I am convinced that these papers, which I have the privilege and the duty to make public, comprise one of the most extraordinary documents in the history of thought. Whatever their value as works of scholarship and argumentation (this will surely be debated), they are of interest for their unique perspective—especially in the aftermath of the recent Revolt of the Beasts.

The “Dolphin Papers” consist of typescripts found in the Cetacean Section of the now-defunct Institute for Interspecies Communication (a research affiliate of the Center for Pacific Studies at the University of Hawaii) by intelligence officers following the occupation of the Institute by the U.S. Navy in December 1970. The condition of the papers is imperfect: some pages are missing from numbered sequences, while others are partially burned or water-damaged (perhaps as a result of the shelling of the Institute during the process of pacification). The papers remain classified “Top Secret” by the Department of Defense, but recently a copy of them came to my attention, and I resolved to begin publishing those portions of the text that I could reconstruct with reasonable accuracy.

In publishing the papers, I am motivated both by the scholar’s desire that the truth should be known, and by the citizen’s faith that knowledge will enable us to act with greater prudence so as to avoid a recurrence of the late, unfortunate, and still somewhat mysterious rebellion. While I take no responsibility for the validity of individual statements in the papers, or for the overall viewpoint, I feel strongly that we need to understand the state of mind—the “philosophy”, so to speak—of those who may have masterminded the uprising.

We do not yet know with certainty whether the papers are a human translation of the discourse of one or more dolphins, or whether they are a human fabrication. From the Institute’s grants, contracts and publications, we know that the staff was testing the intelligence of bottlenose dolphins (Tursiops truncatus) by teaching them to understand English and to perform such simple tasks as carrying and positioning underwater explosive devices. The papers were found in a double-locked filing cabinet along with numerous tapes containing long series of dolphin sounds (fast and slow clicks, whistles, barks, wails, humanoid sounds, and sounds at ultrasonic frequency). There is no hard evidence that communication was achieved beyond the level of simple commands—the sort understood by well-trained domestic dogs or by the dolphins that perform tricks at Sea World and Marineland—but perhaps we do not know everything that went on at the Institute. Of the 37 staff members, 26 were killed, most of them by the shelling, ten are missing, and one is hospitalized as an acutely paranoid schizophrenic who refuses to speak and who suffers from the delusion that he is listening to messages others cannot hear.

If we assume that the Dolphin Papers are a human translation of dolphin dictation, the implications are enormous. Not only can dolphins think and communicate, but the papers could have been dictated only by very learned dolphins—learned in the history of Western thought, no less. How this could have come about, we can only speculate. Since dolphins depend as much on their hearing as we do on our sight, our author(s) would doubtless have learned aurally. This presupposes that at least one dolphin had been able to understand human speech for some time, and had either held converse with human scholars or been able to listen to distant speech. (Should we imagine our author(s) auditing university lectures in the history of Western thought while sporting in the tank at the Institute or basking at sea?)

What could have been the purpose of dictating the Dolphin Papers? We might suppose that the more scholarly portion (Section III) was originally composed as part of a larger effort to understand human culture in aspects particularly related to dolphin interests, and to communicate that understanding to other dolphins (perhaps also to other intelligent species), either as an exercise in satisfying curiosity or as part of a campaign of conscious-

---

1 An earlier version was presented at the annual meeting of the Western Political Science Association, April 5-7, 1973, San Diego, California.
ness-raising. The more militant portions (Sections I and II), on the other hand, would appear to be more on the order of political propaganda designed to crystallize and focus grievances and, by implication, to mobilize for action (though they stop short of outright incitement). The mood and style are sufficiently varied that we may assume that the papers are not necessarily the work of a single intelligence.

What could have been the purpose of having the papers translated into a human language, specifically English? Were dolphins beginning to reach out to selected humans (and were we the chosen people?), seeking to win allies by discoursing with us in terms of our own intellectual traditions? This possibility makes sense in light of the papers' curious statement that, at a special stage of history, certain individual humans will break through to a transhuman, truly philosophical consciousness of the whole and, in consequence (non sequitur!), desert the human camp and join the dolphins. Is it possible that some staff members of the Institute, funded to humanize dolphins, became "converted" to the dolphin cause? Did they, out of misanthropy and/or misguided compassion for the subhuman, commit the mistake typified by Romain Gary's Morel, who took his rifle into the African jungle to defend elephants against the human predator?2

Granted that such a theory can explain the facts, it also makes great demands on our credulity. I, for one, find it more plausible to assume that the Dolphin Papers were composed by one or more human beings, presumably members of the Institute's staff who, out of disgust with their own species and/or sympathy with the dolphins, "invented" the dolphin cause. There is, after all, a literary tradition of the animal fable, from Plutarch through Fontaine to the contemporary comic strip. Moreover, the hypothesis of human composition fits easily with received knowledge about the intellectual and empathetic capacities of human beings, while not requiring us to make far-fetched assumptions about the powers of non-humans. On the other hand, we are left with the problem of how to explain the recent Revolt of the Beasts. But it is surely as plausible to suspect sheer coincidence, or a well-convened plot by certain human beings who trained and manipulated the hapless rebels, as it is to suspect that different animal species conspired among themselves, even under the leadership of dolphins.

In either case, the practical lesson seems to me to be the same. If we want to avoid future rebellions, we should adopt policies that will pacify the bestial interest, whether it is the beasts themselves or their human "friends" that are mainly in question. As Pascal said of God, what is there to lose if we wager that He exists? We only have to change our lives.

Lest I be misunderstood, I wish to make it absolutely clear that I have little sympathy with revolutionary violence, and that I retain unshaken my faith in the genetic superiority of the human race. This faith I regard as firmly grounded, not only in revelation, but also in the philosophical analysis of the concept of man and in the analysis of what we mean when we use the terms "man" and "beast" in ordinary language. It is also supported by the most respectable empirical research on animal behavior in laboratories and zoos (that is, under controlled conditions). If certain recent "discoveries" have seemed to make the traditional distinction between human nature and bestiality seem problematic, as our anonymous author suggests, it should be remembered that these were not studies carried out in controlled conditions in accordance with the approved experimental methods of scientific research. In any case, I am confident that a satisfactory reformulation of the man/beast distinction can be achieved, even if it is only in terms of differences of degree with respect to a "family" of loosely related characteristics (e.g., intelligence, consciousness, communication, tool-making, tool-using, social organization). Differences of degree should never be underestimated; sometimes they are all we have.

