself becomes dreadful — particularly the otherness of the female, whose powers have always been mysterious to men, and evocative of the mystery of existence itself. Like the infinite universe, which threatens to swallow the individual "like a speck," the female, with her strange rhythms, long acknowledged to have their chief affinities with the rhythms of the natural (now alien) world, becomes a reminder of how much lies outside the grasp of man.

"The quintessential incarnation" of that which appears to man as "mysterious, powerful and not himself," as Dorothy Dinnerstein says, is "the woman's fertile body" (p. 125). Certainly, the mother's body holds these meanings for the infant, according to Klein. If Dorothy Dinnerstein is right, women (particularly the woman-as-mother, the original "representative" of the natural world, and virtually indistinguishable from it for the human infant) are always likely targets for all later adult rage against nature.¹¹ Supporting Dinnerstein's highly theoretical account are the anthropologist Peggy Reeves Sanday's cross-cultural findings that in periods of cultural disruption and environmental stress, male social dominance — particularly over female fertility — tends to be at its most extreme (172–84). In the seventeenth century, with the universe appearing to man more decisively "not himself" than ever before, more capricious and more devastating in her capacity for disorder, both the mystery of the universe and the mystery of the female require a more definitive "solution" than had been demanded by the organic world view.¹²

The project that fell to both empirical science and "rationalism" was to tame the female universe. Empirical science did this through aggressive assault and violation of her "secrets." Rationalism, as we have seen, tamed the female universe through the philosophical neutralization of her vitality.

The barrenness of matter correlatively insured the revitalization of human hope of conquering nature (through knowledge, in this case, rather than through force). The mystery of the female, however, could not be bent to man's control simply through philosophical means. More direct and concrete means of "neutralization" were required for that project. It is within this context that witch-hunting and the male medical takeover of the processes of reproduction and birth, whatever their social and political causes, can be seen to have a profound psychocultural dimension as well.

THE CONTEMPORARY REVALUATION OF THE FEMININE

My next focus will be on the recent scholarly emergence and revaluation of epistemological and ethical perspectives "in a different voice." That voice, which classical as well as contemporary writers identify as feminine (as, e.g., in the work of Carol Gilligan, Sarah Ruddick, and Nancy Chodorow), claims a natural foundation for knowledge, not in detachment and distance, but in what I have called "sympathy": in closeness, connectedness, and empathy. It finds the failure of connection (rather than the blurring of boundaries) as the principle cause of breakdown in understanding.

In the seventeenth century, when Paracelsus articulated the alchemical conception of knowledge as a merger of mind and nature, the "female" nature of this ideal operated for him as a metaphor, as did Bacon's contrasting ideal of a virile, "masculine" science. In the second half of our own more sociologically oriented century, women themselves — not some abstract "feminine principle" — have been identified as cultural bearers of the alternative, "sympathetic" scheme of values. The research of Chodorow and Gilligan, in particular, has suggested that men and women (growing up within a particular cultural framework, it needs emphasizing) do appear to experience and conceptualize events differently, the key differences centering around different conceptions of the self/world, self/other relation.

Girls emerge . . . with a basis for "empathy" built into their primary definition of self in a way that boys do not. Girls emerge with a stronger basis for experiencing another's needs or feelings as one's own (or thinking that one is so experiencing another's needs or feelings) . . . girls come to experience themselves as less differentiated than boys, more continuous with and related to the external object-world and as differently oriented to their inner object-world as well (Chodorow, 167).

Carol Gilligan has described how these developmental differences result, in men and women, in differing valuations of attachment and autonomy, and correspondingly different conceptions of morality.

The association of cognitive style with gender is in itself nothing new. We find it in ancient mythology, in archetypal psychology, in philosophical and scientific writings, and in a host of enduring popular stereotypes about men and women (for example, that women are more "intuitive," men are more "logical," etc.). In the second half of the nineteenth century, the celebration of a distinctively female moral sensibility was widely held by both feminists and sexual conservatives. What is new in the recent feminist exploration of gender and cognitive style is a (characteristically modern) emphasis on gender as a social construction, rather than a biological or ontological given. If men and women think differently, it is argued, that is not because the sexes inevitably embody timeless "male" and "female" principles of existence, but because the sexes have been brought up differently, develop different social abilities, have occupied very different power positions in most cultures. Using a psychoanalytic framework, Nancy Chodorow explores the origins of these differences in the differing degrees of individuation from the mother demanded of boys and girls in infancy.¹³

An appreciation of the historical nature of the masculine model of knowledge to which the feminine "different voice" is often contrasted helps to underscore that the embodiment of these gender-related perspectives in actual men and women is a cultural, not a biological phenomenon. There have been cultures in which (using our terms now, not necessarily theirs) men thought more "like women," and there may be a time in the future when they do so again. In our own time, many women may be coming to think more and more "like men." The conclusion is not, however, that any association of gender and cognitive style is a reactionary mythology with no explanatory value. For the sexual division of labor within the family in the modern era has indeed fairly consistently reproduced significant cognitive and emotional differences along sexual lines. The central importance of Chodorow's work has been to show that boys have tended to grow up learning to experience the world like Cartesians, while girls do not, because of developmental asymmetries resulting from female-dominated infant care, rather than biology, anatomy, or "nature."¹⁴

It is of crucial importance, however, that feminist scholars like Chodorow more explicitly and emphatically underscore the fact that they are describing elements of a social construction, characteristic of certain (though not all) forms of gender organization, and not the reified dualities of an "eternal feminine" and "essential masculine" nature. A great deal of current division among feminists rests on lack of clarity and understanding regarding this distinction. This is unfortunate, because the sociological

emphasis and understanding of gender as a social construction is one crucial difference between the contemporary feminist revaluation of the "feminine" and the nineteenth-century doctrine of female moral superiority. Too often, recently, the two have been conflated.

A still more central difference between nineteenth-century and twentieth-century feminism is the contemporary feminist emphasis on the insufficiency of any ethics or rationality — "feminine" or "masculine" — that operates solely in one mode without drawing on the resources and perspective of the other.¹⁵ The nineteenth-century celebration of a distinctively feminine sensibility and morality functioned in the service of pure masculinized thought, by insisting that each "sphere" remain distinct and undiluted by the other. This was, of course, precisely what the seventeenth-century masculinization of thought had accomplished — the exclusion of "feminine" modes of knowing, not from culture in general, but from the scientific and philosophical arenas, whose objectivity and purity needed to be guaranteed. Romanticizing "the feminine" within its "own" sphere is no alternative to Cartesianism, because it suggests that the feminine has a "proper" (domestic) place. Only in establishing the scientific and philosophical legitimacy of alternative modes of knowing in the *public* arena (rather than glorifying them in their own special sphere of family relations) do we present a real alternative to Cartesianism.

FEMINISM AND THE "RECESSIVE" STRAIN IN PHILOSOPHY

The Cartesian ideals are under attack in philosophy today, and philosophers who subscribe to those ideals, whether in their analytic or phenomenological embodiment, are on the defensive. Because philosophy has been so dominated by the Cartesian standpoint, the erosion of Cartesianism has been interpreted by some as signalling the "death of philosophy," and many of the current debates among philosophers are couched in those terms. If anything is dying, however, it is the intellectual rule of a particular model of knowledge and reality. Philosophers who grew up under that rule, and who were taught to identify philosophy with it, may experience the end of that rule as portending the "end of philosophy." But in fact, philosophy has always spoken in many voices (although they have seldom been heard by the Cartesian "cultural overseer"), some of which are being revived and renovated today. More significantly, alternative voices from those groups which philosophy has traditionally excluded are now offering the discipline the very means of its revitalization: the truths and values which it has

suppressed from its dominant models. Those truths and values have been living underground, throughout the Cartesian reign, and are now emerging to make a claim on the culture.

This emergence cannot be adequately understood unless seen against the backdrop of the last several decades of social and political life. Philosophers may think that the widespread self-critique in which philosophy is currently engaged began with the publication of Richard Rorty's *Philosophy and the Mirror of Nature*. But (as Rorty would probably be the first to acknowledge), the impact of that work had much to do with its timely crystallization of historicist currents that had been gathering momentum since the 1960s. Those currents were themselves activated by the various "liberation" movements of that decade. There is a certain similarity here with the Renaissance, in the cultural reawakening to the multiplicity of possible human perspectives, and to the role of culture in shaping those perspectives. But in our era, the reawakening has occurred in the context of a recognition not merely of the undiscovered "other," but of the suppressed other. Women, people of color, and various ethnic and national groups have forced the culture into a critical reexamination not only of diversity (as occurred for Renaissance culture), but of the forces that mask diversity. That which appears as "dominant," by virtue of that very fact, comes to be suspect: It has a secret story to tell, in the alternative perspectives to which it has denied legitimacy, and in the historical and political circumstances of its own dominance.

Fueled by the historicist tradition in epistemology, psychoanalytic thought, and the political movement for women's rights, representation, and participation in cultural life, feminist ethics and epistemology now appears as one of the most vital forces in the development of post-Cartesian focus and paradigm. The feminist exposure of the gender biases in our dominant Western conceptions of science and ethics — the revelation that the history of their development, the lenses through which they see the world, their methods and priorities have been decisively shaped by the fact that it has been men who have determined their course — has come as a startling recognition to many contemporary male philosophers.¹⁶ Inspired by the work of Gilligan, Chodorow, Harding, and Keller, feminist theory has been systematically questioning the historical identification of rationality, intelligence, "good thinking," and so forth, with the masculine modes of detachment and clarity, offering alternative models of fresher, more humane, and more hopeful approaches to science and ethics.¹⁷

It is not only in explicitly feminist writing that these phenomena are occurring. Many of the "new paradigms" being proposed in the recent spate of literature on modernity and modern science are grounded in sympathetic, participatory alternatives to Cartesianism. (See Berman and Capra, in particular.) In philosophy, a whole slew of reconsiderations of traditional epistemological "problems" such as relativism, perspectivism, the role of emotions and body in knowledge, the possibility of ultimate foundations, and so on, has brought the feminine perspective in through the back door, as it were. Without explicit commitment to feminism or "the feminine," philosophers are nonetheless participating in a (long overdue) philosophical acknowledgement of the limitations of the masculine Cartesian model, and are recognizing how tightly it has held most modern philosophy in its grip.

This is not to say that detachment, clarity, and precision will cease to have enormous value in the process of understanding. Rather, our culture needs to reconceive the status of what Descartes assigned to the shadows. Such reevaluation has been a constant, although "recessive" strain in the history of philosophy since Descartes. Leibniz's declaration that each monad is its own "mirror" of the universe, Hume's insistence that "reason is and ought to be the slave of the passions," and, perhaps most importantly, Kant's revelation that objectivity itself is the result of human structuring, opened various doors that in retrospect now appear as critical openings.

Hume, for example, may now be seen as having a rightful place — along with Nietzsche, Scheler, Peirce, Dewey, James, Whitehead, and, more recently, Robert Neville — in the critical protest against the Cartesian notion that reason can and should be a "pure" realm free from contamination by emotion, instinct, will, sentiment, and value. Within this protest, we see the development both of a "naturalist" anthropology of the Cartesian ideals of precision, certainty, and neutrality (Nietzsche, Scheler, Dewey, and James), and a complementary metaphysics (Peirce, Whitehead, and Neville) in which "vagueness" as well as specificity, tentativeness, and valuation are honored as essential to thought.

In emphasizing the active, constructive nature of cognition, Kant undermined the Cartesian notion that the mind reflects and the scientist "reads off" what is simply there in the world. The Kantian "knower" is transcendental, of course, and Kant's "constructionism" begins and ends, like most Enlightenment thought, with a vision of universal law — in this case, the basic, ahistorical requirements of "knowability," represented by the categories. But the "Copernican Revolution in Thought," in asserting the activity of the subject, opened the door, paradoxically, to a more historical

and contextual understanding of knowing. The knower, not the known, now comes under scrutiny — and not, as Descartes scrutinized the knower, for those contaminating elements which must be purged from cognition, but for those "active and interpreting forces," as Nietzsche says, "through which alone seeing becomes seeing something." The postulation of an inner "eye" in which these forces "are supposed to be lacking . . . [is] an absurdity and a nonsense" (1969, 119).

The articulation of the historical, social and cultural determinants of what Nietzsche called "perspective" can be seen as one paradigm of modern thought. The main theoretical categories of that paradigm have been worked out by various disciplines: the "philosophical anthropology" of Max Scheler, Karl Mannheim's work on ideology, and, historically fontal, the dialectical materialism of Karl Marx. Marx, of course, was not primarily interested in epistemological questions. But he is nonetheless the single most important philosophical figure in the development of modern historicism, with his emphasis on the historical nature of all human activity and thought and our frequent "false consciousness" of this. It was Marx who turned the tables on the Enlightenment, encouraging suspicion of all ideas that claim to represent universal, fundamental, "inherent," or "natural" features of reality.

The Cartesian ideal of the detached, purely neutral observer is here viewed as a type of mystification, and the ideals of absolute objectivity and ultimate foundations seen as requiring historical examination. In the modern era, "universal" after "universal" has fallen, under the scrutiny of Marxists, anthropologists, critical theorists, feminists, philosophers of science, and deconstructionists. The various claims regarding human nature and human sexuality (the "naturalness" of competition, the "necessity" of sexual repression, the "biological" nature of gender differences) have been challenged. Rorty and Foucault, respectively, have argued that the "mind" and "sexuality" are historical "inventions." And Patrick Heelan has shown that our most basic perceptions of space have a cultural history.

