

## The Great Divide

### The Autonomy of the Landscape

Arbitrary though it may be, I cannot resist associating the emergence of the modern concept of nature with a little drawing that I noticed a few years ago in the cold light of a gallery in the Louvre. An exhibition had caused it to be disinterred briefly from the storage cabinet of drawings, to which it has since been returned, not without acquiring short-term notoriety, as it also appeared on the cover of the exhibition's catalog.<sup>1</sup> The drawing shows an austere, rocky ravine opening out, in the background, on to a wide valley, where, in between little copses and seemingly well-to-do farms, a river winds its way in wide meanders (fig. 1). A figure, seen from behind, is seated in the lower-left corner, minute among the huge blocks of limestone. Wearing a cape and a feathered hat, he is busy sketching the view before him from life. He is Roelandt Savery, an artist of Flemish origin who, in about 1606, represented himself sketching a landscape in western Bohemia. Officially classed as a "landscape painter" at the Prague court, where he worked first in the service of Emperor Rudolf II and then in that of Rudolf's brother Mathias, Savery was commissioned to roam the Alps and Bohemia and sketch their remarkable sites in their natural state.<sup>2</sup> The appearance of the rock formations, the exactness of the various planes of relief, and the situation of the fields, roads, and houses all suggest that this drawing reproduces a real view, seen in perspective, although possibly a little foreshortened so as to accentuate the vertiginous character of the mountain.

Savery's *Mountainous Landscape with an Artist* was certainly not the first representation of a landscape in the history of Western painting. Art historians trace the origin of the genre to the first half of the fifteenth century with the invention, by northern artists, of the "interior window" that frames a view of the distant landscape.<sup>3</sup> There, the main subject of the painting generally



Roelandt Savery, *Extended valley, view between two high cliffs*. Louvre, Paris, France. Photo by Michèle Bellot. Courtesy of Réunion des Musées Nationaux/Art Resource, NY.

remains a sacred scene set inside some building, but the window or arcade in the background isolates a profane landscape, set within the dimensions of a small picture, and bestows upon it a unity and autonomy that separates it from the religious theme embodied by the figures in the foreground. Medieval painters treated elements extracted from the environment as so many icons scattered within a discontinuous space, subordinating them to the symbolic and edifying ends of the sacred image. In contrast, an interior *veduta* organizes these elements as a homogeneous whole that acquires a dignity almost equal to that of the episode from Christian history depicted by the artist. All that was then needed was to increase the size of the window to the dimensions of an entire canvas so that the picture within a picture became the actual

subject of the representation and, with the religious reference removed, blossomed into a veritable landscape.

Dürer was probably the first fully to develop this process in the watercolors and gouaches of his youth, painted around the 1490s.<sup>4</sup> Unlike his contemporary Patinir, whose famous landscapes still incorporate sacred scenes as a kind of pretext for representing the natural setting of their action with virtuosity, Dürer does paint real environments from which human figures have disappeared. But Dürer's watercolors were private exercises in style. They were unknown to his contemporaries and exerted no immediate influence on the manner of apprehending and representing landscape. Dürer was also the first painter in the Germanic world to master the mathematical bases of linear perspective that Alberti had codified fifty years earlier. The emergence of landscape painting as an autonomous genre stemmed from its being organized in accordance with the new rules of *perspectiva artificialis*. The positioning of objects and the field in which they were deployed were now governed by the gaze of the spectator, which plunged, as if through a transparent pane, into an exterior space at once infinite, continuous, and homogeneous.

Panofsky, in a famous essay, showed how the invention of linear perspective, in the first half of the fifteenth century, introduced a new relationship between the viewer and the world, between the point of view of the spectator and a space now rendered systematic, in which objects and the intervals separating them were simply proportional variations in a seamless continuum.<sup>5</sup> The foreshortening techniques used in antiquity were designed to restore the subjective dimension of the perception of forms by means of a methodical deformation of the objects represented, but the space within which these were placed remained discontinuous and, as it were, residual. In contrast, modern perspective aims to restore the cohesion of a perfectly unified world in a rational space, mathematically constructed so as to elude the psychophysiological constraints of perception. And this new "symbolic form" of one's apprehension of the world presents a paradox that Panofsky skillfully brought to light.<sup>6</sup> The infinite and homogeneous space of linear perspective is, however, constructed on axes that start from an arbitrary point, that of the direction of the gaze of the observer. So a subjective impression serves as the starting point for the rationalization of a world of experience in which the phenomenal space of perception is transposed into a mathematical space. Such an "objectification of the subjective" produces a twofold effect: it creates a distance between man and the world by making the autonomy of things depend upon man; and it systematizes and stabilizes the external universe even as it confers upon the subject absolute mastery over the organization of this newly conquered exte-

riority.<sup>7</sup> In this way, linear perspective established in the domain of representation the possibility of the kind of confrontation between the individual and nature that was to become characteristic of modern ideology and of which landscape painting would become the artistic expression. It really is a matter of a confrontation, a new position from which to look—for the projective plane distances things but offers no promise of a true unveiling. As Merleau-Ponty remarked, “on the contrary, it refers back to our own point of view; and as for things, they flee away into a distancing where no thought can follow.”<sup>8</sup>