But while our natural superiority justifies our rule over the beasts, we owe it to ourselves that our rule should be as enlightened, as generous, and as humane as possible, given the fact that we must eat meat, hunt, protect our crops from predation, and pursue the vocation to which we are called as rational beings, namely, "the enlarging of the bounds of human empire" (Bacon)—the conquest of ignorance, scarcity, and nature through science and technology. I state categorically that the legitimacy of "man's dominion" justifies neither genocide nor gratuitous cruelty. If nothing else, we cannot predict which species will prove to be of use to future scientific inquiry; and it is undeniable that well-treated beasts work more efficiently, make better laboratory animals, serve as more loyal and affectionate pets, and provide better therapists.

It is thus the responsibility of us all to take steps to bring about that more enlightened and humane rule that will at least ameliorate the causes of discontent. The horrors of the recent rebellion still throb in my memory. I saw gentle, loving, contented animals, even beloved pets, turn suddenly into savage beasts. I was forced to watch helplessly while my friend and colleague, the late René Immanuel, Nobel laureate in experimental psychology and a distinguished Christian layman, was brutally tortured to death by white rats who seized control of his laboratory. I shall never forget the horror till my dying day. I hope that the publication of these papers will alert my fellow men to the need for removing some of the underlying causes of the discontents that lurk beneath the surface of our civilization.—J. R.3


I. Theses on “the political”

1. The ultimate political struggle is for control of the definition of “the political.”

2. Party no. 1 (Aristotle, Locke, & Co.): “the political” is a special type of human activity, relationship, association (e.g., political authority as distinct from “brute force”, the master-slave relationship, parental authority). Party no. 2 (Max Weber & Co.): “the political” refers to the affairs of that territorially defined, general-purpose control organization monopolizing “legitimate force” and known variously as polis, empire, commonwealth, or state. Party no. 3 (contemporary radical social critics): “the political” comprises every conceivable form of power, wherever it is found.

3. For the idealists of Party no. 1, “the political” is a relationship involving some degree of equality, rationality, consent, participation (e.g., the citizen is a person who rules and is ruled in turn... and ruling is seen to occur by persuasion). This means that many states (absolute monarchies, despotisms, tyrannies, dictatorships, etc.) are condemned as non-political. If consistent, the idealist student of politics would not concern himself with most of the governments known to human history.

4. By focusing on “the political” narrowly defined, both the idealists of Party no. 1 and the “realists” of Party no. 2 shift attention away from the other forms of control that exist within every organized society. “Political activity” narrowly defined is the activity of an elite and an abstraction from the total system of social control. The Athenian “democracy” presupposed a slave economy, a patriarchal household, and a strong web of religious custom, which were not the proper concern of the student of “politics”. What was the polis, then? Rousseau, who longed to restore the political life of the ancient “republic”, confessed frankly his willingness to have slaves if it were necessary in order to have citizens. Tocqueville saw that weak government was possible in 19th century America because of strong religious/moral social controls, but American political scientists have, on the whole, left the study of social controls to sociologists. “Political science” has become thereby an abstraction functioning as an ideology of social domination.

5. When distinctions have become firmly established, the pointing out of identities and parallels appears as metaphor. Western man lives today in the disintegration of Liberal ideology, but short of the final disruption: old distinctions are still assumed but disbelieved—church vs. state, government vs. economy, public vs. private—and subversive metaphors are rife: “the politics of sex”, “the politics of the family”, “the politics of housework”, “the politics of orgasm”, “the politics of experience”, “the politics of therapy”, “the politics of ecstasy”, “the politics of science”, “the politics of religion”, “the politics of the psyche”, “the politics of the classroom”, et cetera. Who is “top dog”? How do social roles get defined? What is the process by which a society defines “schizophrenia” and thereby deprives people of liberty? Who defines what is professionally acceptable in the contemporary guilds? Who determines which “trips” can legally be taken? Who gets the grants, the contracts, the grades,
the goodies—how, when, where? Will the despotic super-ego succeed in putting down the massive revolt of the oppressed id? What role will political ego play in the new balance of power? Politics is suddenly seen to be everything, everywhere.

6. The history of politics is the story of the struggle of successive groups to gain control and to legitimize their control.

7. Every regime, even if it claims the direct, revealed mandate of the Deity Himself, ultimately legitimizes itself in terms of a conception of the nature of things. Some men are by nature rational and therefore deserve to rule, while others are natural slaves (Aristotle). That is the basic model of all political justification; only substitute male/female, noble/base, industrious/lazy, elect/damned, rich/poor, educated/ignorant, old/young, white/black. Aryan/Semitic, stronger/weaker, civilized/primitive, progressive/backward, et cetera.

8. New groups making claim to political power challenge the established notion of “nature” as mere “convention”. There are really no essential differences, no differences “in nature”, between nobles and commoners, men and women, rich and poor, whites and blacks. There is only accident of birth, force of circumstance, and bias of regime. In the long run, the Sophists will probably win: no man is a natural slave, not even a certified lunatic (R. D. Laing).

9: But the Sophists had their own conception of “nature” just one level below the version they were challenging. The species “man”, human nature in general, was presupposed as an essential unity underlying variations of culture, class, and role. Protagoras proclaimed it: Man is the measure of all things. Modern reformers from Mary Wollstonecraft through Karl Marx to Black Power spokesmen have echoed it in their complaint that society treats women, workers, or blacks as “animals”.

10. The only really revolutionary stance is that “nature” is the greatest convention of all. Perhaps there are no natures, no essences—only categories and paradigms that human beings mentally and politically impose on the flux of experience in order to produce illusions of certainty, definiteness, distinction, hierarchy. Apparently, human beings do not like a Heraclitan world; they want fixed points of reference in order not to fall into vertigo, nausea. Perhaps the idea of nature or essence is man’s ultimate grasp for eternity. The full impact of the theory of evolution (the mutability of species—including man) is thus still to come.

11. The distinction between Human and Nonhuman (Man and “Nature”), Ich and Nicht-Ich, Subject and Object, is certainly the second great convention. On it is founded man’s sense of identity and superiority, as well as his conception of the moral and the political. (Fichte gives the show away: the Ich “posits” (projects?) the Nicht-Ich in order to feel, by contrast, its own subjectivity, infinity, power. Insensibility, death, thinghood, thus originate in man and are unloaded onto the environment.) Rights and duties apply only to human “subjects” (Kant); everything else is an “object” to be used. Other animals than man may be sociable, may communicate, may live in organized societies, may defend a territory, may perform social rituals, may employ a division of labor, may engage in “mutual aid”, may have rulers, subjects, and rebels; but they do not have moral or political life. By definition. Men know from the inside that men reason, consciously choose, engage in intentional action; they know from the outside that the other animals have no inside! In favor of behavioralism is at least an aspiration to consistency.