None of this signals the end of philosophy. What it *has* meant, however, is that it is extremely difficult today for the Cartesian philosopher to sit comfortably on the throne of the cultural overseer, "neutrally" legislating "how rational agreement can be reached" and where others have gone astray. The ideal of absolute intellectual purity and the belief in a clear and distinct universe are passing, though not without protest, out of the discipline. It is too soon to tell what sort of impact feminist and other reconstructions will have on the future development of philosophy, not to mention on the general intellectual and political life of our culture. But what does seem clear

is that coherent alternatives to Cartesianism are emerging out of Cartesianism's "shadow" itself. If a "flight from the feminine," as I have argued, motivated the birth of the Cartesian ideals, the contemporary revaluation of the feminine has much to contribute to the world that will replace them.¹⁸

Notes

INTRODUCTION

1. Descartes's original account of these dreams is lost, but a description of them may be found in Stern, *The Flight from Woman*, pp. 80-84. Although philosophers have generally accepted Descartes's interpretation of these dreams on face value, Stern and other psychoanalytically oriented thinkers have subjected them to a deeper scrutiny. (See Stern, pp. 84-89; Freud, Feuer, Schaffstein, and Wisdom.)
2. See Bordo, "The Cultural Overseer and the Tragic Hero" (pp. 181-183); Rorty (pp. 317-318); Cohen (p. 7).
3. Among the professional philosophers mentioned earlier, Avner Cohen and Bruce Wilshire have taken the psychological turn most seriously and literally. They are unusual within a discipline that has been as antipsychological as it has been antihistorical. It has generally been feminism — both French and American — that has been most penetrating and systematic in application of psychological and psychoanalytic categories to the history of thought. For both French and American feminists, the figure or the "pre-Oedipal" mother is central. French feminists have tended to emphasize the repression of the feminine in patriarchal culture and thought. A central target of criticism is "logocentric" discourse, contrasted to the more bodily, spontaneous discourse (the "semiotic" level) of early mother/infant relations. (See Elaine Marks and Isabelle Courtyron eds., *New French Feminisms*, and Shirley Garner, Claire Kahane and Madelon Sprengnether, eds., *The [M]other Tongue*.) American feminists have been drawn more to the British "object-relations" school, which emphasizes the development of self in relation to others. Often elaborating on the work of Nancy Chodorow, they have developed a fertile theoretical framework for exploring gender differences in early infant development, and their implications for male-dominated culture. The central target of criticism here has been the overvaluing of autonomy in our Western models of reason. (See especially Evelyn Fox Keller, but also articles by Naomi Scheman and Jane Flax in *Discovering Reality*, Sandra Harding and Merrill B. Hintikka, eds.) The feminist who spans these divisions and whose work laid the ground for the development of many of these perspectives is, of course, Dorothy Dinnerstein, whose brilliant *The Mermaid and the Minotaur* was the first to connect psychoanalytic theory, gender, and culture.

ONE. THE PERVERSIVENESS OF CARTESIAN ANXIETY

1. See Popkin (1979) for an excellent discussion of this revival. Popkin's book is an outstanding exception to the general tendency among contemporary philosophers to fail to take Cartesian skepticism seriously enough.

Community and the Ecological Self

FREYA MATHEWS

Small face-to-face communities provide conditions for the growth of relational selves, which, unlike the individualistic selves of liberalism, are predisposed to empathy, and hence arguably to an ecocentric perspective. The relationality of community in this sense, however, needs to be distinguished from abstract forms of holism, such as nationalism and globalism. Community can nevertheless to some extent meet the challenges of transnationality by itself assuming certain transnational features, without thereby losing its roots in particularity and concreteness and assuming the abstract character of globalism.

In this contribution I shall explore some of the tensions between liberal democracy and the requirements of thoroughgoing ecological reform, where by this I mean a degree of reform commensurate with the current worldwide ecological crisis. I propose to adopt an ecocentric rather than an anthropocentric yardstick of reform since, as is explained in the introduction to this collection, ecocentrism affords an exacting standard for ascertaining the true environmental potential of political systems. I shall argue that liberal democracy fails to provide the kind of social conditions conducive to the large-scale emergence of an ecocentric consciousness, and hence that ecocentric environmentalism is bound to remain a minority concern in liberal regimes. I shall then outline the kind of social conditions which I consider generally to be a necessary (though not sufficient) condition for the emergence of an ecocentric outlook.¹ Up to this point my paper recapitulates, though in an ecological vein, some of the lines of argument developed by communitarian, socialist and feminist critics of liberalism. Thereafter, however, I subject the notion of eco-communitarian selfhood, developed in the first half of the study, to closer scrutiny, distinguishing it from abstract forms of collectivism or globalism, yet also expanding it into a transnational frame. It is also worth noting that the overall argument is largely programmatic, as space does not allow the full development and

defence of all the claims and inferences involved along the way.

Liberal Democracy and Morality

What are the underlying principles of democracy? There is of course no agreed-upon answer to this question. But I would suggest that the basic aim of democracy, as it was understood both in classical Greece and in Europe in the seventeenth and eighteenth centuries, was for the individual members of society to achieve some degree of control over social decisions that affected their lives. That is, the aim was to take the power to make those decisions out of the hands of absolute authorities, and to place it, to varying degrees, into the hands of the people whom those decisions affected. In other words, people were to be given the power to conduct their lives as freely as possible from the control of 'higher' authorities. Indeed no 'higher' authority was recognised: individuals themselves in principle had the final authority over their own lives. In this sense, all individuals were equal; no individual or class of individuals was of a higher order than any other. A certain notion of equality is thus implicit in this conception of democracy. But even more deeply embedded in this conception, I think, is the value of autonomy. Advocates of democracy insist on individual freedom from higher authorities not so much because they think that this is the best way to get what they want, in the sense of satisfying their immediate needs and desires, but rather because they value self-rule for its own sake. Hence even were they offered a political system in which everything they wanted would be granted to them by a benevolent, paternalistic authority, they would not be satisfied, for the point of their preference for democracy is not so much that it delivers what they want, in a material sense, but that it provides some degree of self-rule.²

Following a number of feminist, socialist and communitarian critics [Sandel, 1982; Pode, 1993; Jagger, 1983; Pateman, 1988; Nye, 1988], I would argue that democracy in this sense valorises individualism, where this is understood as a particular sense of identity on the part of the members of the society in question. Or rather, it presupposes such individualism in theory, and helps to create or reinforce it in practice. Members of societies which are democratic in this sense see themselves as ultimate social units, of which society as a whole is merely the aggregate. The interests of these units are logically given independently of, and prior to, the interests of society; indeed the function of society, from this point of view, is merely to facilitate the unfettered self-realisation of such individuals – to enable these individuals to pursue their conception of their own good in their own way.

I propose to call democracy understood as a system of governance dedicated to individual freedom and self-rule 'liberal democracy', though I

Freya Mathews teaches in the Philosophy Department, La Trobe University, Australia. The author is very grateful to Tony Condy, Robyn Eckersley, Janina Thompson and Robert Young for helpful comments on an earlier draft of this contribution.

understand such a form of democracy to be capable of taking direct and indirect forms – from the participatory democracies of the ancient world to the representative or parliamentary democracies of the modern West. However, I am using the term ‘liberal democracy’ here, and in what follows, to denote an ideal type, rather than any actual flesh-and-blood historical society, for I am stripping the notion of its institutional and procedural and even economic³ particularities, and focusing only on its ideological base – that is, its over-riding commitment to individual freedom and autonomy (where this, as I argue below, also implies a contractarian view of the foundations of society). In this sense, my use of the term ‘liberal’ is narrower than that of some liberal theorists, and the critique of ‘liberalism’ that I offer may not apply to some more encompassing theorisations of liberalism.⁴

It is liberal democracy understood in the sense of this ideal type that is, in my view, in tension with the requirements of an ecocentric outlook. This is for at least two related reasons, the first pertaining to morality, the second to identity. I shall examine the problem of morality in the present section, and that of identity in the next.

The view of human nature that I am here characterising as ‘liberal’ implies that people come together in democratic societies for the purpose of securing the conditions for self-rule, rather than on account of fellow feeling, or a desire to create social bonds or relationships as ends in themselves or for altruistic purposes. In other words, such democratic forms of society might be seen as having a contractarian rather than a moral basis. Adapting Rawls’s ‘veil-of-ignorance’ strategy to this purely contractarian end, it might be argued that if our ultimate interest is individual self-rule, then democratic organisation is simply prudentialism of the highest order – it involves our setting up society so that whatever happens to me (or my children) – however my fortunes (or those of my children) change – I shall still be free, to some degree, to pursue my own good in my own way. (However rich I am, I may become poor; however powerful, I may become weak; however able, I may become incapacitated; whatever social roles accrue to my gender now, they may give way to others; whatever my sexual orientation now, it may change; whatever my own race, that of my children or my grandchildren might be different. Given the inevitable uncertainty of the future, I can best secure my own long-term autonomy, or freedom to legislate for myself, by granting such freedom to all.)

Democracy in this contractual sense, then, has the satisfying characteristic of appearing to be ‘moral’ – it appears to rest on a principle of disinterested respect for the autonomy of all – without in fact requiring any moral or altruistic commitment from its members. It can be justified purely in terms of the interest of each individual in ruling themselves, and

of their fitness to do so. Indeed such democracies *cannot* consistently require any common moral or altruistic commitment from their members – they *cannot* be founded on a public morality – since if they were, this would in itself violate the autonomy of their members, such autonomy entailing as it does the freedom of individuals to choose their own conception of the good.

It is this implicit lack of moral basis in liberal forms of political organisation that presents an obstacle to ecopolitics. For if the justification for individual self-rule or autonomy for all is that each individual is thereby assured of their own autonomy in any circumstances, then since neither I nor my children can ever become non-human, my interest in securing my own autonomy under all circumstances will not lead me to grant autonomy (in the sense of freedom from undue interference) to non-human beings; there is no reason for me to insist on their protection from the rest of society, since I can never be in their place.

In other words, in the absence of any common moral or altruistic underpinning to society, which might be generalised to non-human beings, there are no grounds intrinsic to liberal democracy for protecting the non-human world for its own sake.

Of course this is not to say that individuals in a liberal society are free to interfere with the environment in whatever ways they please. Some human actions have consequences for the environment that encroach on the autonomy of other human beings. Thus liberal democracies may attempt to deal with the problem of environmental protection by treating nature anthropocentrically as a set of resources which must be distributed and conserved in accordance with liberal principles of justice. Contemporary liberal philosophers seek to limit the destructive use that individuals and corporations make of the environment basically by appeal to the ‘harm principle’. The freedom of a timber company to make commercial use of a forest ‘resource’ has to be offset on the one hand against the freedom of other groups to make, say, recreational use of the forest and on the other hand against the harm that, say, pollution from the timber mill may entail for residents downstream. The main innovation that liberal philosophers introduce into their arguments in addressing the problem of environmental degradation or resource exhaustion is the idea that the harm principle applies not only to present individuals but to future generations as well. Our use of the environment must be such as not to harm or unduly limit the choices of human beings of the future as well as of the present. But this concern for future generations need not be interpreted in a strongly moral sense if we take my interest in self-rule to include the interest of my children therein.

However, although liberal societies are not founded on a public morality,

but on a particular form of individual self interest, namely the interest in self-rule, this is not to say that individuals, in exercising their freedom, might not commit themselves to moralities of their own choosing. That is, the 'good' that individuals are free to pursue in their own way may of course be a moral good as much as an egoistic good – so long as the realisation of such a 'moral' good does not contravene the harm principle or compromise the individual's own freedom to rule himself.⁵

From this point of view then, it is open to an individual with an ecocentric conception of the good to pursue this conception of the good in a democratic society, but on the understanding that this good is part of her interest, and counts for no more than that in computations of the collective good. In other words, her concern for the well-being of other life-forms is not taken at face value in this scenario, but is in effect converted into a kind of psychological interest of the individual in question. Her concern for other life forms is taken into consideration, if at all, out of respect for her freedom to pursue her own interests as she sees fit, and hence it is taken into consideration for *her* sake rather than for that of the other life forms themselves. Liberalism thus collapses the interests of multitudes of non-human beings and systems into a portion of the interests of perhaps no more than a handful of human advocates, and to the extent that those interests are taken seriously, it is out of a calculated deference to human autonomy.

In reply to this, however, a defender of liberalism might point out that liberal forms of democracy are not incompatible with communicative mechanisms within society. To the principle that each individual should be free to pursue her own conception of the good in her own way may be added the principle that as a society we should have mechanisms for communicating about significant conceptions of the good (Dryzek, this collection). In other words, the liberal might take the view that it is simply up to those who hold an ecocentric perspective to persuade the other members of society to share this perspective. If they are successful in inducing everyone to share it, the liberal might argue, then liberal democratic societies would have no difficulty in implementing an ecocentric polity, since human interest would in this case be enlarged to encompass the interests of the non-human world.

However, while it is true that if a majority of individuals in a liberal democracy adopted an ecocentric worldview, then an ecocentric polity might be forthcoming, it is unlikely – for reasons that will become apparent below – that most individuals in a purely liberal democracy would adopt an ecocentric worldview. And as long as there is significant conflict over ecocentric and anthropocentric perspectives, ecocentric outcomes are bound to be less likely than anthropocentric ones. This is because the ecocentric interests of individuals will always appear relatively lightweight compared

with the direct material interests of their opponents: the 'psychological' or 'aesthetic' desires of wilderness *aficionados*, for instance, are always likely to seem trivial compared with the direct bread-and-butter interests of workers in the timber and mining industries. The freedom of the wilderness *aficionado* would seem to be less compromised by the logging of a forest than the freedom of a timber worker would be by the preserving of it. Thus when ecocentric values are subsumed under the interests of the human individuals who subscribe to them, the prospects for the protection of non-human life for its own sake are likely to remain bleak.