Savery was an heir to this revolution, which began several generations before his time; but on two points, his drawing is innovative. Both his theme and his technique reflect the influence of Pieter Bruegel, who was famous as early as the second half of the sixteenth century for his mountainous landscapes. With the exception of Dürer’s watercolors, which had no immediate influence, and one or two striking prints by Altdorfer, the alpine views by Bruegel the Elder are among the earliest pictorial representations that erase human beings from the landscape or testify to their presence solely by referring to their works. But whereas many of Bruegel’s landscapes were imaginary compositions that freely interpreted sketches made from nature, Savery’s drawing seems to be a faithful enough representation of a real scene. And, perhaps more importantly, Savery appears to have pushed the paradox of perspective formulated by Panofsky to its logical conclusion. Where Bruegel, by omitting human beings from a landscape, simply draws attention to the exteriority of the subject who imbues objective nature with meaning and coherence, Savery reintroduces this subject into the pictorial representation, depicting the very action by which he objectifies a space different from the one in which he finds himself, which itself is different from the space offered to the gaze of the spectator. For the perspective view presented to the latter is not the same as the one that the artist, shifted to the left of the drawing but positioned on the very axis of the ravine, is busy drawing on the paper. This landscape thus presents a double objectivization of reality and, as it were, a reflexive representation of the operation through which nature and the world are produced as autonomous objects, thanks to the gaze that a human being turns on them.

Perhaps we should even be speaking, here, of a triple articulation, if we adopt the distinction drawn by Alain Roger between “artialisation” *in situ* and “artialisation” *in visu*. The former defines the rearrangement of a piece of nature for recreative and aesthetic purposes, usually the art of landscape gardening, while the latter characterizes the representation of a landscape in a painting.<sup>9</sup> The countryside that Savery offers to our gaze is certainly no example of English landscaping, and its almost Arcadian elegance no doubt owes as much to the skill of the artist as to the intentions of its inhabitants. It is safe

to say, however, that the latter knew very well what they were doing when they positioned a copse of young elms over here, an apple tree in the middle of a field over there, and, in another spot, a tree providing cool shade in the courtyard of a house. So it is quite possible that the emperor's *Landschaftsmahler* (landscape painter) fully intended to combine in the foreground and the background of his perspective view representations both of a rock formation characteristic of the Silurian mountains of Bohemia and also of the organization of the equally typical rural habitat of the region. The marriage of wild nature and tamed countryside effected by the artist's pen creates the genius loci. And even if that was not the case, the composition of the drawing is sufficiently original to satisfy a fantasy of beholding in it a remarkable representation of the beginnings of a modern production of nature.

In a period of about one hundred and fifty years, from the time of Patinir and Dürer to that of Ruysdael and Claude Lorrain, landscape painting attained total mastery over space. The depiction of scenes in which a succession of planes still evoked a theatrical stage set gave way to an impression of homogeneous depth that masked the artifice of a perspective construction, thereby making it seem as though the subject had withdrawn from the natural scene that he was painting. This way of representing the human environment in all its exteriority was of course indissociable from the movement to mathematize space that in this same period was being promoted by geometry, physics, and optics, ranging from Copernicus's decentralizing of the cosmos to Descartes's *res extensa*. As Panofsky pointed out, "the projective geometry of the seventeenth century . . . is . . . a product of the artist's workshop."<sup>10</sup> The invention of new tools for making reality visible—not only linear perspective but also the microscope (1590) and the telescope (1605)—made it possible to establish a new relationship with the world by circumscribing certain of its elements within a strictly defined perceptive framework that conferred upon them a salience and unity thitherto unknown. The privileged status accorded to sight, to the detriment of other sensitive faculties, led to extension gaining an autonomous status that Cartesian physics was to exploit and that was also favored by the expansion of the limits of the known world that resulted from the discovery and mapping of new continents. Nature, now dumb, odor-free, and intangible, had been left devoid of life. Gentle Mother Nature was forgotten, and Nature the cruel stepmother had disappeared; all that remained was a ventriloquist's dummy, of which man could make himself, as it were, the lord and master.\*

\*Translator's note: This is a reference to Descartes's Discourse on Method: "and thereby make ourselves, as it were, the lords and masters of nature."

For the technical dimension of the objectivization of reality was, of course, essential in this mechanistic seventeenth-century revolution that represented the world as a machine the cogs of which scholars could dismantle, rather than as a composite totality of humans and nonhumans endowed with intrinsic meaning by divine creation. Robert Lenoble has assigned a date to this rupture: 1632, which saw the publication of Galileo's *Dialogues on the Two World-Systems*, from which modern physics emerged in a discussion in the Venice Arsenal between engineers trained in the mechanical arts—far removed from any philosophers' *disputatio* concerning the nature of being or the essence of things.<sup>11</sup> Now the construction of Nature had really begun! It was, to be sure, a social and ideological construction, but it was also a practical one thanks to the expertise of clockmakers, glass producers, and lens grinders and of all the craftsmen who made laboratory experimentation possible. For that experimentation led to ongoing efforts to dissociate and reconstruct the phenomena that produced the objects of the new science. This process then acquired autonomy at the cost of forgetting the conditions of the objectivization of the phenomena. Liberated, thanks to reason, from the dark muddle of the experience of others and rendered transcendent by the severance of the links connecting them to the disorders of subjectivity and the illusions of continuity, the "factishes" of modernity (to borrow Bruno Latour's handy neologism, *faitiches*) now made their appearance.<sup>12</sup> The dualism of the individual and the world now became irreversible: this was the keystone in a cosmology that set in opposition, on the one hand, things governed by laws and, on the other, the thought that organized them into meaningful sets: on the one hand, the body—now regarded as a mechanism—and, on the other, the soul that ruled it, as was intended by the deity. Nature, stripped of its marvels, was now offered up to the child-king, who, dismantling its workings, shook off its power over him and enslaved it for his own ends.