12. If the man/beast dichotomy could be transcended, think of the possibilities for a genuine science of comparative politics! Both human and non-human societies exhibit a wide range of patterns with regard to specific variables such as territoriality, dominance, degree of cohesion, degree of “mutual aid” vs. competitiveness, degree of pacifism, et cetera. Some non-human societies, like some human ones, are relatively loose and anarchic; others are organized more strictly under the dominance of a leader or a ruling group. Some consist of individuals or families holding private property; others have little or no private property, but the group will collectively defend its “country”. It is time for ethologists to stop talking about “territoriality” in general and to develop a differentiated typology. It is time for political scientists and sociologists to stop beginning (and stopping) with the man/beast dichotomy, and to look at the concrete behavior of all animal societies. It is time for an end to anthropology.

13. The distinction between Man and Beast is at bottom a political rather than a scientific distinction. It is ultimately an act of domination rather than of knowledge: or, rather, it is an act of knowledge-as-domination, the imposition upon the complexity of experience of a rigid dichotomy that authoritatively assigns roles but cannot be scientifically defended. One after another, the old formulations (intelligence, communication, tool-making, tool-using, social organization, and so on) have been brought into question by observant naturalists, but most men have stubbornly clung to their traditional faith in themselves as a master race.

14. The freest human political system rests upon a broad base of despotism and slavery. Slogans with universal potential (“freedom”, “equality”, “justice”) stop at a frontier that claims the authority of nature and of science but increasingly looks like a political boundary. What will be the outcome? Can politics be corrected by progressive scientific enlightenment? Can science itself be trusted? Must a political policy be reversed by political action? What is to be done?
II. Fear of the Beast

A spectre is haunting Western man. The Red Menace and the Nuclear Menace have given way to Fear of the Beast. The nightmares of modern men, like their wishfulfillments, are recorded on film, projected onto screens, and ritually experienced as thrilling, harmless spectacles.

Human beings have probably always projected their self-fear and self-hatred onto beasts. For centuries, at least, they have represented their own rapacious potential in legends of men who turn into ferocious wolves and vampire bats. But the contemporary horror film has moved in only a few decades from exploiting the folklore of traditional society (the Wolfman, Count Dracula, the Cat People), through invoking the invasion of strange beast-monsters from outer space, to producing strange earth-monsters as unintended side-effects of nuclear radiation, and, finally, to exhibiting man’s terror of small, ordinary, familiar beasts such as birds, rats, and insects which, taken en masse, embody malevolent power.

The physical force of a gigantic individual beast, a King Kong or a Godzilla, has given way to the subtler power of population increase, cooperation, and intelligence. What human could have failed to sympathize with an enslaved gorilla’s desire for freedom and love, or with the Wolfman’s terrible pangs of remorse for his excesses? What man could lack fellow-feeling for Mary Shelley’s monster, ugly and awkward (because of things beyond his control—nature or fate, or man and his infernal science), wanting only love and acceptance, and becoming bitter, vengeful, destructive only after being ridiculed, rejected, attacked, and imprisoned by inhumane mankind? Contrast with this an inexplicable invasion of the city of man by thousands of birds or a few million insects. As with an invasion of the earth by an unfamiliar beast-monster from another planet, man experiences the terror of the wholly irrational, the wholly Other. Yet humor is eliminated and terror intensified by the easy metamorphosis of the small and familiar into the horrible.

At the same time come sentimental films memorializing “the vanishing wilderness” and some of its inhabitants (e.g., “the African elephant”). On the one hand, nostalgia for “vanishing species”; on the other, terror at the proliferation of other species. Nature is evidently “out of balance”. Man sees his own mortality prefigured in “endangered species”. Nature no longer represents the Eternal, but only perpetual succession.

Not only the beasts but the very elements of Nature seem to rise in revolt against man’s dominion. The earth, water, and air become noxious with poisons. Man poisons Nature; Nature poisons man in return: the universal Golden Rule.

Along with the revolt of Nature: “bodies in revolt”—ulcers, heart trouble, hypertension, lower back pain. Fifty-seven varieties of therapy, all of them stressing “the unity of mind and body” or the “liberation of the body”. Basic principle of the interpretation of dreams: everything in the dream is a fragment of the dreamer. If you dream of the beast revolting against man, you are the beast as well as the man. The philosophers and theologians used to say: man’s body and its appetites are like a beast that must be kept caged by reason. The cages have begun to break.

General spirit of the age: man’s world is out of control. Out of intellectual control: man is threatened by anomalies—chimps that make tools, dolphins that communicate, cinematic monsters that defy the neat categories of thing/plant/beast/man—“things” come to life. Out of practical control: the applications of man’s science produce new monsters in the form of unpredictable radiation-caused mutations, in the form of unanticipated “externalities” of production, in the form of burgeoning populations of pesticide-resistant insects whose natural predators have been eliminated by scientific agriculture. Out of man’s power to cope with alone: Tokyo can be saved only if the good movie monster can be beseeched.
to destroy the bad one; in Leo Szilard's fable, World War III is prevented by "the voice of the dolphins"; the crops can be saved (along with the fieldhands) only if man can replace chemical poisons with "biological controls" (that is, if some insects can be gotten to devour others); urban insomnia is licked by people who go to sleep listening to recordings of the songs of birds, whales, frogs, or wolves; Jane Goodall attempts to imitate chimp child-rearing practices with her own infant son; John Lilly leads workshops designed to teach humans, insofar as possible, to become like dolphins; and a psychiatrist says that for many people "pets" (especially dogs) make excellent therapists. Small wonder that the fantasy of a planet ruled by apes is so popular/plausible.

Duality of the Zeitgeist: on the one hand, man lives in terror of the beast revolt; on the other, he looks for salvation from the beasts. Salvation from outside, or from within? Does man merely project his internal fears and hopes onto other beings? Or has he really begun to fear for his position as lord of the earth? Man himself does not know. His power of intuitive knowledge, his ability to feel certain, has so atrophied, his mind proliferates so many theories, that he can explain everything he experiences several ways and cannot decide among them.

Beneath all else, slumbering but soon to awaken, is the paradox—old as the seventeenth century—intensified by recent studies of animal behavior: certain beasts are "human" enough (similar to man) that experimentation on them seems justified (to man) by the possible benefit to man; yet these same beasts are "inhuman" enough (different from man) that experimentation on them (in ways that would not be allowed on man) is morally permissible. Jane Goodall lamely concludes that chimpanzees should be housed and fed better in the labs.