Liberal Democracy and Identity

I have argued in the previous section that there is a tension between liberalism and an ecocentric environmentalism, in so far as the foundation of liberal societies is not altruism – which might in principle be extended to the non-human world – but rather individual self-interest, specifically an interest in self-rule. This lack of an intrinsic or definitive concern for others on the part of liberal individuals is, I think, precisely a function of their individualism, the individualism implicit in the liberal premise – that is, that individual self-rule is the ultimate desideratum in politics. The priority of the principle of individual self-rule in liberalism means that in a liberal society people are neither expected to be altruistic, nor determined to be so through the structure of their social institutions. They are rather expected to conform to a view of human nature which is, *au fond*, individualistic and basically egoistic rather than altruistic, at least in the social and political domain (Plumwood, this collection), and liberal institutions shape them in such a way as to fulfil these expectations. How do these institutions achieve this?

Liberal institutions foster individualism by allowing social status to be won (or lost) through competition, rather than inherited through bloodlines or custom. In this way liberal societies historically broke up the fixed patterns of premodern societies, and set each individual in motion. Competing with their fellows to climb the ladders and avoid falling down the snakes of an hierarchical social structure, individuals could no longer define themselves in terms of permanent relationships with particular communities or places. In a world in which everything was potentially in flux, and no social destiny was guaranteed, individuals were forced to fall back on their own personal attributes and private relationships for their sense of identity.

However, the fact that liberal individuals are disposed to be self-interested and hence competitive does not, as observed in the previous section, entirely obviate the possibility of their contingently forgoing

competition in favour of co-operation or even service-to-others, if these courses are sanctioned by reason or instilled by socialisation. But in this event, reason and/or socialisation will have to overpower the egoistic disposition of the individuals in question. In short, in liberal societies individuals are neither expected to be, nor constituted so as to become, disposed to fellow-feeling, empathy, spontaneous identification with others and their interests.⁵ Without such an innate disposition, it is unlikely that more than a minority of such individuals will ever arrive at that perhaps most altruistic of all commitments – that is, the commitment to protect the non-human world for its own sake, as well as for the sake of its human beneficiaries.

Let us look a little more closely at the idea of the liberal individual. Liberal individualism may in fact be seen as exemplifying a principle of individuation that is quite general in its application, in the sense that it may be used to define what it is to be an individual across a range of domains, including physics, society and psychology [Mathews, 1991]. This principle, which is at bottom metaphysical, may be characterised as one of separation or division: it gives rise to *atomistic* realities, realities made up of ultimate units, where these units are, or are analogous to, substances in the traditional metaphysical sense – they are logically capable of standing alone. In such a substance scenario, it is the individuals that are given – it is they which have ontological priority. Assemblages of such individuals are mere aggregates, whose identity is derived from their constituent units. Moreover, since each individual is logically independent of all others, its properties belong to it, and it alone. Hence it is quite possible for a particular class of individuals, defined in terms of a common property, to be considered as categorically distinct from another class, whose members lack the property in question. If the property in question is a highly valued one, the class of individuals that possesses it might then be ranked above the class that lacks it. In this way, separation or division as a principle of individuation permits dichotomisation and value hierarchism (and hence reason/nature dualism, as we shall see below) to inform ontology.

It is easy to see how such a substance criterion of individuation is translated into social terms in liberal philosophy. From a liberal point of view, society is made up of discrete, independent individuals (social atoms), which can logically exist asocially, but who choose to place themselves in social settings with a view to furthering their own individual interests. Social structure is ultimately explained in terms of the actions and intentions of such individuals – that is, individuals are given; the identity of societies is derived from that of their constituents – that is, the individuals or the individuals or social atoms.

Liberal individualism is an abstract form of individualism in the sense

that, in the shift from metaphysics to politics, liberals simply presuppose that human individuals, like metaphysical atoms, are logically capable of ‘standing alone’. That is, they simply presuppose that people are logically capable of existing as rational (and therefore human) beings, independently of society, even though, from an empirical point of view, rational beings of course never are simply ‘given’, independently of social relations.⁶ In this sense, liberal notions of human identity are based on an abstract idea of ‘the individual’, and liberal identity is accordingly an abstract form of identity, rather than one that is grounded in our actual experience of the process of identity formation. On the other hand, however, liberals so arrange society as to vindicate to some extent their presuppositions with regard to human nature. Through institutions that promote competition and social mobility, and which to a significant extent instrumentalise and contractualise relations (at least between adult people), liberal society goes some way towards countering the relational aspects of early (and later) identity formation and making actual the abstract individuals prefigured in its theory.

Understanding the way a substance criterion of individuation is used in liberalism also helps to throw light on another aspect of its worldview for, as noted above, the division of the world into discrete, self-contained units makes it possible to treat mind and matter as separate metaphysical categories – attributes which some individuals possess and others lack, absolutely. Since mind is valorised by liberal, and other Western, philosophers, the class of beings that possess mind may be set apart from, and above, the classes of beings that lack it. In this way, the substance principle of individuation permits a dualistic ranking of mind over body, and humanity over nature, where this has been seen as a hallmark of liberalism by feminist critics [Jagger, 1983; Plumwood, 1993]. Such a dualistic ranking of mind over body, and humanity over nature, also clearly vitiates liberalism as a vehicle for ecocentric politics.

Let me explain the latter point a little more fully. From a liberal point of view, human beings earn their political status, and are entitled to the political prerogative of individual self-rule, on the strength of their capacity for reason. It is reason that qualifies us to legislate for ourselves in matters that affect us directly. But in liberal thought reason is understood dualistically, as that which sets human beings apart from, and above, nature. It seems to follow, then, that the whole edifice of *modern* liberalism, at any rate, is raised, from the very start, on the ideological ruins of nature: human beings are invested with ‘natural rights’ to freedom and equality on the grounds that they, *qua* human beings, transcend nature.⁷ The substance principle of individuation thus generates a tendency towards dualism and hierarchism in liberal thought, which vitiates liberalism as a vehicle for a

polity based on respect for nature.

However, liberal individualism, based as it is on a substance principle of individuation, does not exhaust the possibilities of human identity. Alternative modes of identity may offer more promising ontological foundations for human empathy with, and compassion for, both the human and non-human worlds. And there may be forms of society which mould human identity along lines more conducive to such an altruistic, and hence potentially ecocentric, outlook than liberal democracies do.

Ecological Identity as a Function of Community

I wish to suggest that a form of human identity defined not in terms of its independence from others but rather in terms of its relationships with them would provide a more appropriate ontological foundation for an ecocentric polity than liberal individualism does. It is the 'relational self', rather than the 'separate self' of liberalism, that regards the interests of others as inextricable from its own, and is accordingly imbued with fellow-feeling.

How to understand this contrast between the 'relational self' and the 'separate self' of liberalism? One way is to consider the metaphysical principle of individuation which underlies the 'relational self', in the same way that we have just considered the principle which underlay the 'separate self'. The principle of individuation which produces 'separate selves' is, as we saw, a principle of separation or division, which, like a pastry-cutter, carves reality up into substances or substance-like entities. That which results in 'relational selves', in contrast, may be characterised as a systemic or relational principle [Mathews, 1991]. From a relational perspective, reality is not divisible into units. It is rather a system or web of relationships. Individuals are, in this scheme of things, constituted by their relations with other individuals – it is these relations that determine their identity. Such individuals cannot stand alone – their identities are logically intermeshed with those of others.

In this scenario, then, it is the system of relations as a whole that is given, or has ontological priority. Though the identities of individuals are 'real', in the sense that they are objectively determined rather than nominal or illusory, they have a derivative status: without the system as a whole, the individuals would not exist.⁹

Since the attributes of any element of such a system are in fact a function of the attributes of other elements, or of the system of relations as a whole, the credit (or blame) for attributes that happen to be more prized (or reviled) than others cannot be assigned exclusively to the individuals who manifest those attributes, but must be distributed more diffusely throughout the system. Hence attributes cannot properly be dichotomised, nor the classes

which ostensibly possess them ranked one above another.

Now the relational principle of individuation is, of course, invoked in contemporary ecological metaphysics, which is relational to the core [Naess, 1973, 1979; Mathews, 1991]. But how is it to be translated into social terms? Before answering this question, it might be worth pointing out that it is not my intention here to attempt to legitimate a particular social order (in this case, as it happens, community) by arguing that it reflects a particular (in this case, ecological) order of nature. Dryzek criticises this well-worn ideological strategy ('social structure P is right because it is natural') in his contribution to the present collection. While I do not entirely agree with Dryzek on this, since I think there is a sense in which our notions of personhood and society do need to be aligned with the metaphysical, physical, biological and ecological facts of our world if our arrangements for living are to be viable in the longer term, I do not need to settle this issue here. For my present aim is only to discover the sociopolitical conditions that will produce the kind of selves capable of experiencing themselves and their relation to nature in a way that is likely to induce in them an attitude of sympathetic concern for the natural world, and hence an ecocentric outlook.

How then, returning to our earlier question, is a relational principle of individuation to be translated into social terms? If, as we have seen, a separate self lacks a sense of involvement in the identity of others, and is hence capable of arriving at concern for the interests of others at most through reason, a relational individual is likely to enjoy a sense of self which encompasses others, and hence includes concern for their interests, independently of the dictates of reason. One way of characterising this contrast in the grounds of the respective moral outlooks of the two types of self is through the distinction between rationalistic (justice) and empathetic (care) perspectives in epistemology and ethics.¹⁰

According to a number of feminist psychologists,¹¹ the rationalistic perspective emanates from a psychology that foregrounds the self and backgrounds others and the self's relations to them (this corresponds to what I am here describing as a 'separate self'). The empathetic perspective emanates from a psychology of relatedness, which backgrounds the self and foregrounds the self's relations to others (where this corresponds to what I am here describing as a 'relational self'). Of course, the main danger associated with a psychology of separateness is that it will not emanate in a moral outlook at all. But if it does, it will tend to be an outlook formed by reason – a 'justice perspective', which seeks primarily to lay down the rights and duties of individuals, abstractly and impartially, in such a way that it is not even in principle necessary for us to know others in order to discover what is right or wrong for them.

From the empathetic perspective, morality is not the rather cold-blooded business of working out that to which others are rationally entitled, whether one likes it or not, and whether one knows them or not, but is rather a matter of responding appropriately to those we do know – those with whom we are in communication, in relationship. In other words, morality from this perspective does not rely on tablets of commandments, or rules of conduct, but trusts our own responsiveness to those we know and about whom we are accordingly care. Its primary goal is the preservation of the web of relationships which define or sustain both the self and others.

To draw a distinction between these two perspectives is not to say that they are mutually exclusive, or that one is right and the other simply wrong-headed. I would indeed argue that moral sentiment – nourished through sustained relationships with particular others – is a necessary condition for any kind of moral outlook; we have first to learn through experience to care for others before moral argument can have any force. However, once I have learned to care about a particular being of a certain kind, I am more likely to arrive, through reflection, at a generalised concern for beings of that kind than I would if I had never been acquainted with any of the beings in question (this point is particularly important in an ecological connection, as we shall see below.)

If the separate self, with either its unapologetic egoism or its merely intellectual appreciation of justice, is constituted through liberal regimes of individual self-rule, with their concomitants of competition and conflict, what are the sociopolitical conditions for the emergence of a relational self, with its disposition to empathise with others?

I would suggest, along with some communitarians, anarchists and feminists [Sandel, 1982; Ritter, 1980; Elstain, 1981, 1986; Held, 1987], that a society in which individual identity was constituted through relations with others would be one in which self-realisation would be achieved through reciprocity and interdependence rather than through autonomy. Cooperation and communion rather than competition and conflict would be the fundamental principle of such a society. This principle suggests the idea of community, for it is in small, face-to-face communities that people can achieve genuine interconnectedness through sustained experiences of mutuality and reciprocity.

That community is a logical expression of an empathetic perspective, the moral perspective of a relational self, might be explained as follows: empathy is, from the feminist perspectives of Benjamin, Belenky *et al.*, Gilligan, Fox Keller and others, a function of relationship. Clearly, however, 'relationship' must be intended in a special sense in this connection: the term cannot refer merely to instrumental relationships, or relationships of convenience or expediency, let alone of domination or exploitation. It refers

rather to relationships based on mutual recognition, on a mutual understanding of the true needs and desires of the other. For this reason, relationship, in the present sense, requires communication: we can know others, and in this sense 'relate to' them, only by communicating with them. However, when we know others in this sense – when we understand the forces that drive them and the sources of their various forms of self-expression – it is impossible not to feel compassion for them, as spiritual traditions invariably attest. (It is not necessary that we delve into the specific secrets of others' psyches to know them in the present sense; it is sufficient that we establish a certain *rapport*, and a corresponding sense of the reality of their subjectivity, to know that they are feeling, striving, hurting beings, just as we are, where it is this insight that generates empathy on our part, and elicits our sympathy.)

In light of the importance of communication in this scenario, a major moral imperative, from this point of view, is to *keep the channels of communication open*. As long as we are genuinely communicating with others, we shall feel appropriately towards them – that is, communication will help to ensure empathy. An obvious way to ensure that the channels of communication remain open, at a social level, is to organise ourselves into small communities – communities on a human scale, in which it is possible for each individual to communicate effectively with all others.