This masterstroke by which nascent modernity finally liberated humans from the matrix of objects both animate and inanimate may seem exceptional in the history of human peoples, but in truth this moment was, after all, no more than a phase. The process had got under way many years earlier and did not culminate until a century and a half later, by which time nature and culture, each now solidly established with its own subject matter and methodology, would mark out the space in which modern anthropology could operate. Historians of science and philosophy have devoted enough scholarly works to this particular characteristic of the West for it not to be necessary, at this point, to present any more than a brief picture of this long process of maturation that eventually established, on the one hand, a world of things endowed with an intrinsic factuality and, on the other, a world of human be-

ings governed by arbitrary meanings. If I do nevertheless take on this brief exercise, it is the better to emphasize that, contrary to the impression given by many excellent studies of the history of the idea of nature,<sup>13</sup> nature has not revealed its essence thanks to the combined efforts of a cohort of great minds and ingenious craftsmen. Rather, it has been constructed little by little as an ontological tool of a particular kind, designed to serve as the foundation of the cosmogenesis of modernity. Seen from the point of view of a hypothetical Jivaro or Chinese historian of science, Aristotle, Descartes, and Newton would not appear so much as the revealers of the distinctive objectivity of nonhumans and the laws that govern them; rather, they would seem the architects of a naturalistic cosmology altogether exotic in comparison with the choices made by the rest of humanity in order to classify the entities of this world and establish hierarchies and discontinuities among them.

### The Autonomy of *Phusis*

As usual, everything begins in Greece. But initially progress was slow. It is true that the *Odyssey* contains an occurrence of the term that was later used to designate nature: namely *phusis*; but there it is used to refer to the properties of a plant, that is, in the limited sense of whatever produces the development of a plant and characterizes its particular “nature.”<sup>14</sup> That is the sense that Aristotle later clarifies in an overview of all living things: every being is defined by its nature, conceived as a principle, as a cause, and also as a substance.<sup>15</sup> But Homer is not concerned with any such principle of individuation peculiar to particular entities in the world. Nor, a fortiori, does it ever occur to him that things with a particular “nature” might form an ontological set: namely Nature itself, independent of the works of humans and likewise of any decrees from Olympus.<sup>16</sup> On this point, Hesiod differs hardly at all from Homer. His poems trace the origins of deities and heroes, their genealogies and the circumstances of their metamorphoses, and if he does ever mention features of the physical world, it is—as in the Amerindian manner—the better to account for the attributes of mythological figures. Admittedly, in his *Works and Days*, Hesiod does briefly mention a difference that sets humans apart from certain animal species taken as a whole. Whereas fish, wild animals, and birds devour one another, humans have received justice from Zeus and never do so. All the same, this still leaves us a long way from any distinction, even of an embryonic nature, between nature and culture, for the animals that he mentions serve mainly as a foil to humans, who are being urged not to behave as predators. It is also a way of recalling the part played by the gods in the genesis of civic morality. The special attribute of humans, *dikē*, is

more an effect of divine benevolence than of an original nature entirely distinct from that of other living species.<sup>17</sup>

When the first philosophers ventured to propose naturalistic explanations for lightning, rainbows, and earthquakes, they did so in reaction against the religious interpretations sanctioned by tradition, in particular the tradition of Homer and Hesiod, who regarded most unusual or frightening phenomena as personal interventions on the part of a whimsical or angered deity. The philosophers and the Hippocratic doctors too were committed to suggesting physical causes for atmospheric events, cyclical phenomena, and illnesses, causes appropriate to each kind of phenomenon—in other words, causes that stemmed from their respective “natures,” not from some whim of Apollo, Poseidon, or Hephaistos. In this way, they gradually established the idea that the cosmos is explicable and organized in accordance with laws that can be discovered and that arbitrary divine intervention no longer has any place, nor do the superstitions of ancient times. These were, of course, convictions held by an elite, and they were expressed cautiously so as to avoid the grave consequences of an accusation of impiety. All the same, for Hippocrates and his disciples and for some of the Ionian philosophers and the Sophists, the domain of nature began to take shape as a project and a source of hope. This new regime of beings, which covered all physical phenomena and living organisms and was marked with the stamp of what is regular and predictable, distanced itself from the residue of divine intentions, haphazard creations, and human productions, all of which were effects of artifice.

As we know, it fell to Aristotle to systematize this emerging object of inquiry, to establish its limits, define its properties, and set out the principles by which it functioned. His objectivization of nature was inspired by political organization and the laws that governed it, although he formulated this idea in a back-to-front manner: he suggested that the City conformed to the laws of *phusis*, reproducing the natural hierarchy as closely as possible. It is significant that the theater in which this revolution took place was the turbulent and troubled Athens, which, following the brilliance of the age of Pericles, found its power diminished and its role challenged, so that adversity forced it to examine the conditions in which the sovereignty that was eluding it could be exercised. Reflection upon law as an obligation freely accepted and a means of living together, unaffected by the urgency of immediate decisions, made it possible to seize upon the more abstract features that were to provide a prototype for the laws of nature.<sup>18</sup> *Phusis* and *nomos* became indissociable: the entire multiplicity of things operated within a totality subject to identifiable laws, just as the community of citizens was governed by rules of public action unaffected by particular intentions. These constituted two parallel domains

of legality, one of which, however, was endowed with a dynamic and finality of its own, for Nature lacked the versatility of men.