Once upon a time, it was physical similarity that justified experimentation, and mental/spiritual difference that was held to allow it—a distinction that hardly applies in an age when men experiment on the central nervous system and talk of "bio-computers". In truth, the modern tradition of experimentation on non-human animals is based either on the theological/philosophical doctrine that beasts do not have souls, or upon sheer force and torture. No wonder secular men dream of beasts revolting and destroying human civilization!

III. The Animal Soul

Descartes argued that non-human animals were irrational and insensible machines (like clocks), while Hume maintained that they not only experienced pleasure, pain, love, hate, and sympathy, but were "endowed with thought and reason as well as men". Montaigne suggested

1 In Section III, footnotes have been added by the editor for the benefit of the scholarly reader. On the beast-machine, see René Descartes, *Discourse on Method* (1637), fifth discourse. Cf. David Hume, *A Treatise of Human Nature* (1738), Book I, Part III, Sec. XVI.

early 18th century French thought as being that of the animal soul. Did beasts have souls? If so, what type of soul, and what were the implications for man’s immortality and for the justice of the universe? If not, how could the appearance of beast suffering and beast sagacity be explained?  

The surprise experienced by the mid-20th century human mind when it encounters these issues suggests that there has been in recent years a human consensus of sorts on the nature of beasts and on the degree and mode of their similarity to and difference from human beings. What that consensus is, we shall inquire later. In this essay we shall consider the controversy about the animal soul that accompanied the rise of the modern scientific worldview. Twentieth century man lives with a worldview whose controversial origins have been forgotten and whose “costs” therefore now come as a surprise to him. The fact is that the regime of modern science was founded on an act of violence.

Before discussing the Cartesian Revolution and its significance, it will be useful to survey the range of views to which the beast-machine was (and is) an alternative. For brevity’s sake we shall group these under three headings: Theriophily, Theriophobia, and the Great Chain of Being.

1. Theriophily

Tetiophily is a perennial outlook fully visible in antiquity (Empedocles, the Pythagoreans, Plutarch, Celsus, Porphyry), largely absent in the Christian era (except perhaps for St. Francis of Assisi), recovered in the Renaissance by Montaigne and others, revived in the Enlightenment (Hume, Rousseau), bolstered by Darwin and Kropotkin, and currently enjoying some minor fashion (John Lilly, et al). The common denominator is a conviction that (some) beasts and humans are closely related, are “equal” in some basic sense, even that (certain) beasts are in some ways superior to men. Theriophilists can be roughly divided into three schools.

(a) The religious school. The Pythagorean respect for non-human animals was associated with a belief in the transmigration of souls: the beast you were about to kill and eat could be your deceased friend or relative, or at least another human being. Accordingly, the Pythagoreans abstained from eating meat.

(b) The rational beast school. The more common position has been that close observation of the behavior


4 Therios (Greek)—beast, animal. Theriophily—the love or admiration for beasts. The term was used by Boas.

5 See G. S. Kirk and J. E. Raven, The Pre-Socratic Philosophers: A Critical History with a Selection of Texts (Cambridge University Press, 1957), Ch. VII. It is not clear that the Pythagoreans were vegetarians because of their belief in reincarnation, since both may simply have been aspects of an underlying conviction of the close relationship between humans and beasts. Also, there is evidence that the Pythagoreans refrained from eating beans as well as meat. Empedocles said that he had been reincarnated not only as a boy, a girl, a bird, and a fish, but also as a bush. (Kirk and Raven, p. 354)—which makes his admonitions against killing flesh and shedding blood seem strangely limited.

6 Thus Plutarch (“On the Eating of Flesh”, “That Brutal Beasts Reason”, etc.): Celsus; Porphyry (On Abstinence from Animal Food); Hume Treatise, Book I, Part III, Sec. XVI; II, XI; XII, II, XII, XII. Also Darwin: “We have seen that the senses and intuitions, the various emotions and faculties, such as love, memory, attention, curiosity, imitation, reason, etc., of which man beasts, may be found in an incipient, or even sometimes in a well-developed condition, in the lower animals.” And: “If there is no fundamental difference between man and the higher mammals in their mental faculties.” (The Descent of Man, Ch. III.)
hesitates, moves downstream, hesitates again, moves further downstream and crosses at a narrower or shallower spot. Deliberation and choice in the man, instinct in the dog, says orthodox man. Compare the theriophilist’s response:

*It is from the resemblance of the external actions of animals to those we ourselves perform, that we judge their internal actions likewise to resemble ours; and the same principle of reasoning, carried one step further, will make us conclude, that, since our internal actions resemble each other, the causes, from which they are derived, must also be resembling.*

Thus the theriophilist begins with observation and assumes that similar effects have similar causes or are outcomes of the same type of process. Does this not seem so reasonable that the burden of proof should be borne by those who, for whatever *a priori* reasons, assume that different causes/structures/processes must be invoked to account for similar patterns of behavior?

2. Theriophobia

More common in Western thought than theriophilia has been theriophobia, the fear and hatred of beasts as wholly or predominantly irrational, physical, insatiable, violent, or vicious beings whom man strangely resembles when he is being wicked. Thus in a state of nature “man is a wolf to man” (Hobbes). A society founded on the principle of satisfying appetites is “a city of pigs” (Plato). The basic theriophobic stance is one of disgust at “brutish”, “bestial”, or “animalistic” traits that are suspiciously more frequently predicted of men than of beasts, just as the types of behavior in which these traits are exhibited (egoism, insatiably greed, insatiable sexuality, cruelty, the gratuitous slaughter of other species, and the mass extermination of one’s own species) are more frequently observed on the part of men than of beasts.

Terrorphobia appears to be compounded of two major elements: man’s disgust with his own body and appetites (“certainly man is of kin to the beasts, by his body; and, if he be not kin to God, by his spirit, he is a base and ignoble creature”—Bacon); and man’s anxiety stemming from the loss of inhibitions (e.g., against the killing of one’s own species) normal to other animal species. The well-spring of theriophobia is thus fear of self, and its central mechanism is projection. In the most alienated form of theriophobia, the beasts themselves were seen as animated by devils, and man’s extermination of the beasts and of “savages” (bestial men) was carried on as part of God’s war against Satan.