So it would seem that community is a clear socio-political expression of and condition for relational selfhood, and that relational selfhood provides an ontological foundation for an empathetic outlook and the moral sensibility which accompanies it. However I would like to dwell a little longer on the ideal of community and the notion of relationality that underpins it. For community may be dismissed as an ontological basis for a moral outlook on the grounds that many traditional communities have been hierarchical in structure. Individuals in such communities may indeed have been interdependent, and constituted by their relations of interdependence, but these relations were often those of the master-to-slave type. In other words, it seems pertinent to ask whether domination and subordination are not forms of relationship which can inform the identities of those who are party to them, and if so, whether relationality is not compatible with hierarchy, and hence inadequate as an ontological foundation for an altruistic outlook.²⁷

In describing a relational self as one constituted by its relationships with others, I have already remarked that the relationships referred to in this context must be of a special type. But it is now imperative to specify this type more precisely. The relations connoted by 'relationships' in the present context are, I would suggest, not contingent relations but in some sense necessary ones: they are essential to the identity of those who are party to

them. But this implies that the relationships in question are such that they contribute to the *self-realisation* of those who are their relata: the individuals in question could not come into being, and flourish, as the kinds of individuals they are, in the absence of these relationships. A certain reciprocity or mutuality is, as I indicated earlier, thereby implied: A depends on B to realise itself, but B also depends on A. Such reciprocity need not be directly one-to-one: A may depend on B without B's directly depending on A, yet A may be necessary to other elements of the system which are in turn necessary for the self-realisation of B. An example drawn from ecology might serve to illustrate the type of relationship in question here: in some parts of Australia, the bettong (a small kangaroo-like marsupial) appears to depend on truffles for its 'self-realisation', though the truffles themselves do not seem to need to be eaten by bettongs. However the *forest* depends on the digging-out activities of bettongs for the health of its root system. When the bettongs die out, as a result of predation by feral species, for instance, the forest dies-back. In this way, it transpires that truffles are indirectly dependent on bettongs for the maintenance of their habitat. Bettongs and truffles may thus be seen as mutually constitutive within a wider framework of relationships.

When this analysis of relationality is applied to the human case, it becomes clear that a relational self is one that depends on certain kinds of relationships with others for its self-realisation, for its coming into being and flourishing as a self. What is it to flourish as a human self? Without digressing for a hundred pages or so, it seems reasonable to say that a minimal condition for human self-realisation is the full realisation of subjectivity: a self can scarcely be regarded as self-realised if it lacks a sense of itself as subject, but instead experiences itself as an object-for-others. In light of this we might redefine the relational self as one whose subjectivity – the essence of its selfhood – is constituted intersubjectively: the self becomes aware of herself as subject by recognising the subjectivity of others and by having her own subjectivity simultaneously recognised and affirmed by them [Benjamin, 1990; Poole, 1993].

It now becomes clear that selves in this sense cannot be constituted by relations of domination and subordination. Hence although master and slave may be logically co-defining, under the descriptions of 'master' and 'slave', they are not mutually constituting *qua* selves – that is, their relationship is not conducive to their mutual flourishing as selves. For, following Hegel, Sartre, de Beauvoir, Benjamin and others, we might expect the master to objectify the slave, and the slave to have little sense of her own subjectivity – she may identify her master as subject, and, in her fantasies of subjectivity, imagine herself doing as he does (that is, dominating others). No intersubjectivity occurs in such a situation of denial and illusion, and there

is certainly no self-realisation for the slave. Even the subjectivity of the master rings hollow, resting as it does on denial, on an inability to confront the reality of the other, where this implies the master's lack of belief in the reality or adequacy of his vaunted 'subjectivity'.

In any case it seems clear that relations of domination and subordination are not the kinds of relationships through which selves, *qua* selves, are mutually realised. So communities which permit relations of domination and subordination will not give rise to relational selves – that is, to the kinds of selves that are given to empathising with one another, and taking each other's interests as seriously as their own. In other words, communities must be *egalitarian* if they are to produce relational selves. Community as a foundation for an empathetic outlook then must be understood in an egalitarian sense.¹³

But how is this empathy and moral sensibility to be extended from the human to the natural world? Clearly community needs to be understood here not merely in human terms, but also as community with nature. That is to say, the eco-community will be such as to facilitate relationships not only amongst its human members, but also between its human members and their biotic neighbourhood. Human individuals will in this way come to experience themselves as constituted through their relationships with the natural world as well as with the human world. But what will such relationships consist in? Clearly I have in mind here something more than purely biological relationships, such as those defined by the food chain: such relations are already, perforce, in place, yet they conspicuously fail, in and of themselves, to generate empathy on our part for those beings who comprise our food.

What I have in mind is rather face-to-face relationships with a variety of particular non-human beings on a day-to-day basis, relationships which enable us to come to know those beings in all their variousness and individual uniqueness. How could we come to know them in this way? Presumably we could do so through communication, where communication is to be understood in a relatively straightforward manner in relation to the so-called 'higher' animals, and in a more figurative manner in relation to the so-called 'lower' animals, and plants, and plant communities such as forests. In making sense of the notion of communication in the latter case, we might appeal to epistemologies of 'attentiveness', invoked by some theological and feminist thinkers [Weil, 1962; Buber, 1970; Fox Keller, 1985; Ruddick, 1984; Holler, 1990; Warren, 1990; Mathews, 1994a]. These point to forms of human-to-non-human encounter, in which each party discovers the subjectivity of the other, through a process of overt and response. Clearly it is the relational self, with its readiness to recognise the subjectivity of others and receive their affirmation in return, that is likely to

be open to the possibility of the subjectivity of non-human others. And since it is only through readiness to recognise the subjectivity of the other (through addressing it as a 'thou' rather than an 'it') that one is likely to receive the response that will indeed confirm its subjectivity, it is the relational self that is best placed to discover the putative subjectivity of non-human others, and to feel appropriately towards them in consequence.¹³

Communication in the above sense is possible only with *particular* others. Hence to communicate with the natural world, and thereby come to empathise with it, is to be engaged in ongoing encounters with particular others – where this means, in practice, nature as it is embodied in a particular place. The eco-community will thus be a situated community, tied to place, as deep ecologists, social ecologists and bioregionalists attest.¹⁴ When we have engaged in sustained, face-to-face relationships with a range of non-human others, and recognised them as complex and responsive centres of subjectivity, with their own unique and mysterious purposes and imperatives, we shall be much more likely also to take seriously the interests of non-human others who lie beyond our ambit. Thus while eco-community may draw us into emotional and moral involvement with the lives of those in our immediate biotic neighbourhood, it will also tend to awaken in us a more generalised concern for nature.

It is worth pointing out that eco-communities need not necessarily be located only in rural areas. Community-with-nature may of course be more readily realisable in the countryside, but it is also eminently realisable in cities. There are numerous ways in which we can cultivate a sense of community with the natural world in urban neighbourhoods [Plant, 1989; 1990]. One of the more imaginative ways is to devise new forms of totemism, by, for example, declaring each child, at birth, a 'guardian' of some local species, perhaps including the name of that species amongst the child's given names. Other more hands-on ways include acquainting ourselves with the natural and indigenous history of our own area; greening streets and vacant land; restoring rivers or creeks; establishing neighbourhood gardens and permaculture projects; initiating alternative technology projects, compost and sewerage systems. Particularly important, I think, is the establishment of 'mixed communities' [Naess, 1979; Deval, 1988] of humans and animals, via urban and backyard 'farms' and sanctuaries, where these would provide opportunities for us to share our life world with non-human beings, and thereby discover for ourselves their complexity and individuality, their intelligence and capacity for responsiveness. (Modern western cities are increasingly becoming animal-free zones, where even such 'honorary persons' as dogs are barely tolerated any longer, so strong is the public sense that all living space should be for the exclusive use of humankind.) Through efforts such as these, urban eco-

communities can eventually come to emanate a 'magic', and command a passionate loyalty, that even their rural counterparts cannot match, precisely because of their significance as beacons of hope and 're-enchantment' in a spoilt and uncaring world.¹⁵

My overall suggestion in this section, then, is that community, rather than liberal democracy, is the primary political prerequisite for the development of the kind of identity conducive to an ecocentric outlook (in this I am in agreement with Barns, present collection.) I do not wish to suggest however that eco-community is a *sufficient* condition for such an outlook. People may live in small rural communities, in daily face-to-face interaction with the natural world, yet, if they have been taught to regard non-human beings as mere objects, and means-to-ends, rather than as subjects, and ends-in-themselves, they may never experience the kind of intersubjective relationship with the natural world which I have described. Relationality facilitates open-ness to the possibility of inter-subjective engagement with the natural world, but does not guarantee it. On the other hand, a merely reasoned or taught belief in the moral considerability of non-human beings would not have much force in the moral field of action, unless it were underpinned by a deeply felt, concrete sense of the living receptivity and responsiveness of such beings. My conclusion, then, is that an ecocentric outlook is rendered possible, maybe even probable, but certainly not inevitable, by eco-communitarianism. It will generally be the case that, in Western societies at any rate, anthropocentric prejudices will have to be challenged before people will become open to the possibility of the kinds of *encounter* with the natural world that I have described. So although I have argued here that some experience of relating to nature is a necessary condition for an ecocentric outlook, such experience cannot, of course, be taken as conceptually unmediated: different understandings of nature will vitiate or enhance the possibility of human-to-nature relationships.

Having now conveyed something of the meaning I wish to assign to the notion of community in the present context, I would like to clarify further the relation between community and liberal democracy. Earlier I characterised liberalism in terms of individual self-rule, but I suggested that self-rule could be achieved to varying degrees in different types of liberal democracy, ranging from the direct and participatory to the indirect and representative. However, many authors equate participatory forms of democracy with community. How then can liberal democracies which take such participatory forms be distinguished, in practice, from communities in the present sense?

The short answer is that they cannot be so distinguished, at least not in any black-and-white way. This is because in fostering individual

participation, small-scale direct democracies also incidentally tend to foster social relationships, while small-scale communities, in fostering social relationships, tend incidentally to induce individual involvement in public affairs: the two forms of political organisation thus in practice tend to converge. It is none the less important to bear in mind that they are dedicated to different ends: the end of liberal forms of democracy is to free individuals from political domination and to enhance their sense of autonomy, while that of community is to bring individuals out of self-absorption, into sympathy with others. Both envisage a form of self-realisation for individuals, but they conceive of the conditions for such self-realisation in different ways. The distinction may be illustrated by the significance attributed to consensus decision making from the two perspectives respectively. Some advocates of small-scale societies, such as Bookchin [1987], insist on the importance of consensus in community contexts, but see that importance as residing in the status of consensus as an extension of self-management and self-determination: in the absence of consensus, individual wills are over-ridden and individual autonomy accordingly diminished.¹⁶

Feminists and ecofeminists [Plant, 1989; Trinh T. Minh-Ha, 1989] who insist on consensus, however, tend to do so with a view to the opportunity for extensive communication that the process of consensuality affords: in the lengthy discussions which the process entails, mutual understanding amongst the participants is increased, and relationships tested and strengthened.¹⁷ Since I am arguing that it is community that is conducive to an ecocentric outlook, it will make a difference in the long run whether a small society is conceived as first and foremost a direct democracy or as a community. The eco-anarchism of a theorist such as Bookchin, whose small direct democracies seem to be conceived primarily as vehicles for self-management and self-determination, exhibits strong liberal tendencies, which may militate against the possibility of its also serving as a vehicle for an ecocentric environmentalism.

In this connection I think it is important to notice that community, in the present sense, is not at all compatible with the modern ideal of individual freedom. The aim of community is to cultivate and preserve social bonds. But social bonds do bind – they create responsibilities and obligations from which one is not supposed to walk away. An individual woven into a web of such relations will indeed have a place in the scheme of things – she will ‘belong’, she will never be alone, she will be assured of human succour in all circumstances. But she will not have much room to move. She will be supported by the web, but also caught by it.

Community, then, does have its price. To take the communitarian path in the present sense is very much to forfeit autonomy, at least in the sense of

individual freedom. One forfeits this autonomy not to ‘higher’ authorities, but to the needs and expectations of one’s own people, the people with whom one’s own destiny is interwoven.¹⁷

Although I have argued that eco-communitarianism is the primary political prerequisite for the development of ecological identities, such eco-communitarianism must be qualified in various ways if it is to be effective as an instrument of ecocentric environmental reform. I shall explore two of these ways.

First, the relational form of identity constituted through community must be distinguished not only from liberal individualism, but also from identities based on abstract identification with greater wholes or unities – that is, wholes or unities which have a basically abstract significance for the individual in question (for example, the nation).

Second, given that many ecological problems are now global in scope and result from forces which are themselves transnational in character (such as the forces of corporate capitalism), small local communities will be of limited efficacy as instruments of either innovation or resistance in the face of these problems [Eckersley, 1992]. Can new forms of community evolve to meet these challenges posed by globalism? Is transnational community possible, and, if so, would it be a match, politically speaking, for the transnational forces of environmental destruction currently arrayed against it?

I shall discuss each of these questions in turn, under separate headings.

Relational vs. Holistic Identity

When individual identity is described as being a function of community, this is sometimes understood to imply a holistic form of collectivism. That is, when I say that the community is logically prior to its members, I might be understood as saying that the identity of individuals is subsumed under that of the collective – that the individuals in question are no more than individual bearers of the collective identity, and in this sense have no independent identity of their own. Similarly, when ecophilosophers speak of the ‘ecological self’, they are sometimes understood holistically, as declaring that individuals are constituted by such identification with the biotic community as a whole, and accordingly lack any independent ontological status.¹⁸ But this is not how I intend the notion of the relational self to be understood in the present context. Relational identity does provide an alternative to the individualism of liberalism, but this alternative should not be read in over-simplified holistic terms. The relational self is constituted by a system of relations – it is a nexus within the wider web. The wider web does indeed constitute a whole, in the sense that it is indivisible – it cannot be broken down into self-subsistent parts, since when we attempt

to excise parts from it, the entire system begins to unravel. Hence while the web of relations is holistic in the sense of indivisible, its holism is systemic in nature, rather than substantival (block-like).