To be sure, Aristotle's nature is not as all-encompassing as that of the Moderns. It is restricted to the sublunary world, that of familiar phenomena and beings. Beyond these extend the incorruptible heavens, in which the divine stars move, no doubt likewise in accordance with regular and predictable rules; but the perfection of those heavens is such that they are exempt from natural accidents. In contrast, in the realm here below, the things of nature are now endowed with an undeniable otherness: "Some things exist, or come into existence, by nature; and some otherwise. Animals and their organs, plants and the elementary substances . . . these and their likes we say exist by nature."<sup>19</sup> When he examines the ontological regime peculiar to these entities that exist *by nature*, Aristotle provides a theoretical basis for one of the current meanings of the word "nature." It is the principle that produces the development of a being that contains within itself the source of its movement and its rest. This is the principle that causes it to realize itself in accordance with a particular type. But Aristotle's *Physics* is complemented by a natural system, an inventory of different forms of life and the structural relations that they share within an organized whole. Here, Aristotle is concerned about Nature as the sum total of beings that are ordered by and submitted to laws. This was a new concept that, after him, was to enjoy a lasting influence. His project consists in specifying each class of beings on the basis of the variations in the characteristics that it possesses in common with other classes of beings within the same form of life. Each form of life, in turn, is characterized by the kind of specialized organs that enable it to realize a vital function: locomotion, reproduction, nutrition, respiration. In this way a species can be defined precisely by the degree of development of its essential organs, which are peculiar to the form of life to which it belongs. The wings of birds, the paws of quadrupeds, and the fins of fish are all organs that serve one and the same function in different forms of life. But the size of the beaks, wings, and organs of nutrition and locomotion that characterize birds would, in its turn, provide a criterion for distinguishing species according to their modes of life. This classification of organisms on a basis of collection and division draws upon the particular "nature" of each being, so as to construct a system of Nature in which species are disconnected from their particular habitats and stripped of the symbolic meanings that were attached to them, so that they can exist solely as complexes of organs and functions that are part of a table of coordinates that encompass the entire known world.<sup>20</sup> A decisive step had thus been taken. By decontextualizing the entities of nature and organizing them into an exhaustive taxonomy of a causal type, Aristotle conjured up an

original subject matter that was thereafter to account for many of the peculiar features of Western thought.

### The Autonomy of Creation

In Greek thought and particularly in Aristotle's, humans remain a part of nature. Their destiny is not dissociated from an eternal cosmos, and it is by virtue of the fact that they are able to accede to knowledge of the laws that govern it that they are able to find their place in it. So, for the nature of the Moderns to come into being, a second operation of purification was necessary: humans had to become external to nature and superior to it. Christianity was responsible for this second upheaval, with its twofold idea of man's transcendence and a universe created from nothingness by God's will. The Creation bears witness to the existence of God and to his goodness and perfection, but his works were not to be confused with him, nor were the beauties of nature to be appreciated for themselves. They proceed from God but God is not present in them. Given that a human being, too, is a creation, his significance stems from that founding event. His place in nature is therefore not that of an element like any other; he is not, by nature, as plants and animals are; he has become transcendent in the physical world; his essence and his coming-to-be are matters of God's grace, which is beyond nature. The source of a human being's right and mission to administer the earth is his supernatural origin, since God formed humans on the last day of Genesis in order for them to exercise their control over Creation, organizing and arranging it to suit their needs. Just as Adam, having received the power to name the animals, was authorized to introduce his order into nature, so too his descendants, as they multiply on the face of the earth, realize God's intention to impose the mastery of Creation everywhere. But nature is only entrusted to humans on a temporary basis. For now the world has not only an origin but also an end—a strange notion that Christianity inherited from the Jewish tradition and that is at odds not only with the ideas of pagan antiquity but also with most of the cosmologies that ethnography and history have recorded. The Creation is a provisional scene in a play that will continue after the stage scenery has disappeared, when nature will exist no more and only the principal protagonists will be left: namely God and human souls, that is to say, human beings in a different form.

Although obsessed by the idea of the Creation and its consequences, the Middle Ages also retained some of the lessons learned from antiquity. This produced a plethora of syntheses on the unity of nature, combining biblical exegesis with elements of Greek physics, especially from the twelfth cen-

tury onward, when Aristotle's works were rediscovered. The exteriority of the world acquires a manifest character through a metaphor that runs right through the Middle Ages: nature, in all its diversity and harmony, is like a book in which one can decipher evidence of the divine creation. The book of nature is certainly inferior to the Holy Scriptures, since God, a transcendent being, is revealed only imperfectly by his works. The world should thus be read as an illustration, a commentary to complement God's word. Many medieval writers nevertheless set great store by this source of edification, for it was all that was available to those who, lacking education, had no direct access to the holy text: "even the most simple of men may read the world," Saint Augustine was to declare.<sup>21</sup> It is worth noting that this bucolic optimism is still favored by certain missionaries who appear to be in no doubt that the tribes they are trying to convert are capable of recognizing in their environments the harmonious nature celebrated by Saint Basil and Saint Francis. Perhaps we should even see in this one of the earliest formulations of the idea, beloved of the West, that nature is universally self-evident and no people, however savage, can fail to perceive its unity.