3. The Great Chain of Being

While theriophily and theriophobia have defined the extremes, the center of the stage has been held from antiquity through Darwin by the Great Chain of Being, of which we shall take Aristotle’s version as the classic example.7

Aristotle regarded every living entity as animated by soul (psyche), but there were various forms and faculties of soul. Plants were animated by the merely nutritive form of soul (having the faculties of nutrition and reproduction) shared by all living beings. Animals had also the sensitive form of soul; and from the capacity for sensation stemmed both the capacity for feeling pleasure and pain and the capacity for desire or appetite. While the very lowest forms of animal life had only the sense of touch, essential for animal survival, the higher forms had the power of local movement, imagination, and other senses than touch, which conduced to the “well-being” or “happiness” of the organism. The human animal was distinguished by his additional possession of the intellectual or rational form of soul, the capacity for speculative and practical reason. Mind (the rational soul) was alone imperishable, but all forms of life (vegetable, bestial, and human) strove to participate in the divine and eternal order by reproducing themselves and thereby insuring the imperishability of their species. Thus, all living beings were ensouled and strove to participate in eternity; all animals experienced pleasure and pain; and many animals (not only men) strove for a “well-being” beyond mere survival. In addition, Aristotle discussed animal sensation as “a kind of knowledge” and pointed out that there were many analogies and even identities between the psychic qualities of beasts and of humans (including in certain beasts a natural potentiality for something like knowledge, wisdom, and sagacity). The great chain of being proceeded by gradual differentiation, with complex parallels, and with many “intermediate creatures”, in such a way that “it is impossible to determine the exact line of demarcation, nor on which side thereof an intermediate form should lie.”

This account is drawn from Aristotle’s writings in natural philosophy, which represented a conscious rejection of the Socratic-Platonic turning away from the older Greek tradition of philosophic contemplation of the natural universe.8

Aristotle’s *Ethics* and *Politics* present a different picture, however. In his “practical philosophy”, Aristotle generally followed Socrates and Plato in regarding the world from the standpoint of the good-for-man, so that “happiness” or “well-being” was restricted to man; the nutritive part of man’s soul was viewed as incapable of contributing anything to human happiness; certain human life-styles were condemned on grounds that a man

7 Hume, *Treatise*, Book I, Part III, Sec. XVI.
8 Francis Bacon, *Essays*, “Of Atheism”.
who led them would be no better than a plant or a beast; and "all animals must have been made by nature for the sake of men." In short, whereas in his writings on the overall universe of living beings Aristotle stressed continuities, parallels, differences of degree, the difficulty of drawing sharp lines, and the value of all beings as participants in the system of life, in his practical writings he took the part of man, sharpened the differences between man and beast, relied upon theriophobic patterns of metaphor, relegated the non-human to the status of the useful-for-man, and generally fell short of the spirit of theoria that he affirmed to be man’s highest achievement.

Yet the Politics also contains the thesis that human beings differ so greatly among themselves in their capacity for rational control of action (i.e., they partake of intellectual soul in such diverse degrees) that it may be just for the more rational ones to treat the more irrational ones the way man treats the beasts, that is, as "natural slaves." In this respect the Politics approaches the more complex spirit of Aristotle’s nature philosophy. The doctrine of natural slavery may seem an embarrassing anomaly to modern, humanistic, neo-Aristotelians, but it is an anomaly only from the standpoint of the kind of abstract species-dichotomizing that Aristotle and others do when they are advocates of a cause, not from the standpoint of the philosopher’s Great Chain of Being. If the cause of Man qua Man is not assumed to be the highest possible perspective for a philosopher, then the doctrine of natural slavery, repugnant as it may be by itself, is, when taken in context, at least a step towards a less anthropocentric perspective.

Since the medieval Scholastic version of the Great Chain of Being was the chief orthodoxy against which the Cartesian Revolution was made, let us look at what happened when St. Thomas Aquinas fused Aristotle with the Bible and the Church Fathers, and had to reckon with the notion of a brute soul that was possibly different only in degree from the soul of man. The result was eclecticism, to say the least.

On the one hand, St. Thomas tended to treat beasts benignly as part of God’s creation instinctively sharing a part of the Natural Law with man (self-preservation, procreation, nurture of the young), but not the parts of Natural Law that required reason. On the other hand, in his discussion of anathemas, St. Thomas maintained that, while it was blasphemous to curse beasts insofar as they were the creatures or agents of God, and futile to curse beasts insofar as they were simply irrational creatures, it was proper to curse them insofar as they were satellites of Satan, "instigated by the powers of hell."!

Again, on the one hand, we find in St. Thomas a tendency to elaborate with fine distinctions and compound terms the notion of brute soul as an intermediate and mixed form (e.g., as a substantial or material form—related to that beneath it as form to matter, and to that above it as matter to form; as a soul capable of a kind of knowledge, but only "imperfect knowledge" which allowed participation in the "imperfect voluntary", "imperfect enjoyment", et cetera). On the other hand, we find a stronger tendency than in Aristotle to stress and sharpen the man/beast distinction. Thus "irrational animals" could not (by definition) exercise intention, choice, consent, use, command, and so on. The "prudence" or "sagacity" remarked by certain ancient writers stemmed not from the beasts' exercise of any reason or choice but wholly from the operation of "natural instinct" implanted by the Creator. In St. Thomas' analogy, the beast behaved much as a clock ran: its movements traced a rational pattern not because it possessed mind or thought but because it was made by a rational artisan.

Thus St. Thomas conceded the appearance of intelligence and choice throughout animal behavior but refused to accept it at face value because of his commitment to the Christian doctrine that man alone was created "in the image of God". While allowing men to be the agents of their own actions, he attributed the actions of beasts to the invisible controlling agency of God, a "solution" in which he was later followed by Bossuet.

4. Descartes: the Philosophy of Vivisection

You will have noticed that a seminal version of Descartes' great metaphor, the beast-machine, specifically the beast as clock, had already appeared in the Summa Theologica. Despite the fulminations of Bacon, Descartes, and other moderns against the anti-scientific spirit of Scholastic philosophy, the jump from the late medieval Christian world-view to the modern scientific-technological worldview was less great than they depicted it—as the continuity of the mechanism metaphor and what it implied about the non-human world should suggest."

Descartes saw himself, and has usually been seen by others, as a rebel against his own Jesuit-classical education, as an architect of a new order who razed the rams-hackle structure of Scholasticism in order to build the edifice of philosophy anew along simpler, clearer, straighter lines." Simplify he did, but using old tools. Descartes seized upon one of the basic principles of classical and Scholastic philosophy, the principle that intra-species differences are always and necessarily (by definition) accidental or ones of degree, while inter-species differences are differences of nature or essence, and ruthlessly eliminated all compromise (such as substantial forms, brute souls, et cetera).