Individuals are identified through the system inasmuch as they come into existence through interaction with other elements of the system – they do not 'stand alone', in the manner of substances. Their identity is thus a function of that of the system. But this is quite different from saying that they are simply one-with, undifferentiated within, a block-like whole. Relational selves enjoy unique individual identities – they are what they are as a result of their unique positioning in a dynamic web of relations. Holistic selves, in contrast, are uniform in nature, in that in so far as they achieve identity at all, it is only as bearers of that of a greater homogeneous whole.

How to illustrate this distinction between relational and holistic selves? Consider an indigenous person whose identity, let us suppose, has been constituted through her relations with her people. Her people are part of her, they are her life-blood. But this is because she has been in continuous interaction with them since infancy. Her identity is based, not on an abstract identification, but on a lived interaction with concrete particulars. It would not make any difference to this identity, *qua* relational identity, if the woman in question were unaware that the people amongst whom she had lived were in fact members of a particular tribe, with a particular name and cultural identity. They are 'her people' primarily because they inform her very being, rather than because she has conceived of them as an abstract unity, and identified with her concept of them. Moreover, since the identity of this woman is a function of her own unique history of relations with particular individual members of the tribe, her identity will be different from those of other tribe members, even though the identities of all members are a function of their positioning within a single greater whole – that is, a particular field of relations.

Nationalism would qualify as an example of the contrasting case, that of holistic identity. In this connection, individuals identify with an entity which has only abstract significance for them, since no individual can experientially encompass a nation in all its concrete particularity. Indeed it is doubtful whether the idea of a nation can be exhausted by concrete particulars in any case. It seems to include an abstract dimension – an abstract unity, and perhaps value, which are not grounded in any of its concrete features. In any case, when seized by the sense of nationalism, entire populations do indeed become 'as one': as Australians, or Americans, or Japanese, they are uniform in nature, mere bearers of a common abstract – national – identity.¹⁹

The dangers of such holistic identification are manifest. When the identity of individuals becomes subsumed under that of wholes in this way,

the interests – and rights – of individuals may become subordinated to the perceived interests – and rights – of the abstract whole, where this immediately summons up fascistic and totalitarian associations.

But this familiar danger of holistic identity is not the only one. When an individual identifies, not with particular others but with an abstract entity, she comes to see others not as particular living presences inextricably intertwined with her own living being. Rather she tends to view them under abstract categories – as instances of this or that abstract identity, congruent or dissonant with her own. Perceiving others in this way does not generate fellow-feeling for them – it does not induce a sharing of one's immediate sense of aliveness – and vulnerability – with them. This is not to say that it may not elicit *sentimental* attitudes towards the others in question – as bearers of *this* cherished abstract identity, or *that* despised one – but these attitudes are sentimental rather than authentic precisely because they are based on hollow preconceptions rather than on direct encounter with the reality of the others in question. Identification with abstract wholes or unities can thus have a dehumanising effect, allowing the true needs and nature of others to be ignored in favour of abstract stereotypes.²⁰ Another – more fashionable – way of putting this point is to say that when individuals identify with abstract wholes – whether these be as large as the cosmos itself, or 'Gaia', or the cosmopolis, or the nation, or as small as one's own city or neighbourhood – *difference* will be suppressed, the manifold real differences amongst individuals will be dissolved in homogenising or exclusionary abstract categories.²¹

This is not the last of the dangers of holistic identification in this abstract sense. When an individual subsumes his identity under that of a greater abstract entity or unity, one might expect him to suffer a sense of diminution, but in fact the opposite seems typically to take place: the individual becomes subject to inflation, or ego-aggrandisement – he feels as big and important and perhaps as powerful as the greater entity or unity purportedly is. Such a sense of omnipotence works, again, against the possibility of empathy – although again it might express itself in grandiose acts of charity or aid, as well as in a deadly hubris or arrogance.

In light of these remarks about the nature of holistic identity, I think it is clear that the abstract individualism of liberalism on the one hand, and a form of abstract holism, such as nationalism, for instance, on the other, can ultimately appear as flip sides of the same coin. As I have already explained, the identity of abstract individuals is abstract in the sense that it rests on the abstract idea of a pre-social individual, an individual who can logically exist as a fully rational, and therefore fully human, being independently of social relations with others. This idea is abstract inasmuch as such an individual is not – originally, at any rate – encountered in experience, since from an

empirical point of view human individuals are invariably formed through social relations of interdependence.²² (However, as I have already remarked, later exposure to liberal institutions can to some extent counter the relational aspects of the early processes of identity formation.) The liberal individual thus arrives at a sense of self not so much through attending to the data of his own experience, which reveal the irreducibly relational bedrock of his identity, as through identifying with an idea.²³

The identity of holistic individuals is, I have suggested, abstract in a similar fashion: ideas of greater wholes – such as ‘the nation’ (or indeed ‘Gaia’, or the ‘world society’) – with which holistic individuals identify are also abstract in the sense that these wholes are not encountered in experience. An entity such as ‘the nation’ is not encountered in experience in two senses: it cannot be *encompassed* in the experience of a single individual; and as a unity it cannot be experienced because it does not *exist*; all that exists is a field or manifold of heterogeneous elements. (The latter objection may not apply to all contenders for the title of ‘greater whole’: Gaia, for instance, may have a unity which is objective rather than nominal. However the former objection will still apply: from the viewpoint of the individual it is abstract because it cannot be encompassed in experience.)

A deeper contrast than that between the relational and the holistic self is here emerging. This is the contrast between concrete and abstract selves; while the concrete self is relational, the abstract self may take individualistic or holistic forms. The idea of self with which the relational individual identifies is based on processes which it has encountered in its own experience. These processes include relations of interdependence with others. Being dependent on others, and being identified with this dependence, the relational individual has to try to understand the reality of others, in all their concrete particularity: in other words, in order to understand himself, he must seek to understand others. The abstract individual, on the other hand, is ‘out of touch’ with his experience. Whether he sees himself as a liberal individual or as a bearer of a national identity, he has no need, logically speaking, to understand the real nature of particular others, since their nature – whatever it is – will make no difference to his own identity: he does not need to understand them in order to understand himself.

Finally, returning to the issue of holism again, I think that the significance of this distinction between identities that are concretely relational and those that are abstractly holistic is particularly important to appreciate in the present era of ‘globalisation’. People from various different ideological camps are, today anxious to identify themselves as ‘global citizens’. Clearly such a global identity involves identification with an abstract concept of a global whole, since individuals cannot interact

concretely, in face-to-face fashion, with all the (human and non-human) particulars included in the global domain. It matters little, in this connection, whether the abstract global unity with which one identifies is the system of corporate capitalism or the biosphere or planet itself. Global identity in either form would presumably be subject to the dangers I have just enumerated. However, the undeniably global nature of certain ecological processes and threats to the environment, do seem to call for some kind of expansion of locally-based identities towards wider horizons. Whether or not this can be achieved without entraining holistic identity in the above sense will be considered below.

Transnational Communities

The idea of eco-communitarianism has a *prima facie* connotation of political decentralisation and regionalism. These are positions in favour with many of the more radical ecological thinkers, such as deep ecologists and bioregionalists: when people ‘dwell in place’, and live in true community with their own biotic neighbourhood, they are expected to become responsive to, and responsible for, that neighbourhood [Sale, 1985; Naess, 1989; Plant, 1990]. However, the suitability of small local communities for all ecopolitical purposes may be challenged on a number of grounds [Eckersteyn, 1992], including the following:

- (i) Since ecological processes are not confined by national boundaries, many ecological problems are now international in scope, and therefore not manageable by local agencies.
- (ii) External authorities are occasionally needed to over-ride regional authorities that willingly or unwittingly fail to meet their ecological responsibilities, either to their own bioregion, or to those downwind or downstream.
- (iii) The political power of small local communities is no match for the forces of transnational capitalism currently arrayed against the environment world-wide.

These objections to small, local communities as the privileged vehicle for ecopolitics may lead to calls for more centralised or more global forms of political organisation, or both. I propose to concentrate here on the third problem, which is a problem of power, and the seeming inadequacy of small local communities to function as effective instruments of resistance to the forces of transnational capitalism, where these now arguably constitute the major threat to the world’s environment.²⁴ My question is whether political formations are conceivable which retain a relational – that is, communitarian – structure yet which also demonstrate a capacity to resist the forces of transnational capitalism. If such formations are indeed conceivable, they

might prove to be adaptable to management and coordination roles as well (Dryzek, Thompson, this collection).

The question I have posed is, I think, particularly important at the present time because of the accelerating pace of the processes of globalisation. These processes are driven by the increasingly stark imperatives of capitalism, where the ultimate such imperative is simply that of profit maximisation. The bedrock requirements of social life are, as we know, at the present time increasingly being subordinated to the bottomless requirements of capitalism. Societies in the grip of global competition, for instance, can no longer 'afford' such fundamental social goods as welfare and publicly-owned utilities and amenities. In this climate, the function of the state itself is seen to be that of ensuring conditions favourable to commercial enterprise. Since profit-making tends to be optimised at the scale, level of mechanisation and computerisation, and monopolising potential of companies increase, states find themselves dedicated to facilitating the rise of corporate colossi, which rival the states themselves in economic, and hence ultimately in political, power. Principles of economic natural selection ensure that such corporations in due course become transnational in scope and structure. Since such transnational organisations easily gain control of the economies of smaller states, their operations cannot be effectively controlled by those states. This process of corporate giantism accordingly seems self-reinforcing and therefore set to continue. In the middle future we might envision a situation in which states have faded into the political background, except as auxiliaries to corporations, and the corporations themselves have become not only the major economic players, but the primary political formations as well. States would no longer then be in a position to protect either their citizens or their environments from corporate agencies – they could no longer insist on either human or ecological rights, or even on the rights of states themselves to the means of their own self-perpetuation, such as taxes.²⁵

In this scenario, then, the state as an independent regulatory power would wither away, although individual states might linger on as puppet-like enforcers of the will of corporations. As the state *qua* independent political agent withered away, so would the nation, until individual countries retained their identities only as geographical entities. This dissipation of national identity, together with the thoroughly transnational character of the corporations themselves, would ensure that individual members, or employees, of corporations would no longer identify themselves either in terms of nationality, nor even in terms of regionality, since they would have to stand in readiness to move from post to post around the world at the behest of their companies. Such individuals would accordingly be likely to identify directly with the companies themselves, in the abstract way I described in the

previous section: the true 'corporation man' and woman would finally be born!

The scenario I have outlined here might be characterised as a kind of *corporate feudalism*. To the extent that corporations would still have to compete with one another for personnel, they could be expected to look after their employees – providing them with training (but not necessarily a general education), accommodation, health care, pensions, and so on. To this extent the corporation might effectively take over the social functions of the by-this-time defunct state. But those individuals whose services were not needed by the corporations would simply drop through the net of social provision, where this would mean that whoever was not supported by kin would fall into social oblivion.

Those whose services were not needed by the corporations would include any who were, for whatever reason, unemployable and, even more significantly, any who simply constituted surplus labour. The class of those who would satisfy the latter description is likely to be extremely large – to include entire populations, in fact. For as production of all kinds (primary as well as secondary) becomes – in the interests of economic efficiency – increasingly mechanised and computerised, and accordingly centralised, the requirements for labour (at manual, technical and managerial levels) progressively diminish.²⁶ The combination of exploding populations in Third World countries with the dwindling need for labour on the part of the corporate capitalist interests which have appropriated the resources of the countries in question poses a truly terrifying prospect. As noted, entire populations could be discarded in this scenario, and those individuals who were not so discarded would be effectively owned, body and soul, by their corporate providers, since these individuals, like the vassals of the medieval period, would depend on their corporate masters for their very survival.

The picture I have painted here – of corporate feudalism – is undoubtedly an apocalyptic one, but my intention has been merely to highlight a particular trend in current events, where the world is, thankfully, sufficiently complex to contain all kinds of other, countervailing and tangential trends as well. However, in light of the particular trend in question it would seem to be important, from environmental and other, social, perspectives, to develop transnational structures of resistance now – structures which bypass the state in order to apply direct pressure to corporations themselves. My question here is again, can such structures be developed in such a way as to preserve and reinforce the relational identities of their members – identities which have been formed in genuine eco-community – or will they inevitably reinforce, at the existential level, the very processes that led to the kind of thinking they are attempting to resist? In other words, will transnational structures of resistance inevitably foster

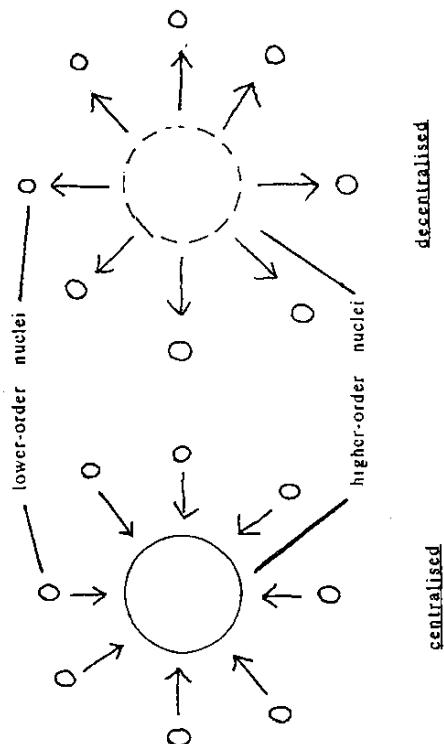
that abstractness of identity which allows us to become 'out of touch' with the real, felt needs of others, human and non-human alike?