The theme of the book of nature sustains developments in a natural theology that is echoed in a particular Christian view of ecological ethics.<sup>22</sup> This kind of theology, which examines the effects of divine intentions in the Creation, is, to be sure, no more than an auxiliary to revealed theology, but it nevertheless constitutes a precious complement for the interpretation of nature and knowledge of God, one upon which Saint Thomas Aquinas drew. His natural theology relies on the authority of Aristotle to show the respective effects of final causes (the intellect of God) and efficient causes (natural agents) in the organization of the world. He likewise picks up the Aristotelian idea that nature does nothing by chance and commits himself without reservations to its finalism: everything bears witness to the fact that the forms and processes of natural objects are those best adapted to their functions; everything also indicates that Adam's descendants are destined to occupy the supreme position here below in the world and to rule over the hierarchy of inferior creatures, for "the subordination of animals to man is natural."<sup>23</sup> No doubt Genesis does literally justify such dominion, but it also supports the idea of a common measure between God and human beings. Given that God's intelligence was at the origin of the creation of living beings, it was appropriate that some of them should be able to participate in this faculty and thereby be able to apprehend, in the perfection of the universe, the goodness of God's design. Humans, who are therefore endowed with reason and knowledge, are thus set apart from the rest of Creation, enjoying a supremacy that stems from the divine plan and, in consequence, calls for humility and responsibility. In his

*Literal Interpretation of Genesis*, Saint Augustine had already emphasized that in the Creation only humans constitute a unique *genus* that stands in contrast to all the animal species. With the support of the authority of this exegesis, the theologians of the sixteenth century were to assert that the human race is unique.<sup>24</sup> The Middle Ages had thus not proved themselves unworthy: what with divine transcendence, the uniqueness of humankind, and the exteriority of the world, all the parts of the mechanism were now in place together, making it possible for the classical period of the seventeenth century to invent nature as we know it.

### The Autonomy of Nature

The emergence of modern cosmology results from a complex process in which many factors are inextricably intermingled: the evolution of an aesthetic sensibility and pictorial techniques, the expanding limits of the world, the progress of mechanical skills and the greater mastery over certain environments that this made possible, the progression from knowledge based on an interpretation of similarities to a universal science of order and measure—all these are factors that have rendered possible the construction not only of mathematical physics but also of a natural history and a general grammar. Changes in geometry, optics, taxonomy, and semiology have all emerged out of a reorganization of humanity's relationship with the world and the analytical tools that made this possible, rather than from an accumulation of discoveries and a perfecting of skills. In short, to quote Merleau-Ponty, "It is not scientific discoveries that brought about a change in the idea of Nature. Rather, it is the change in the idea of Nature that has made those discoveries possible."<sup>25</sup> The Scientific Revolution of the seventeenth century legitimated the idea of a mechanical nature in which the behavior of every element can be explained by laws, within a totality seen as the sum of its parts and the interactions of those elements. For this to happen, it was not necessary to invalidate rival scientific theories, only to eliminate the finalism of Aristotle and medieval Scholasticism, relegate it to the domain of theology, and lay the emphasis, as Descartes did, on one single efficient cause. Of course, this was still linked with God, but God purely in the sense of a moving force, at once the original source of a movement conceived in geometric terms and also the guarantor of its constant preservation. Divine intervention became more abstract, less dependent on the functioning of the cogs in the world machine, and it was now confined to the mysteries of faith or to an explanation for the principle of inertia. All the same, alongside the likes of Bacon, Descartes, and Spinoza, who rejected the illusion of an intentional nature, a more dis-

creet trend of thought remained attached to finalist convictions and the idea of a nature organized in accordance with an overall plan, understanding of which would make it possible to account better for the action of the elements that composed it. Kepler, Boyle, and Leibniz were by no means negligible advocates of this conception of nature as a balanced totality and unity, and as we know, they were eventually succeeded by Buffon, Alexander von Humboldt, and Darwin. And the legacy of the latter thinkers, in its turn, no doubt contributed powerfully to the teleological orientations of a particular kind of contemporary biology characterized by a quasi-providential vision of the adaptation of organisms and the homeostasis of ecosystems. In the seventeenth century, however, among both the supporters of a mechanistic world and the partisans of an organicist one, a separation between nature and humanity gained acceptance. Spinoza found himself quite alone when he rejected such a separation, urged that human behavior be considered as a phenomenon governed by a universal determinism, and condemned the prejudices of those who imagined the plan of nature on the analogy of self-knowledge. For the latter, who were in the majority, were in no doubt that natural effects served an end determined by some divine intention, that man, "the viceroy of Creation," was totally distinct from the reality that he tried to understand, and that God "had invested man with power, authority, right, dominion, trust and care . . . to preserve the face of the Earth in beauty, usefulness and fruitfulness," as the English jurist Matthew Hale floridly put it.<sup>26</sup> What now came into existence was a notion of Nature as an autonomous ontological domain, a field of inquiry and scientific experimentation, an object to be exploited and improved; and very few thought to question this.