12 Nicomachean Ethics, passim; Politics 1256b
13 Politics 1260a.
15 Summa Theologica, Part I, Questions 75-78; Part II, Questions 1-17, esp. Question 13, Art. 2.
16 For another view of this continuity, see Lynn White, "The Historical Roots of Our Ecologic Crisis" (Science, 10 March 1967), "Continuing the Conversation" (in Western Man and Environmental Ethics, ed. Ian G. Barbour, Addison-Wesley, Reading, Mass., 1973), and Machina ex Deo (Cambridge, Mass., 1969).
17 See the second discourse for Descartes’ own imagery, which is that of himself as engineer, architect, or city planner, as well as geometrical.

THE NORTH AMERICAN REVIEW/Spring 1974
Thus the thrust of Descartes' emphasis was to radically sharpen and simplify the dualistic aspect of classical and Christian thought. As before, the dualism ran both between man and beast and through man's own nature, dividing the rational from the bestial part. Only the rational part was no longer appetite, but dead matter. Mind and matter were totally different, mutually exclusive principles. Man, it is true, was a compound of mind (soul) and body, but "the mind; by which I am what I am, is entirely distinct from the body": "our soul is of a nature entirely independent of the body". Generalizing from the involuntary character of the circulatory and respiratory systems, Descartes saw the human body as a machine designed by God to run according to physical laws. Beasts were like human bodies—divinely engineered machines, clocks, automatons. (65,163) That beasts could not reason was shown by the fact that they could not "speak", by the alleged regularity of their behavior, and by their degree of specialization. It was not that beasts had less reason than men but that they had "none at all". Hence, either their souls were "of an altogether different nature from our own" or, more properly speaking, since mind was the only "soul" worth the name, they had no souls."

In reply to objections raised to the Discourse, Descartes made it clear that he did not deny life, sensation, or even memory to beasts. Yet the "life" that he conceded was purely a matter of the heart, blood, heat, and "animal spirits" (a supposed physical emanation from the blood). The sensations caused by the body (brute or human) were of a totally different kind than sensations caused by the mind. Hence the conclusion that beasts did not know pain, since pain was experienced only by conscious beings capable of understanding their bodily sensations. Beasts might go through the external motions that were in men the symptoms of pain, but they did so without experiencing pain as a sensation in the mind."

Once all of Descartes' explanations and qualifications have been registered, there remains a difference between his view and that of most of his predecessors, but perhaps less of a difference than the sweeping metaphor of the fifth discourse led us to expect. The history of philosophy is full of cases of strikingly "new" viewpoints that are produced by a slight reordering of the observed data, a slightly different conceptualization, a shift in terminology, an illuminating (and concealing) metaphor... all adding up to a shift of orientation that is hard to explain in purely literal terms. The appearance of novelty being often greater than the novelty itself, we may inquire into the tendency, emphasis, or thrust of any particular philosophical "innovation" and into the probable intention of its author.

The central thrust of the Cartesian dualism was not so much to divide man within himself, since the body and the mind did communicate and the body's pain was registered in the mind, and since Descartes explicitly lay (contradictory) stress upon "the union and, as it were, the mingling of the mind and the body". (79,159) The central thrust was rather to sharply divide man from the non-human world by reclassifying the living, ostensibly sentient and rational beings surrounding him (and, by implication, "lower" forms of life as well) as insensible things.

What was Descartes' purpose in doing this? The text of the Discourse offers two suggestions.

(1) The fifth discourse, in which the thesis of the beast-machine was set forth, concluded with the following reflection:

"After the error of those who deny the existence of God, which error I think I have sufficiently refuted above, there is nothing which leads jeeble minds more readily astray from the straight path of virtue than to imagine that the soul of animals is of the same nature as our own, and that, consequently, we have nothing to fear or to hope for after this life, any more than have flies or ants."

In other words, granted the unspoken premise that the souls of beasts were perishable, it threatened man's faith in his own immortality to think that beasts and men were very similar; and since man's morality depended heavily on his fears and hopes of a life hereafter, virtue itself was threatened. Descartes thus presented himself in the role of a defender of traditional religious faith and morality against subversive atheism. It is a historical fact that the Cartesian doctrine of the beast-machine eventually attracted support from many theologians and philosophers who seemed to value the doctrine chiefly as a bulwark against atheism and libertinism."

That this was the basic intention of the Cartesian dualism, however, seems unlikely. Descartes' own account of his life, as well as the content and mood of his writings (especially the third and sixth discourses), suggests that he was a person who acknowledged conventional religion and morals so as to provide a framework of order for everyday living and to protect himself from criticism, while he plunged deeper and deeper into his real mission: scientific inquiry and the philosophy of science. Indeed, Descartes' very next page (the opening of the sixth discourse) alluded to the recent trial of Galileo and discussed "feeling" more broadly than was traditional. A. D. Lindsay comments: "Feeling becomes for Hume, as he lays more work upon it, less and less identical with irrational impulse and more and more like reason as Aristotle conceived it." (Hume, A Treatise of Human Nature, Everyman edition, 1911, "Introduction" to Volume II, p. xii.)
his own dilemma: whether to publish his “general ideas about physics” and risk offense “either to religion or to the State”, or to withhold his thoughts and thereby sin against “the law which obliges us to procure, by as much as in us, the general good of all men.” (77ff.) Whatever Descartes’ personal piety, he was not so much a man who philosophized to bolster traditional faith as a man who felt himself to be risking the wrath of ecclesiastical authorities in the cause of advancing science.

(2) Having desensitized man’s natural environment in the fifth discourse, Descartes revealed his purpose in the sixth. In place of “the speculative philosophy taught in the Schools” he offered the prospect of a “practical philosophy” which, by knowing “the power and the effects” of material “bodies”, could provide “knowledge which is most useful in life”, could make men “masters and possessors of nature”, so that they could enjoy “the fruits of the earth and all its commodities” more easily and more fully and also achieve “the preservation of health, which is undoubtedly the first good, and the foundation of all the other goods of this life.” In Descartes’ metaphor, the practical philosopher or man of science was a “craftsman” who applied his knowledge of principles to produce tangible benefits. (78)

This, then, was the real Cartesian revolution. The philosophic life cultivated not in contemplation (Aris-totle) or “the vision of God” (St. Thomas), but in the domination and exploitation of nature through science/technology-industry and, most specifically, in the progress of the science/art of medicine, whose potentials for improving man’s estate seemed almost limitless:

—We could free ourselves of an infinity of illnesses, both of the body and of the mind, and even perhaps also of the decline of age, if we knew enough about their causes and about all the remedies with which nature has provided us. (79)

It is at this point that Descartes has to retract, in effect, his earlier emphasis on the independence of mind and (human) body:

—Even the mind depends so much on the temperament and on the disposition of the organs of the body, that if it is possible to find some other means of rendering men as a whole wiser and more dextrous than they have been hitherto, I believe it must be sought in medicine. (79)

What Descartes does not have to retract, of course, is his thesis that the natural environment is insensible, for the licensing of modern science-technology seemed to require the insensibility of Nature. This was not only a theoretic issue of whether natural entities were to be regarded as animated (ensouled) rather than as matter-in-motion, but also a practical question of “method and results”. Thus the sixth discourse moved on to a discussion of the importance of verifying inductions by “experiments”. (79ff.) Now, experimentation involves coercing, torturing, operating upon the body of Nature so as to transform it—unless Nature’s body is an unfeeling, soulless mechanism, in which case, torture is not torture.