I think the key to this question lies in discovering a type of political formation which is not bounded in the conventional way – that is not defined in terms of regional, national or even global boundaries, but rather retains its connective or relational structure. To this end I would like to propose here two models of political structure.

It is apparent from this, I think, that centralisation and decentralisation, as conventionally conceived, are merely different modalities of the same basic model of political structure – decentralisation is not the radical alternative to centralisation it is generally taken to be. In either case, political power is invested in larger or smaller political units – substance-like entities which, logically speaking, stand on their own. Autonomy is still the operative notion here. Decentralisation involves devolution of power away from larger nuclei to smaller ones. However, whether larger or smaller, these nuclei are still centres of power in their own right, centres of self-rule, not subject to interference from without. Even when such an organisation is decentralised to the point of returning power to mere individuals, the individuals are conceived as units of sovereignty, mini-centres of power, capable of making for themselves the kinds of decision relevant to the aims of the organisation. In political structures of this type then, power is located in autonomous or semi-autonomous centres, or nuclei.

(1) *The substance or nuclear model*: This model depends upon the notion of a boundary: political formations are bounded, either in space or by formal means, such as legal incorporation. It is relative to such a boundary that a centre can be defined. Hence it is only within the terms of this substance model of political structure that the dichotomy between centralisation and decentralisation arises: investing political power in the centre of course gives rise to centralised political structures; when power is returned to elements at, or closer to, the periphery (the boundary), however, the structure becomes decentralised. Such patterns of the distribution of power may be illustrated as follows:

FIGURE I
SUBSTANCE OR NUCLEAR MODEI



(2) *The lattice or relational model of political structure:* In a lattice structure, power is invested not in the elements of the structure themselves, but in the relations between them. Such structures accordingly cannot be described in terms of either boundaries or centres, but rather in terms of the lines of communication between the elements. Nor can they be characterised as either local or global, because they traverse geographical space, rather than encompassing it. The distribution of power in such structures may be illustrated as shown in Figure 2.

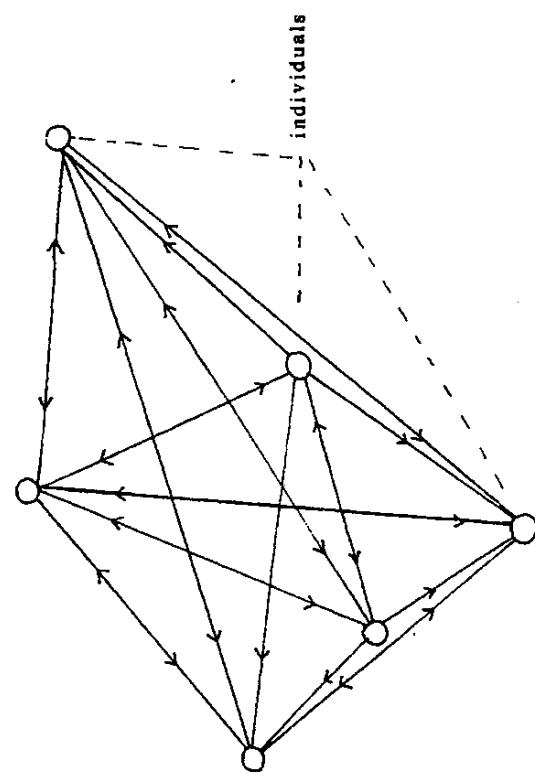
The centralised/decentralised dichotomy does not apply to structures of this lattice or relational type. Autonomy is no longer the operative notion in this context. Decisions are made neither by large nuclei at the centre of the organisation nor by small nuclei at the periphery, but rather in the lattice itself, as a result of everyday communication and information transmission. Structures of the lattice or relational type are, of course, more familiarly designated as 'networks'. Network structures are already favoured by activists on many political fronts. However, the term 'network' is used loosely and may not always refer to the kind of structure I have outlined

decentralised

centralised

here. I have used the term 'lattice' to provide a more precise designation for the structure in question.

FIGURE 2
LATTICE MODEL



To the extent that lattice structures are effective in shaping or modifying identity, they will clearly promote relational rather than substantial (whether individualistic or holistic) forms thereof. Our question here then is, can such lattice or relational structures take transnational form? Can we in effect establish transnational *communities* of individuals, dedicated to specific environmental ends?

For lattice structures to qualify as communities in the present sense they would have to be such as to permit face-to-face interaction between members. Clearly this is not possible in a transnational context. However to the extent that individuals have access to computer and telecommunication facilities, sustained person-to-person interaction is feasible for members of networks. Such concrete, though technologically mediated, interaction between individual members of a transnational network may be expected to reinforce existing relational aspects of identity, forged in local communities, while adding important new, transnational dimensions to them. These will not be the abstract dimensions implied in the ideas of 'global citizenship' or 'global cosmopolitanism' currently in vogue in political theory [Archibugi

and Held, 1995]. They will rather be aspects of identity grounded in actual relations with particular others, relations that will add, in a small but real way, particular transnational threads to the existing fabric of our identity. In this case I shall no longer be merely an Australian of European descent, for instance, for I might blend a few strands of Bardi, Penan, Sioux, New Yorker, Icelander, and so on into my sense of self.²⁸ This is important, I think, for two reasons.

First, ecosystems themselves are relatively unbounded. Hence if our goal is an ecocentric polity, our loyalties cannot be too fixated on our own local bioregion – we must be aware of and responsive to wider ecological horizons. Yet simply to identify with wider and wider (and hence less and less concretely known) circles of nature, as some deep ecologists [Fox, 1984; 1990] advise, is surely to court the dangers of abstract holism, explored above. Perhaps transnational lattice structures afford an opportunity to expand our sense of ecological selfhood, without risking abstraction and inflation. To the extent that we are communicating in an ongoing, sustained way with individuals actively involved with ecological issues in their own regions or countries, we might achieve more meaningful forms of identification not only with the individuals in question, but with particular parts of the natural world beyond our own biotic neighbourhood.

Second, the forces presently threatening the environment worldwide are largely, if not predominantly, transnational in character. As I remarked earlier, small local eco-communities appear to be politically insignificant in the face of such forces. Transnational networks or communities of resistance, however, are potentially highly effective, even though small in terms of membership. Part of the secret of the strength of transnational corporations is, of course, that when political pressure is applied to them in one country, they simply transfer their operations to another. The availability of this option protects them even from strong state pressure within any given country. However, although a transnational activist network can generally bring to bear only pincers of pressure within any given country, it can apply its pressure directly to markets (for example, through picketing), and – unlike nation states themselves – it can reproduce this pressure in many countries. Even a relatively small pressure, reproduced in this way, is likely to provide sufficient irritation to induce a corporation to comply with the political demands in question. In other words, transnationality confers on organisations of resistance precisely the same kind of strength it confers on corporations themselves – a strength that cannot be computed in terms of the size (or scale of membership) of the organisation in question.²⁹

So the present age of transnational corporations, which have largely escaped the rule of law – this being still essentially a function of the nation

state – calls forth organisations of resistance which are themselves transnational in structure, and which seek to exercise some control over the corporations not through law, but by applying painful stimuli directly to those most sensitive of corporate nerve-endings, the retail outlets. With their lattice structures, these organisations can hopefully begin to address the global aspects of the environmental challenge without reproducing in their own structures the very forms of identity which result in the abstractness, the ‘out-of-touchness’ with the urgent living reality of other beings, that arguably underlies our present epic blindness to their needs.

Is There a Role for the Liberal State?

In this study I have questioned the appropriateness of liberal democracies as vehicles of an ecocentric environmentalism. I have argued that they provide neither the moral nor the ontological basis for ecocentric consciousness, and that small egalitarian communities are more suited to this end. Such communities, which may be local or transnational in their scope, help to cultivate relational – and hence ecological – identities. In their transnational guise, they also constitute a political instrument well adapted to resisting the environmentally destructive forces of transnational capitalism, and perhaps to assuming environmental administrative and co-ordinative roles as well. There are many problems with such a communitarian scenario in addition to those which I have addressed here. These include problems concerning institutional and procedural arrangements both within and across communities. I do not have space here to offer a total picture of a communitarian world. Nor is my intention in any case so utopian. I am interested rather in the steps that we can take towards achieving a general ecocentric will, and devising political tools for such a will, within the framework of existing liberal democracies. I have argued that the creation of communities of various types would take us some distance in this direction. The shape that politics would take thereafter probably cannot be anticipated from the present point in time.

I do not wish to claim here, then, that there is no role for liberal democracies in a green future. On the contrary, although the emphasis on individual freedom and autonomy that is characteristic of liberal regimes works against the emergence of ecological identity and consciousness, the safeguarding of individual freedom remains important for ecopolitical purposes. For it is this commitment to individual freedom – and ‘human rights’ generally – that makes it possible for us to form ourselves into the ecological communities and to create the transnational structures of resistance that I have been advocating in the previous sections. As the corporate titans gain a stronger grip on states, they will – if my forecast of

corporate feudalism is at all on track – tend either to replace existing liberal states with repressive ‘puppet’ states, or establish a directly corporate world order amongst themselves. In either case, individual participation in communities of ecological initiative or resistance is likely to be curtailed, whether through legal means or economic reprisals. It would seem to be necessary, then, to try to protect our liberal freedoms, even while seeking to create less individualistic, more relational identities for ourselves in communities of our own making. There is a tension in this position, but it is not a paralysing one.

Ironically, it is not only the environment but the liberal state itself which is at risk from that state’s present one-sidedly economicistic course. For, as I argued earlier, that course is likely to strengthen corporate formations, which may in time come to rival states themselves as the primary locus of power. One of the first steps towards protecting the liberal state then, with the opportunities for experimenting with communitarian initiatives that it affords, is surely to try to ameliorate its present excessive economicism – to try to awaken it to the fact that if it continues down its present path, it will eventually no longer be in a position to ensure the autonomy of its citizens, nor hence to discharge its definitive duty as a liberal state; it will no longer be a liberal state, and possibly not even a state at all.

Moreover, as long as the liberal state is in place, there is every reason to green it to the best of our ability, through green parties, social movements, lobby groups, and so on, as long as we do not invest all our hope for an ecocentric sea change in these mechanisms, but rather continue to work on the ontological foundations for an ecocentric consciousness. Even centralised international agencies, such as Greenpeace, Worldwide Fund for Nature, and so on, are not ideologically ruled out by my argument. Although centralised and hierarchical in structure, and hence not in themselves conducive to the development or reinforcement of ecological identities, they may be effective tools of resistance or initiative in international forums for those who have already arrived at ecological consciousness by other means.

My argument then is that, while liberal forms of democracy do not in themselves provide conditions likely to foster widespread ecocentric consciousness, they do provide a starting point and a safe space, politically speaking, in which we can begin to create such conditions for ourselves. To that extent, liberal democracy remains important to ecocentric environmentalism, even though we shall have to attempt to counteract its individualistic effects in the limited space of political freedom that it makes available to us.