If the idea of nature acquired such importance in the seventeenth century, it was certainly not because the powerful vibration of the life of the world was suddenly perceived by eyes now unsealed that would in future never cease to endeavor to fathom its mysteries and define its limitations. For that notion of nature was indissociable from another, namely that of human nature, which the former had engendered through a kind of fission when, in order to determine a place in which the mechanisms and regularities of nature could be discerned, a tiny portion of being was detached to serve as a fixed point. As Michel Foucault has shown, those two concepts function as a pair to strengthen the reciprocal link between the two dimensions of representations in that period: the first was the imagination, which was seen as the power, attributed to the human mind, to reconstitute order on the basis of subjective impressions; and the second was resemblance, the property that is possessed by things and that presents thought with a whole field of barely sketched in similarities upon which knowledge can superimpose its work of establishing

order.<sup>27</sup> Thanks to the wide generality of their meanings, Nature and human nature allow one neatly to synthesize the new possibility of effecting a readjustment between the ceaseless pullulation of the analogical multiplicity of beings and the mechanism of induction, with its whole parade of images and reminiscences. Understanding and controlling nonhumans are assigned to a subject who knows or one who acts, the scientist in his heated room\* or the engineer draining marshland, the physicist manipulating his air pump or the steward of Colbert's forests. They were not the responsibility of humanity as an organized whole, let alone of particular collectivities differentiated from one another by their respective customs, languages, and religions. Nature is there, of course, paired with human nature, but as yet there is no sign of society as a concept and a field for analysis.

Since Foucault's *Les mots et les choses* (translated into English as *The Order of Things*), it has become almost a cliché to say that the birth of a concept of "man" and that of the sciences that explore his "positivities" were events that did not occur in European culture until quite late and are unparalleled in the history of humanity; and also to say that these events were instigated, at the very end of the eighteenth century, by a great upset in the Western episteme, which now witnessed the appearance of a space that brought together organized systems that were comparable to one another thanks to their contiguity in a chain of historical successions, replacing a general schema of representation that simultaneously set in order a whole network of identities and differences. Yet another commonly accepted idea is that, in consequence, the human sciences owed nothing to some vacant domain more or less similar to that once occupied by human nature, now left fallow but well marked out, in which all they would have needed to do was sow some seeds of positive knowledge and, using the more effective tools that they now possessed, bring them to fruition. In short, to quote Foucault's emphatic declaration: "No philosophy, no moral or political option, no empirical science of any kind, no observation of the human body, no analysis of sensation, imagination or the passions, had ever encountered, in the seventeenth century, anything like man; for man did not exist."<sup>28</sup> The results of Foucault's archaeological inquiries into the substrata of the human sciences are now so well known that further commentary is unnecessary. However, we should bear in mind one point that is relevant to the present study. If it was not until the nineteenth century that the concept of society began to take shape as an organized totality and if it was

\* Translator's note: In his *Discourse on Method*, Descartes indicates that he is seated by a wood-burning stove, a seventeenth-century method of heating.

therefore only then that such a concept could be set in opposition to nature, then the genesis of, respectively, each of those notions, and their progressive maturation within an operational field where they could be combined, together with the glimpses of reality that their paired discontinuities rendered possible—all that must result from such a long and exceptional process of multiple filterings and ruptures that it is hard to see how it could possibly have been shared by cultures other than our own.

But at this point a brief comment on Rousseau seems necessary. We know that Lévi-Strauss gave him an important role in the anticipation of modern ethnology. He credited the author of the *Discourse on the Origin of Inequality* with having foreshadowed the method of this science that was yet to be born when he recommended observing the differences between humans, the better to discover the properties that they shared in common. Lévi-Strauss also declared that Rousseau had based his program on a concrete examination of the problem of the relations between nature and culture, seeing it not as an irreversible separation but in a nostalgic and often desperate quest for what, in humans, authorizes and encourages them to identify with all forms of life, even the most humble.<sup>29</sup> Despite the criticisms directed at it, the militant Rousseauism of the founder of structural anthropology can therefore not be regarded as an attempt to extract from the thought of the Enlightenment the beginnings of a dualism between nature and society that twentieth-century anthropology then itself took over. After all, in Rousseau's view, the assembly of citizens in no way constitutes a society in the conventional sense of the term in modern sociology, that is, a unit superior and external to individuals, as it were, a moral entity the needs and aims of which differ from those of the members who compose it—in other words, an autonomous whole animated by a specifically social collective interest that amounts to something more and other than the sum of the desires of individuals. Moreover, Durkheim made no mistake about this when he compared his own conception of collective utility, determined by a social being considered in its organic unity, with the common interest as expressed by Rousseau: “the interest of an average individual,” which gave body to the general will by adding to it whatever is useful to each member of the community.<sup>30</sup> There is more than a difference of degree and a different emphasis between Durkheim's transcendent society and the aggregation of individuals all mutually bound by a convention whose conditions of legitimation are spelled out by the social contract. The former is an ontological entity of a new kind, and it is illusory to seek in Rousseau for a promise or prefiguration of it, even if his theory of a social link does offer a fertile source of analogies to those who, like Lévi-Strauss, have managed to

detect behind the power that Rousseau grants to feeling and his defense of the idea of virtue an original manner of thinking about ways of getting along with others.

### The Autonomy of Culture

But our genealogical account of dualism is not completed by the advent of the concept of society; for contemporary ethnology owes its *raison d'être* to a notion established more recently: namely the notion of culture, by which it defines the proper field of its inquiries and by which it concisely expresses all that which, in humans and their achievements, is distinct from nature and imposes meaning upon it. Perhaps it was also inevitable that terms as vague as “nature” and “culture,” so ready to lend themselves to the successive meanings that have been found for them, so well adapted to gathering together in a single expression this or that region of the welter of aspirations, processes, and forces that the variegated spectacle of the world presents—perhaps it was inevitable that these terms should end up finding in their mutual opposition a definition of their positive qualities and at the same time a seemingly self-evident significance that is greatly increased by their conjunction. The idea of culture assuredly took shape later than the idea of nature, but its development was no less contingent, and the movement in the course of which the range of its meanings came to be restricted was just as complex.