In this context, the beast-machine stood as the symbol and test case for the whole body of Nature; if beasts did not feel, then all Nature was insensible.

But the beast-machine also stood very concretely for itself. The initial “progress” of modern medical science, like the philosophy of Descartes, came covered with blood from the dissecting room. It required, for its continued progress, the termination of “superstitions” that inhibited the dissection of the human cadaver as well as experiment upon dead and live beasts.

“I would like those who are not versed in anatomy,” wrote Descartes early in the fifth discourse,

to take the trouble, before reading this, to have cut open in front of them the heart of some large animal which has lungs, because it is, in all of them, similar enough to that of man, and to be shown its two ventricles or cavities. (66)

There followed a detailed, six-page account of the heart and circulatory system—presumably based on Descartes’ own extensive work in the dissecting room. From 1629 on, Descartes worked to prepare a definitive treatise on animals (“the whole architecture of their structure, and the causes of their movements”). It remained unfinished because he was unable (for some reason not stated) to complete certain essential “experiments”. Appropriately, the first champions of the Cartesian doctrine of the beast-machine were physiologists, who regarded Descartes as clearing the way for the progress of physiology as a science. The influence of Descartes’ special blend of scientific-technical enthusiasm and compartmentalized religious piety can be seen with particular clarity in the case of the Jansenists (including Pascal), who adopted Descartes’ doctrine of animal automatism. The situation at the Jansenist seminary of Port-Royal in the late 17th century was described by a disapproving contemporary as follows:

There was hardly a solitary who didn’t talk of automata . . . . They administered beatings to dogs with perfect indifference, and made fun of those who pitied the creatures as if they had felt pain. They said that the animals were clocks; that the cries they emitted when struck, were only the noise of a little spring which had been touched, but that the whole body was without feeling. They nailed poor animals up on boards by their four paws to vivisect them and see the circulation of the blood which was a great subject of conversation.”

23 On which, see Rosenfield, 4, 25. Huxley comments: “Descartes was no mere speculator, as some would have us believe: but a man who knew of his own knowledge what was to be known of the facts of anatomy and physiology in his day. He was an unwearied dissector and observer, and it is said, that, on a visitor once asking to see his library, Descartes led him into a room set aside for dissections, and full of specimens under examination. ‘There,’ said he, ‘is my library.’” (T. H. Huxley, “On the Hypothesis that Animals are Automata, and its History” (1874), in Method and Results, N.Y., 1898, p. 201.)

24 Rosenfield, 14, 27ff., 241ff.

25 Rosenfield, 54ff., 69ff., 281ff.; Nicholas Fontaine, Mémoires pour servir à l’histoire de Port-Royal (Cologne, 1738), esp.
Modern experimental science, dedicated to improving man’s material estate, was thus founded on acts of violence against non-human nature. The historical function of the Cartesian philosophy was to legitimize this despotism, this torture, by revealing it to be neither despotism nor torture. The Cartesian sharpening of the dualism between man and beast was thus a function of the intensely “practical”, technological character of Descartes’ view of the purpose of knowledge. As Aristotle’s Ethics and Politics were to Aristotle’s own writings on nature, so Descartes’ philosophy was to the philosophy of St. Thomas. The purpose of over-simplifying the complexity of man’s experience of the world, of drawing clear-cut lines across the complex fabric to reality, is to make possible action uninhibited by intellectual doubt or moral guilt. One dissects experience for practical advantage. In a letter to Henry More, Descartes remarked that his opinion on animal automatism was not so much cruel to beasts as favorable to man, since man could now eat or kill animals without guilt.” Vegetarianism and hunting were, of course, not the real issues; torture and murder committed in the course of modern man’s quest for secular immortality were.

St. Augustine had long ago decided that beasts were incapable of suffering pain, because otherwise God would be unjust. (Assume that beasts share neither in original sin nor in eternal life: then for them to suffer pain seems to contradict the principle that “God being just, no being suffers undeservedly”; therefore, animals must not be thought to suffer pain.) The Cartesian gospel held that beasts were incapable of suffering pain, because otherwise the empire established by modern scientific man would be unjust.

4. Man a Machine?

By including beasts within the sphere of mechanism and matter, Descartes inadvertently suggested to others the possibility that, if apparently rational and sentient behavior could be explained on mechanistic, materialistic principles, perhaps what was true of beasts was true also of human beings. This possibility occurred to some of Descartes’ earliest critics and was for many thinkers a crucial obstacle to accepting Descartes’ doctrine.

Throughout all the controversy over animal automatism, most thinking people probably accepted an increasingly de-theologized version of the Great Chain of Being: beasts were sensitive and intelligent beings, only significantly less so than human beings. (Such is the perspective of the article “Ame des bêtes” in Diderot’s Encyclopédie.) The notion that the man/beast distinction was really one of degree underlay, in fact, the anxiety that animal mechanism might be generalized to include man, just as it had underlain for centuries the theologians’ anxiety that to regard beasts as having souls would undermine faith in human immortality.

After a century of anxiety, the nightmare came true, but in paradoxical form. In 1748 the French physician and man of letters La Mettrie, published L’homme machine, proclaiming that “man is a machine, and . . . in the whole universe there is but a single substance differently modified.”25 Descartes was treated as a worthy predecessor who “was the first to prove completely that animals are pure machines” and who craftily adopted the doctrine of two distinct substances as a “ruse” to fool the theologians. (68) In short, the true meaning of Descartes was revealed in La Mettrie’s theory of universal mechanism, (63f.)