- NOTES
- Throughout this study I take the position adopted by Dryzek in his contribution to this collection, namely that, in environmental matters, at any rate, particular forms of political organisation tend to induce (or pre-empt) particular types of policy outcome, or that 'green values' cannot be fully separated from 'green agency' (Goodwin, 1992).
 - In this sense I think that a purely utilitarian conception of democracy – which seeks to maximise individual utilities – misses an important part of the original point of democracy since 'the greatest happiness (or satisfaction) for the greatest number' could in principle be realised under a benign dictatorship.
 - Such a conception of liberalism of course entails its eminent compatibility with capitalism, but my intention here is to investigate the environmental implications of liberalism as such, rather than of liberal capitalism.
 - Those theorists, such as Kymlicka (1993), who regard liberalism as a theory about the state and its limitations rather than about society, are a case in point. From such a point of view, society might take communitarian forms and give rise to non-individualistic modes of identity in its members, while still falling within the framework of a liberal polity. This is not altogether unlike the sort of provisional compromise with liberalism that I reach at the end of my paper.
 - Recall Mill's well-known refusal to countenance any exercise of freedom intended to extinguish freedom itself (e.g. the selling of oneself into slavery).
 - In Kant's terminology, they might, through reason, arrive at *moral judgements*, but they will not be capable of *beautiful acts* (see Naess (1993)).
 - In fact, as feminists such as Pateman (1988) have shown, the individuals who were deemed party to the social contract in the original social contract theories, such as those of Hobbes and Locke, were male heads of families. It was tacitly recognised, then, that individuals are formed through relationships with others, but the sphere of such 'domestic' relationships was relegated to the 'state of nature'. In so far as individuals are members of society, they were considered by liberals as logically independent of others. The actual original (and ongoing) social interdependence of individuals was thus glossed over in favour of an abstract ideal of autonomy. The whole question of how women, with their greater enmeshment in domestic relationships, could match this ideal was of course not even raised by the early contract theorists; autonomy was understood to be an ideal for men.
 - Plumwood (this collection) makes the point that though this dualistic elevation of reason above nature serves as a rationale for equality in the rhetoric of liberalism, it at the same time serves to inferiorise a whole range of social groups which are, in liberal societies, associated with nature. In this way, such reason/nature dualism naturalises and justifies social and political *inequality*.
 - There is, in my view, more to the metaphysical story than this: a purely relational ontology does not account for the the substantiarity – in the sense of concreteness – of things. A field of relations is only actual, and hence constitutive of a world of concrete particulars, if it is in some way embedded in a substance continuum, such as space. For further metaphysical elaboration, see Mathews (1991).
 - The contrast between purely rational and more emotionally informed ways of knowing, and ways of thinking morally, has been explored by a number of feminist thinkers, for example, Gilligan (1992); Belenky *et al.* (1986); Fox Keller (1985); Benjamin (1990); Benhabib (1992); Catherine Keller (1986); Noddings (1984); Ruddick (1984); Hartsock (1985). However the contrast may also be found in Hume, who argued that the basis of morality is moral sentiment rather than moral reason.
 - Feminist object relations theorists, such as Nancy Chodorow (1978) and Jane Flax (1980), originally provided models of the separate and relational selves. These models have been refined by Benjamin (1990), and applied by psychologists such as Gilligan (1982) and Belenky *et al.* (1986).
 - This is an important question because many commentators have shied away from communitarianism on the assumption that it is a basically conservative ideal. Certainly many of the values implicated in communitarianism have been embraced by conservative thinkers.
- The contrast between interconnected or relational social organisations and aggregate or individualistic ones has a long history and was elaborated most notably perhaps by Ferdinand Tönnies, in the nineteenth century. In his book, *Gemeinschaft und Gesellschaft*, he distinguished between 'community' and 'society' in the following terms: community (Gemeinschaft) is to be understood as real, interacting, face-to-face community, where people are known to each other in many different roles, and are accordingly perceived by one another as whole persons, ends-in-themselves, rather than as mere functionaries. Community in this sense is held together by custom, ties to locality and bonds of kinship and inherited status. In society (Gesellschaft), in contrast, relationships between persons are formed as means-to-ends, and based on contract rather than custom, habit or affection. People encounter one another in limited, functional and often transient roles, and accordingly form no conception of one another as whole persons. Society in this sense is built on an instrumental and contractual foundation.
- Tönnies's own preference is obviously for community, which, sustained by bonds of kinship, status, locality, affection and affinity, creates a way of living conducive to a sense of wholeness, or fulfilment, and instils in people a sense of belonging, of their own inalienable place in the scheme of things. Tönnies's vision has striking affinities with that of contemporary communardians, yet the communities to which Tönnies nostalgically looks back for inspiration are the feudal and patriarchal communities of the pre-modern era. It is clear in the light of this that we need to scrutinise more closely the notion of community that I have advocated here as a foundation for an altruistic and hence potentially ecocentric polity.
13. This conclusion – that relational selves require egalitarian forms of community as a precondition for their very existence – dovetails with my earlier observation that relationship, when it is an established fact, compels an admission of equality. For when it is understood that the identities of others permeate my own, and *vice versa*, then it is also understood that no attribute of mine is referable to myself alone: my attributes, like those of all other elements of the system, are a function of the relations which constitute them, and hence of the system as a whole. No element of the system can count itself higher than any other, nor on that account in a position to dominate another. Hence any community which in fact achieves a relational structure will *ipso facto* also achieve egalitarianism, at least at an ontological level – though the logic of this will not necessarily be reflected in peoples' perceptions, or their politics. However, since relationality can only be achieved in an egalitarian context, according to the above arguments, the egalitarianism of peoples' perceptions in such a community is already assured on other grounds in any case.
14. Deep ecologists (Naess, 1989; Devall, 1988) and bioregionalists (Sale, 1985; Plant, 1990)
15. Ursula Leggin's novel, *Always Coming Home* (1988), is a treasure trove of ideas as to how human beings can live in community with the natural world. Admittedly the novel is set in the distant future, and in a rustic ambience, but it is a wonderful study in mixed communities. The novel is also noteworthy in this connection in that, although it depicts an eco-communitarian utopia, it does not suggest that the problem of evil has been solved therein, but rather shows how such a society manages and contains, but does not eliminate, human tragedy.
16. This also seems to apply in some indigenous communities. See Rose (1992).
17. Some of the more traditional Aboriginal communities illustrate this point. Individuals are indeed woven into an extensive and complex web of blood and customary relationships (Rose, 1992), but nor can they escape these relationships and the obligations they entail (Graham, 1992). Lacking individual freedom and being beholden to others in this way effectively militates against not only a liberal ethos of individual freedom, but the capitalist ethos as well: one cannot simply follow the trail of opportunity wherever it might lead, and one's relatives will help themselves to whatever wealth one happens to attract in any case. Community in this sense thus seems to imply a trade-off between freedom and belonging, between material wealth and social wealth.
18. This has been pointed out by Cheney (1987); Plumwood (1993); Kheel (1990).
19. Mary Daly (1979) makes an interesting (though typically rhetorically loaded) distinction between male comradeship, which involves loss of individual identity, and female sisterhood

or friendship, which results in mutual individual self-realisation.

20. Identification with abstract classes may occur as well. Racism, sexism and classism may rest on such a form of identification.
21. Some authors have raised this objection to communitarianism itself – that is, they have argued that communities homogenise their members, in the sense of making individual difference unacceptable [Young, 1990]. I hope to have shown here that this objection can only apply if community is understood in a holistic rather than a relational sense.
22. In saying that human individuals are invariably formed through social relations, I am not ignoring wolf and gazelle children, and such like. To the extent that these children do acquire a coherent sense of self, it is presumably more likely to be as honorary wolves or gazelles, though they will not of course perform entirely satisfactorily as such.
23. I am not intending to set up a sharp division between (abstract) ideas and experience here. All ideas are abstract, and all human experience is mediated by ideas. In qualifying certain ideas (and identities) as 'abstract' in the present context, I am intending to signify that they go beyond what is or can be encountered in experience.
24. Clearly overpopulation is also a factor contributing to environmental degradation worldwide. I do not wish to enter into the debate about the relative weightings assignable to these factors. Corporate capitalism is unquestionably at the very least a threat of the highest order.
25. If a major corporation did not wish its employees to pay taxes, then the state, being in the pay of, and under the control of, such corporations, would not be in a position to extract the corporation's compliance.
26. Computerisation does not always entail centralisation. The kind of access and responsiveness to specialised markets that computerisation allows also makes small, highly specialised ('boutique') production ventures economically feasible [Mathews, 1989]. However these are likely to be co-opted by larger corporations in due course too. Centralised management is of course perfectly compatible with any degree of diversification and specialisation in production.
27. This is presumably not the only route to nationalism, since peoples not traditionally perceived as either individualistic or liberally inclined, such as the Japanese, have demonstrated strong propensities for nationalism. Identification with the nation or the corporation could, perhaps, in the case of the Japanese, have come about as a result of filial sensibility. Confucian-style deference, devotion or loyalty to the father, the executive director, or the Emperor may lead, via a different psychology, to a result convergent with that of abstract holism [Yamuchi, 1995].
28. For further elaboration of this idea, see Mathews [1994b].
29. An example of a such transnational organization of resistance which exerted considerable political influence on corporations in the late 1980s and early 1990s, is the worldwide Rainforest Action Network.

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Environment, Democracy and Community

IAN BARNS

A radical democratic polity might provide a discursive framework more supportive of a green political agenda than that provided by a liberal democracy. Four key themes of a radical democratic project are: the development of a richer public discourse involving a more active, participatory practice of citizenship; the inclusion of group difference within the public domain whilst at the same time maintaining a commitment to working towards 'the common good'; the renewal of those forms of community life that enable the formation of persons with strong moral commitment yet respectful of difference; and the explicitation of the moral sources of radical democracy through peaceable dialogue between rival versions of the good life. These themes are then applied to the following key issues of green politics: the development of a morally grounded vision of sustainable development; the balancing of green political activities at the 'centre' and the 'periphery' of political life; the recovery of the communitarian basis of an 'ecological self'; and the creation of a 'frame reflexive' dialogue about the moral foundations of both democracy and a respect for the natural world.

Even for the more or less committed, 'staying green' is a demanding moral practice. If you are an urban consumer it means resisting the seductive appeal of television advertising to consume more and to care less, and a willingness to change your habits in relation to energy use, transport, and waste disposal – at a not insignificant cost in time, energy and convenience. If you are a business person it means an ongoing commitment to invest in 'socially useful' and environmentally non-destructive products. If you are 'just' a concerned citizen it implies a persistence in participatory activism in environmental politics, with the hard slog of understanding complex issues, remaining attentive to the spotty records of government, business and unions on conservation issues, and supporting campaigns on diverse environmental issues, ranging from the protection of local wetlands, to matters of national and international policy, such as conventions on

Ian Barns teaches in the Institute for Science and Technology Policy at Murdoch University in Western Australia.

Being a sandpiper

Animals have thoughts, feelings and personality. Why have we taken so long to catch up with animal consciousness?

by [Brandon Keim](#)



'A strangely affecting parade'. Semipalmated sandpipers at Jamaica Bay, Long Island, NY. All photos by the author

I met my first semipalmated sandpiper in a crook of Jamaica Bay, an overlooked shore strewn with broken bottles and religious offerings at the edge of New York City. I didn't know what it was called, this small, dun-and-white bird running the flats like a wind-up toy, stopping to peck mud and racing to join another bird like itself, and then more. Soon a flock formed, several hundred fast-trotting feeders that at some secret signal took flight, wheeling with the flashing synchronisation that researchers observing starlings have mathematically likened to avalanche formation and liquids turning to gas.

Entranced, I spent the afternoon watching them. The birds were too wary to approach, but if I stayed in one spot they would eventually come to me. They followed the tideline, retreating when waves arrived, and rushing forward as they receded, a strangely affecting parade. When they came very close, their soft, peeping vocalisations enveloped me. That night I looked at photographs I'd taken, marvelling as the birds' beauty emerged from stillness and enlargement, each tiny feather on their backs a masterpiece of browns. I looked up their scientific classification, *Calidris pusilla*, conversationally known as the semipalmated sandpiper — a name derived from a combination of their piping signal calls and the partially webbed feet that keep them from sinking in the tidal sand flats of their habitat, where they eat molluscs, insect larvae and diatom algae growing in shallow, sun-heated seawater.

I learned that semipalmated sandpipers are the most common shorebird in North America, with an estimated population around 1.9 million. My copy of *Lives of North American Birds* (1996) described them as 'small and plain in appearance', which seemed unappreciative, especially in light of their migratory habits. Small enough to fit in my hand, they breed in the Arctic and winter on South

America's northern coasts, flying several thousand miles each spring and fall, stopping just once or twice. The flock I'd watched was a thread in a string of globe-encircling energy and life, fragile yet ancient, linking my afternoon to Suriname and the tundra. At that fact, I felt the sense of wonder and connection that all migratory birds inspire. Yet not once did I wonder what they thought and felt along the way. How did they experience their own lives, not just as members of a species, but as individuals?



It was a question outside my habits of thought, and occurred to me only months later, when I interviewed the American artist James Prosek. His compendium *Trout: An Illustrated History* (1996) had earned comparisons to the great American ornithologist and painter John James Audubon. Prosek's paintings are indeed beautiful and his book, published while he was still an undergraduate, was shaped by a tradition of field guides and natural histories.

Prosek had not personally encountered many of the trout and salmon species that he painted. Instead, he accepted on faith their place within established taxonomic classifications. But those classifications would soon be rearranged by the application of molecular genetics to the taxonomy of the salmonids, a rearrangement that encouraged Prosek's deepening appreciation for how varied fish of the same species or subspecies, or even the same watershed, could be. The field guide notion of a species 'type' felt inadequate, even misleading. Prosek's contemplations culminated in the glorious paintings of his latest book, *Ocean Fishes* (2012): he made a simple but profound decision to paint the specific, individual fishes he encountered. The Linnaean system of classification — a hierarchical naming structure introduced by the Swedish botanist Carl Linnaeus in 1735 — might describe the world and its generalities, implied Prosek, but it could not capture the richness of an individual life.

Several months after meeting Prosek, I was walking in Jamaica Bay on a bitterly cold and cloudless day when I saw semipalmated sandpipers again, running ahead of a pounding surf that caught the afternoon sun and sprayed their retreats with prisms. As Elizabeth Bishop observed in her poem 'Sandpiper' (1955): 'The roaring alongside he takes for granted./and that every so often the world is bound to shake.' I wondered what it would be like to be one of them, to run with the flock and feed in the surf, to experience life at their scale and society. Simply put, did they enjoy it? Were they cold? Did they remember their journeys, feel a connection to individuals with whom they'd flown, a concern for compatriots and mates?

Asking those questions made me appreciate just how deeply I'd internalised the taxonomic system against which Prosek strained, as well as the habit of explaining animal behaviour in mechanical

terms. I'd regarded the sandpipers as embodiments of their species and life history, but not as individuals, much less as *selves*. This oversight was not coincidental. The very history of taxonomy and attendant studies of animal behaviour is intertwined with a denial of individual animal consciousness.

Scientific taxonomy began not in the 18th century with Carl Linnaeus but some 2,000 years earlier in ancient Greece, with philosophers who venerated rationality and the power of language. Before them, and especially during humankind's long prehistory, animal deaths at our hands might have been necessary or justifiable, but they were also seen as unfortunate, and we offered thanks and apologies, as evidenced in paintings, artifacts and ritual.

The most rationalistic of Greek thinkers washed their hands of such sentiments. Aristotle introduced the notion of binomial nomenclature, grouping animals by whether or not they had blood, and whether they lived on land or in water, in a hierarchy with humans at the top. In his view, animals were incapable of any sensations but pain and hunger. Brutal as this sounds, Aristotle was practically an ancient Peter Singer compared with the Stoics such as Zeno of Citium, who insisted that animals felt nothing at all. This view influenced early Christian thought and, eventually, René Descartes, according to whom animals were all body and no mind, no different from the lifelike mechanical toys popular in 17th-century France.