All ethnologists are familiar with the famous critical inventory in which Alfred Kroeber and Clyde Kluckhohn noted most of the definitions of culture.<sup>31</sup> Of the 164 accepted meanings that they list, I shall pick out only two, to make my point. The first, which they label “humanist,” envisages culture as a distinctive characteristic of the human condition. Its canonic formulation, by Edward B. Tylor in 1871, is traditionally regarded as, so to speak, the birth certificate of the field of modern anthropology: “Culture or Civilization, taken in its wide ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society.”<sup>32</sup> Here, culture is not distinguished from civilization, in the sense of an aptitude for collective creation governed by a progressive quest for perfection. This was the view adopted by the evolutionary anthropologists of the last third of the nineteenth century. It accepts the possibility and necessity of comparison between a range of societies arranged in order of the degree of development of their cultural institutions, which are more or less elaborated expressions of a universal human tendency to overcome natural constraints and instinctive forces. The strictly anthropological concept of culture did not appear until later. It was only at the turn

of the twentieth century, in the ethnographic work of Franz Boas, that there emerged the idea that each people constitutes a unique and coherent configuration of material and intellectual features sanctioned by tradition, that tradition being typical of a certain mode of life, rooted in the specific categories of a language and responsible for the specificity of the individual and collective behavior of its members.<sup>33</sup> The Boasian view, reworked and elaborated in a more systematic fashion by his disciples, was to form the matrix of North American anthropology and lastingly define its “culturalist” character. In this second definition, culture takes a plural form, as a multitude of particular realizations; it is no longer singular, signifying the attribute par excellence of humanity. The grading of peoples according to their proximity to the modern West is supplanted by a synchronic table in which all cultures are equally valid. The optimistic universalism of the theorists of evolution gives way to a relativist method centered on an intensive monographic approach and the revelation of the full richness of the peculiar. The teleological emphasis shifts from faith in a continuous progress in manners and customs to the assumption that every culture inclines toward its own conservation and the perpetuation of its own *Volksgeist* (spirit of the people).

Before reaching a more or less specialized status in ethnology, each of these concepts of culture was crystallized in particular national contexts and in accordance with a process of differentiation, the echoes of which are still perceptible in the theoretical tendencies of various scholarly traditions. Culture, in the universal sense, was, as we have seen, not distinguished from civilization. Up until the beginning of the twentieth century, the two terms continued to be used interchangeably in anthropology, even by Boas. The word *civilisation* is itself relatively recent. It appeared for the first time in French in 1757, penned by Victor Riqueti de Mirabeau, and about ten years later in England, used by Adam Ferguson with an equivalent sense.<sup>34</sup> It meant the state of civilized society, which had resulted from constant progress in virtue and civic skills, in contrast to the mere urbanity of manners or civil behavior, superficial and static qualities. However, as Norbert Elias has shown, “civilization” was to take on a completely different meaning in Germany, in fact a meaning closer to what it was originally opposed to, that is, customs ruled by convention that expressed one’s social standing, knowing how to present oneself well and speak well, in short the attitudes of a court nobility aping French taste. “Culture” was the opposite of a civilization of appearances conceived in this way.<sup>35</sup> The term “culture” evoked the character peculiar to certain products of human activity that testified to the genius of a people, revealing its own particular value and enabling it to regard this as something of which to be proud. In Germany, the antinomy between culture and civilization initially

took on a social dimension. At least, that was the polemical argument used by a bourgeois intelligentsia, distanced from any real economic and political responsibility by a court aristocracy that gloried in its privileges but was reputed to be incapable of any creative initiative. Following the French Revolution, the antagonism between the values that these two notions (civilization and culture) embodied began to take on a national character: the ideals of the cultivated middle class became emblematic of German culture, in contrast to the idea of civilization that an expansionist and confident France was conveying to the four corners of Europe.

What followed is so well known that I need not dwell on it. We know how Germany reacted to the Enlightenment; how Herder, Fichte, and Alexander and Wilhelm von Humboldt turned away from the quest for universal truths and instead emphasized the incommensurability of collective peculiarities, styles of life and forms of thought, and the concrete achievements of this or that community. We know the degree to which a people denied political unity became obsessed by the question of the bases of its own character; and to what extent its desire to classify, delimit, and consolidate the specific characteristics of a nation as yet still nascent contributed to setting up the idea of culture as one of the central values of nineteenth-century Germany. We also know how much Boas, who emigrated to New York at the age of twenty-nine, owed to his years of *Bildung* (upbringing) in the crucible of German university life, as did his principal disciples, the first generation of American anthropology, most of whom had received a Germanic education; Sapir was born in Pomerania, Lowie in Vienna, and Kroeber amid the German American elite of Manhattan.<sup>36</sup> The roots of the American conception of culture thus plunged deep into German historicism, in the *Volksgeist* (spirit of the people) of Herder, the *Nationalcharakter* of Wilhelm von Humboldt, and the *Völkergedanken* (folk ideas) of Bastian.