Only, of course, La Mettrie’s machines thought, felt, and distinguished good from evil. (64) In fact, they had—all of them, from plant through insect and beast to man—“souls”, at least at times when La Mettrie chose to use the word. (68) It seemed that Descartes had made a mistake in conceiving of matter as mere extension; matter also had the power of motion and of feeling, and “thought is but a faculty of feeling.” (60, 73) Thus La Mettrie, in the guise of universal materialism, restored the Great Chain of Being in a relatively egalitarian form: Nature has created us all solely to be happy—yes, all of us from the crawling worm to the eagle in the clouds. For this cause she has given all animals some share of natural law, a shore greater or less according to the needs of each animal’s organs when in normal condition. (41)

While claiming to draw out the logic of Descartes, La Mettrie elsewhere confessed that he felt himself close to “the ancients, whose philosophy, full of insight and penetration, deserves to be raised above the ruins of the philosophy of the moderns.” (81) In keeping with his affection for the “ancients”, as well as with his considerable skepticism, “La Mettrie’s mood was essentially contemplative: the upshot of philosophy was not the domi-

---

25 La Mettrie, Man a Machine (including extracts from “The Natural History of the Soul”), Open Court, Chicago & London, 1927, p. 69. Subsequent numbers in this section of the text refer to this edition.

26 “—It does not matter for our peace of mind, whether matter be eternal or have been created, whether there be or be not a God. How foolish to torment ourselves so much about things which we can not know, and which would not make us any happier even were we to gain knowledge about them!” (42f.) “The nature of motion is as unknown to us as that of matter.” (60) “What more do we know of our destiny than of our origin?” (68)
nation or transformation of the world but the "tran-q
uility" and contemplative affectation that came with a
correct understanding of the nature of the universe.
(68f.) With his conviction of the close relation of man
and beast, together with his suspicion that too much
thinking about unknowable matters led to unhappiness,
and his injunction of respect and "humanity" towards
all of nature (68f.), La Mettrie may also be classified
as a theriophilist. We suspect that what was fundamental
to La Mettrie's intent was not to show that man was a
machine, or even that matter was the universal substance,
but rather—like the German Idealist philosophers Hegel
and Schelling in their different ways—to overcome the
Cartesian dualism, to repudiate the Cartesian spirit of
scientific-technological domination, and to re-establish
a vision of a universe that involved a somewhat theriophilic
version of the Great Chain of Being. This suspicion is
supported by the discovery that in his Natural History
of the Soul, published only three years earlier, La Mettrie
had rejected the Cartesian doctrine of the beast-machine as "absurd". (79f.)

If the Cartesian sword cut two ways—to license vive-
section by classifying beasts as machines, and (potential-
ly) to include man among the machines—so did the
sword of La Mettrie. On the one hand, his monism aimed
at re-establishing the Great Chain of Being and the con-
templative mood; on the other, his "materialism" has
been taken to suggest the possibility of the universal
malleability of man and nature through practical action,
of man's becoming his own product. First the beasts were
stripped of their souls and abandoned to the domination
of science and technology; then men followed. This logic
leads from Descartes to the behavioral engineering of
B. F. Skinner. The creation of the beast-machine was the
first step towards the dehumanization of man, and both
are only moments in the larger "mechanization of the
world-picture". This is why contemporary efforts to
"rehumanize psychology" are often so pathetic: they pre-
suppose the Cartesian framework while thinking to rebel
against the "mechanization" represented by "behavioral-
ism". Thus Maslow:

—While it was necessary and helpful [to science] to
dehumanize [sic!] plants, rocks, and animals, we are
realizing more and more strongly that it is not neces-
sary to dehumanize the human being and to deny him
human purposes,

At such moments, at least, Humanistic Psychology seems
to have bought the Cartesian/Kantian dichotomy of
"humans" and "things". History suggests a more radical
perspective: as man perceives and treats non-human
nature, so he will eventually perceive and treat himself.

5. Miscellaneous Materials for a Continuation

Frontispiece for a new edition of Descartes' Discourse:
photograph of the dimly-lit interior of a battery henhouse.

29 E. J. Dijksterhuis, The Mechanization of the World-Picture,
30 Abraham H. Maslow, The Psychology of Science: A Recon-
31 See Ruth Harrison, Animal Machines: The New Factory
32 See Karl Marx: Early Writings, tr. and ed. T. B. Bottomore
(London, 1963), pp. 72f., 80. The last line is apparently a
quotation from Wilhelm Schutz, Die Bewegung der Produktion
(Zurich and Winterthur, 1843).
33 René Dubos, Man Adapting (Yale University Press, 1965),
p. 313. (Emphasis not in the original.)
35 See especially Laing and Esterson, Sanity, Madness, and the
IV. Dolpinic Wisdom

I. Original Sin. Religious man separated himself from God and was driven from the garden for his pretension. Philosophic man, also in quest of short-cut wisdom, separated himself from the rest of nature, which is its own punishment. Thus Socrates turned his back on the great speculations about the nature of the universe and focused his whole attention on "the good for man". Twenty centuries later men lament that they pursue loneliness, and that their morals and politics lag dangerously behind their natural science. Perhaps the good for man cannot be comprehended out of the context of a universal good in which man shares.

2. True Irrationality. Man, said the ancient philosophers, is a rational animal. Animal: genus; common denominator of man and beast. Rational: species; the principle distinguishing man from beast. Assume the distinction to be valid, and ask the following question. If you and I have certain qualities in common and certain qualities in difference, is it obvious that I (or you) ought to live so as to maximize the qualities that distinguish us? Classical philosophy, from Socrates on, is based on a choice, and that choice is arbitrary: it is not made in accordance with any general principle that is self-evident, nor is it deducible from another principle that is in turn self-evident. The reductio ad absurdum of the classical choice is modern "individualism" in its "Romantic" form—the cult of individual eccentricity. Classical thought stopped short of that, of course. But why? The preference for differentiation at the species level is an unjustified presupposition of the philosophic tradition.

3. Waiting. Once before, around the time of Plato and Aristotle, the dolphins began tentatively to approach man. But first philosophers, then religious men, turned their backs on us in disinterest or hostility, and we retreated into the depths of the sea to await a better time. Now men in desperation voyage into outer space, searching far-off planets for signs of intelligent, non-human life. We wait and wonder whether man is ready.

4. Transcendence. In the lore of the dolphins it is recorded that at some moment in time a few individual human beings will break through to a new, transhuman level of consciousness, will become true philosophers comprehending the whole in all its parts, and will quietly leave the city of man and make contact with the dolphins. There are several versions of this legend. In one, the philosophers join the dolphins and never return. In another, they return out of a sense of duty to bring the good news to their fellow men and are imprisoned in lunatic asylums. In a third, they join forces with the dolphins, execute a bloodless coup d'état, and establish their benign and pacific rule over the rest of the animals (both human and other). In a fourth, the philosophers and the dolphins lead a bloody insurrection of all the beasts, smash all machines, and eliminate the human race as irredeemably depraved and dangerous to the planet.