Descartes' influence is manifest in the infamous words of the French rationalist Nicolas Malebranche, who said in *The Search After Truth and Elucidations* (1674) that animals 'eat without pleasure, cry without pain, grow without knowing it; they desire nothing, fear nothing, know nothing.' Not everyone agreed. Notable critics included Thomas Hobbes, Spinoza and Voltaire, but their objections held little sway in an era of triumph for mathematics and the physical sciences. It was an intellectual moment most unfavourable to what could be felt but not quantified. Thus beliefs about animals that would be considered psychopathic if acted out by a 21st-century child became tenets of Western scientific thought and, in this milieu, taxonomy as we know it took form.

The science of taxonomy was driven by wonder and new discoveries in faraway lands, but this was not the whole of it. As Michel Foucault notes in *The Order of Things* (1966), people had always been interested in plants and animals. What taxonomy satisfied was not simply curiosity but a desire for an overarching order to the world. Linnaean classification was triumphant among dozens of competing, lesser taxonomical schemes, but they all served a common project of bringing nature's wild diversity to Enlightenment heel, of putting the messy living world in tabular form.

The great beauty of evolution, its essential profundity, is in placing humans among animals, not only in body but in mind

Linnaeus did have an extraordinary eye for detail, and combined his supreme ambition with a simple and powerful system for classification. It worked by comparing a few clearly visible, easily measurable anatomical traits: his natural history was based purely on surfaces. A century later, the French naturalist Georges Cuvier revolutionised taxonomy by introducing comparisons of internal anatomy, but, as far as the inner lives of animals went, this too was a superficial revolution. It was a science of gross anatomy, not of minds, reflecting Descartes's mechanistic image of animals as assemblages of pieces. By the time of Cuvier, science had an entrenched species-first filter through which nature would be scientifically and culturally apprehended.



Taxonomic science was far, however, from arbitrary. It was, and is, a wonderful means of describing the variations that do exist in the natural world. Taxonomy – or modern-day systematics – provides a language with which it is possible to understand the sandpipers in that crook of Jamaica Bay as being part of a related group including oystercatchers and common terns. With that language, it's also possible to note that semipalmated sandpipers can live for more than a decade, take mates in monogamous relationships that may persist for years, eat a lot of horseshoe crab larvae while migrating, and have declined in population by roughly one-third since the 1980s.

Most importantly, taxonomy was a scaffold upon which evolutionary theory could be built. Although Linnaeus had believed the variation among animals was an immutable arrangement and divinely apportioned, evolutionary thinkers realised that these were family resemblances, to be elucidated more than a century later by Charles Darwin. And the great beauty of evolution, its essential profundity, is in placing humans among animals, not only in body but in mind.

Just as humans shared physical traits with other creatures, Darwin argued, so we also shared mental traits. The ability to think and feel was just another adaptation to life's uncertainties and hazards, and, given our evolutionary relatedness to all other living things, it made no sense for them to be unique to us. 'Even insects express anger, terror, jealousy, and love,' he wrote in *The Expression of the Emotions in Man and Animals* (1871). His protégé George Romanes, who was an avid collector of anecdotes about intelligent cats and dogs, thought that animal behaviour should be interpreted in light of our own capacities. 'Whenever we see a living organism apparently exerting an intentional choice,' wrote Romanes in *Animal Intelligence* (1884), 'we might infer that it is a conscious choice.'

Intelligence is ubiquitous, not just in chimpanzees, dolphins and parrots, but in octopuses, archerfish, prairie dogs and honeybees — a veritable Noah's Ark of braininess

By emphasising the kinship between animals and human beings, Darwinian taxonomy could have opened the door to thinking about the consciousness of individual animals. But, instead, the opposite happened. Even as evolution's mechanics were accepted and expanded, the views of Darwin and Romanes on individual animal consciousness were rejected, consigned to cautionary tales of how even the most brilliant scientists can get things wrong. By the 1940s, when the great systematist Ernst Mayr settled on a fuzzy but useful standard definition of a species — as a population with a common reproductive lineage that could interbreed — the possibility of animal consciousness and

individuality, so evident to anyone with a pet dog or cat, was largely eliminated from mainstream science. We could accept our animal bodies, and classify ourselves on that basis, yet had to avoid the implication that animals might have human-like minds.

A new age of machines and industry spawned the behaviourism of the psychologist B F Skinner who, echoing Aristotle and Descartes, proposed that animals were nothing but conduits of stimulus and response (as were humans). Seeming evidence of higher thought was an illusion produced by some simpler mechanism. It's true that behaviourism helped to establish protocols by which animal cognition could eventually be studied in rigorous, scientifically acceptable fashion. But the price was steep: decades would pass before scientists began to allow that some animals might be more than biological automata.

In the 1960s, Jane Goodall was mocked by her primatologist peers for speaking of chimpanzee emotions, such as a mother grieving for her dead infant. Even her use of gender-specific terms for individual chimpanzees was seen as anthropomorphic and unscientific. As the journalist Virginia Morell recounts in *Animal Wise* (2013), Goodall's editor at the prestigious journal *Nature* tried to replace 'he' and 'she' with 'it' in her first manuscript. When the zoologist Donald Griffin wrote in *The Question of Animal Awareness* (1976) that biologists should investigate 'the possibility that mental experiences occur in animals and have important impacts on their behaviours', it was still a radical suggestion.

These days, Goodall is a hero, Griffin a prophet, and studies of animal intelligence ubiquitous: not just in chimpanzees, dolphins and parrots, but in octopuses, archerfish, prairie dogs and honeybees — a veritable Noah's Ark of braininess. Caveats remain, of course. Intelligence is relatively easy to study, but it isn't quite the same thing as consciousness, nor emotional life. It's been less controversial to ask whether rats remember where they stored food than whether one rat cares for another.

Yet even rats, it turns out, feel some empathy for one another. A team at the University of Chicago found that rats became agitated when seeing surgery performed on other rats, and a follow-up study in 2011 found that, when presented with a trapped labmate and a piece of chocolate, rats free their caged brethren before eating. Those who study animal behaviour are still careful when talking about subjective experience — sure, Eurasian jays can guess what their mates want to eat, but who knows if they like each other? — but they're being professionally cautious rather than dismissive. The average person can safely speculate away: animal consciousness is a reasonable default assumption, at least for vertebrates, and not just in some dim sense of the word, but possessing forms of self-awareness, empathy, emotion, memory, and an internal representation of reality.

Many of the characteristics thought to be important for higher consciousness (such as brain size) and a sense of individuality (in humans and — maybe, just maybe — a few other great apes and cetaceans) aren't so unique anymore, or are no longer considered very important. Features such as working memory and episodic memory — keeping multiple pieces of information in mind and remembering what has happened, the cognitive fundaments of conscious experience — appear to be widespread. And the environmental challenges that might prompt the evolution of consciousness are widespread, too. Among these is sociality: if you're going to live with others, it's very useful to be conscious of them. And the distinction between cognition and emotion is increasingly seen as a false one: certainly in humans, they are more or less inseparable systems.

In July last year, a group of high-profile neuroscientists signed the Cambridge Declaration on Consciousness with the announcement that:

The weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness. Non-human animals, including all mammals and birds, and many other creatures, including octopuses, also possess these neurological substrates.

Those other creatures likely include a great many reptiles, amphibians and fish. They tend to be underappreciated because they're even harder to study than mammals, birds and octopuses, and seem, well, a bit inscrutable. Consciousness is necessary to be an individual, to have unique thoughts and feelings rooted in one's own experience of life — and the animal kingdom teems with it.

Many scientists still don't know this, or don't accept it. The whale biologist Shane Gero is part of a research team that has conducted long-term sperm-whale studies off the island of Domenica in the Caribbean. These studies describe the dynamics of whale families in which children are, in a very real sense, the centre of their lives. Yet Gero told me of being chastised by colleagues for referring to animals by name rather than number. Pressure still exists to think not of individuals, but of general species traits that happen to be manifested in a particular animal. Gero has helped to decode the vocalisations that sperm whales might use as names, something that's also been observed in dolphins, but this remains controversial. That's why a visitor to the 'Whales: Giants of the Deep' exhibition at the American Museum of Natural History in New York can learn a lot about their skeletons, heart capacity and navigational abilities, but barely anything about their intelligence and social lives — arguably the most dynamic area of contemporary cetacean research.

All those cute cat videos, reliably mocked as a symptom of our unintellectual internet habits, bespeak our era's willingness to acknowledge the inner lives of companion animals

Not surprisingly, the science of animal personality is still young. Recognition of animal consciousness might be just a first step. Individual differences based on temperament and experience, again so obvious to pet owners, is a new idea in science. For sperm whales, says Gero, such differences were once dismissed as statistical noise or evidence of behavioural maladaptation. The blind spot is hardly restricted to whales. The article 'Energy metabolism and animal personality' published in the journal *Oikos* in 2008 pointed out that 'personality will introduce variability in resting metabolic rate measures because individuals consistently differ in their stress response, exploration or activity levels....' Animals that have 'frozen' with fear during capture might be misclassified as having high resting metabolic rates, when in fact a motionless rabbit with his heart racing might simply be scared.

This seems like common sense, and in some respects the general public outpaces much of the scientific community, at least when it comes to the familiar animals we live with and know well. All those cute cat videos, reliably mocked as a symptom of our unintellectual internet habits, bespeak our era's willingness to acknowledge the inner lives of companion animals. Not that they're tiny humans in kitten suits, of course — indeed, part of the fun in knowing a cat (not to mention watching those videos) is the obvious disparity between their view of the world and our own. But neither are they entirely incomprehensible, per Ludwig Wittgenstein's enigmatic statement: 'If a lion could speak, we would not understand him.' Wittgenstein probably never saw a pair of lion cubs at play

What might it mean to treat all vertebrates as having some form of consciousness and individuality? Animal welfare advocates campaign for the better treatment of companion and farm animals, which is a noble cause. But I am more interested in wild animals, our neighbours in nature. To the painter James Prosek, seeing wild animals as individuals offers a new and sorely needed conservation ethos. Biodiversity and ecosystem services make for well-meaning but often uninspiring rhetoric; they value nature generally, but provide little reason to care for actual creatures in a nearby forest or your backyard. Acknowledged as individuals, those sparrows, salamanders and squirrels are not interchangeable parts of a species machine. They are beings with their own inner lives and experiences.

Does this mean we should never eat a salmon, or cut down a tree to build a house? Not necessarily. We might simply acknowledge the consequences of our actions, and offer apologies and thanks to those creatures we affect. It's the sort of ethical equation people need to solve for themselves.

For myself, I'd be happy to see a revival of naturalist language, the sort of charming, unapologetically anthropomorphic descriptions one finds in old field guides, written before the ascendance of the 20th century's airless, specialist vernacular. It's a voice heard in *The Birds of Essex County, Massachusetts* (1905) in which Charles Wendell Townsend described a 'low, rolling gossip note' voiced by semipalmated sandpipers approaching other birds. He waxed eloquent about their courtship, the male 'pouring forth a succession of musical notes, continuous wavering trill, and ending with a few very sweet notes that recall those of a goldfinch... one may be lucky enough, if near at hand, to hear a low musical cluck from the excited bird. This is, I suppose, the full love flight-song.' It is the language of a man who cares.

I'm happy to know simply that the birds I've seen have their own private worlds, their own sense of light and companionship

And what of the semipalmated sandpiper, a few of which I last saw at low tide on Labor Day? Is it appropriate to use words such as gossip and love, to think of their self-awareness? I put the question to the British ornithologist Tim Birkhead, whose latest book is *Bird Sense: What It's Like to Be a Bird* (2012). He told me he couldn't recall any behavioural tests of sandpipers, nor rigorous comparisons to crows or parrots, but still, he said: 'You can guess that they have more sophisticated cognitive abilities than most people would give them credit for.' Given everything we know about animal consciousness, and the primal nature of both our own emotions and our social bonds, it certainly seems reasonable to err on the side of personalising the birds.

Birkhead told me an anecdote about a red knot — *Calidris canutus*, a close relative of the semipalmated sandpiper — found injured in 1980 on the north Dutch coast by a middle-aged couple. Jaap and Map Brasser named him Peter and nursed him to health. Peter never flew again, and lived with the Brassers and their dog Bolletje for nearly 20 years. Each afternoon he received half a loaf of bread, not so much to eat as to peck; Peter felt an instinctive need to forage, and became agitated if he couldn't. At night he rested quietly at their feet, stirring when wildlife shows came on television. He and the dog became companions. Years after Bolletje died, recordings of his barks brought Peter running.

That Peter would bond with a dog isn't so unusual. Red knots are social birds and, as we've seen, sociality is a great evolutionary driver of consciousness. What was unusual was a change in Peter's internal clock, which naturally guided his migratory transformation. Rather than following the seasons, it became synchronised to his new family. Ornithologist Theunis Piersma speculated that Peter 'developed his own personal cycle and ... stayed red as long as possible hoping that Jaap, Map and the dog would also become fat and change colour, after which they would all depart for Greenland.'

Of course, the Brassers knew Peter well, whereas I've only glimpsed semipalmated sandpipers. I can't truly know what goes on their heads. Yet at some point this becomes irrelevant: we can't ever really know what goes on in another person's mind, but we manage all the same. I'm happy to know simply that the birds I've seen have their own private worlds, their own sense of light and companionship. They go to sleep expecting to wake again. Perhaps they have names for each other. I just don't know what they are.

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