Although shaken by the failure of evolutionism, the notion of culture, in the singular, nevertheless did not disappear from twentieth-century ethnology. This was the case even in the United States, where Kroeber, distancing himself from Boas, soon set about defining the specific character of culture as a “superorganic” entity of a particular kind, a hypostasis that took shape as it transcended individual existences and defined their orientations.<sup>37</sup> But it was above all in French and British anthropology that culture continued to exist as a distinctive attribute of the whole of humanity. Yet it did so in an almost underground fashion by reason of the predominance of the Durkheimian school and the preeminence that this ascribed to the notion of society for filling the same function. This belief in “culture” was really an unreflective conviction that was at odds with the particularism of Boas’s followers: it was thought

that it was both possible and desirable to find regularities and invariants—not to mention universals—in the human condition that could account for a unity of culture that underlay the multiplicity of its particular manifestations. Expressions of this aspiration are to be found not only in Malinowski's somewhat unconvincing "scientific theory of culture," in Radcliffe-Brown's insistence on defining anthropology as a nomothetic discipline, and also in Lévi-Strauss's proclaimed project for a science of the "order of orders." In fact, this last project illustrates to what extent the two notions of culture, as a reality sui generis distinct from a Nature that was both the originating condition of humanity and also an autonomous ontological domain providing symbolic thought with an inexhaustible source of analogies, stemmed from Lévi-Strauss's philosophical training and his attachment to the rationalism of the Enlightenment. But as a result of his time spent in the United States and his acquaintance with Boas, he did pay heed to the lessons of relativism: the idea that nothing justifies setting up a hierarchy of cultures in accordance with either a moral scale or a diachronic series.

There can be no doubt that the notion of culture (in the singular) derives much of its fertility from its opposition to nature. Cultures (in the plural), on the other hand, make sense only in relation to themselves; and even if the environment in which they have developed certainly does constitute an important dimension in the peculiarities ascribed to them, from a culturalist point of view their manner of adapting to nature is but one means among others that helps us to understand them, a means no more legitimate or expressive of a worldview than is language, a system of rituals, technology, or table manners. So, in itself, a holistic idea of culture does not summon up nature as its automatic counterpart. Yet, as initiated in Germany and developed in North America, this was the idea that was to solidify contemporary dualism, not by disseminating its specialized use in anthropology but by reason of the work of epistemological purification that was necessary for the idea of culture as an irreducible totality to win autonomy in the face of natural realities.

The genesis of this idea is indissociable from the intense debates that, in late nineteenth-century Germany, attempted to spell out the respective methods and objects of natural sciences and sciences of the mind. Battling as much against idealist philosophy as against positivist naturalism, historians, linguists, and philosophers were trying to set on a firm basis the humanities' claim to become rigorous sciences, worthy of as much respect as that received by physics, chemistry, and animal physiology. Within barely twenty years, several fundamental texts on this question were published. The first of these was the *Principien der Sprachgeschichte* (1880; English translation 1890), in which the historian of languages Hermann Paul drew a distinction between "sciences

that produce laws” and “historical sciences,” which attach themselves to the individuality of phenomena as a product of historical contingency. The second text was the famous *Einleitung in die Geisteswissenschaften* (1883; English translation 1989), in which Wilhelm Dilthey set the sciences of nature in opposition to *Geisteswissenschaften*, which proceed according to “understanding,” that is, according to the researcher’s aptitude at reliving, through empathy, the concrete situation of a historical actor. The third was the article “Geschichte und Naturwissenschaft” (1894; English translation 1980) by Wilhelm Windelband, who, developing a distinction proposed a few years earlier by Otto Liebmann, established a contrast between the nomothetic method of the sciences of nature and the idiographic method of the historical sciences. Perhaps even Boas should be included in this epistemological debate, for in 1887 he wrote a little essay, entitled “The Study of Geography,” in which he set up an opposition between the method of, on the one hand, a physicist (his initial training in Heidelberg was in physics) studying phenomena that possess an objective unity and, on the other, a cosmographer (here Alexander von Humboldt was his model) endeavoring to understand phenomena whose connection is established in a subjective manner.<sup>38</sup>

However, it was Heinrich Rickert, particularly in his *Kulturwissenschaft und Naturwissenschaft* (1899; English translation 1962), who produced the most complete classification of the sciences, the one that distinguished between their respective methods and objects with the greatest logical rigor. At any rate, this was the classification that exerted the most telling influence not only on Rickert’s contemporaries, first and foremost his friend Max Weber, but also on great figures of twentieth-century German philosophy from Heidegger to Habermas.<sup>39</sup> In the first place, it fell to Rickert to substitute the expression “the sciences of culture” for the one more usual at the time, namely “the sciences of the mind.” This was a novelty that was more than simply terminological. The expression “sciences of the mind” could lead to confusion and, as in the case of Dilthey, suggest that the humanities dealt only with mental life or the spiritual dimension of phenomena, as though this was an intrinsic reality that was presented to us independently of the things that were the object of the natural sciences. As a good Kantian, Rickert held that we live and perceive reality as a disparate continuum whose segmentation into different domains comes about only as a result of the mode of knowledge that we apply to it and the characteristics that we select. The world becomes nature when we envisage it in its universal aspect; it becomes history when we examine it in its particular and individual aspect. Rather than draw a distinction between a nomothetic approach and an idiographic one, we should therefore consider all scientific activity as one and the same: activity that focuses on an object that

is itself unique but that does so according to two different methods: (1) generalization, which is typical of the natural sciences, and (2) individualization, which is the prerogative of the cultural sciences. This is why psychology, to which historians lay claim, far from constituting a privileged means of access to human behavior, rightfully belongs to the natural sciences in that its objective is to discover the universal laws governing mental functions. So by what criteria should we identify that which, in the undifferentiated teeming profusion of the world, is likely to lead to generalizations and that which, on the contrary, leads to reducing things to their peculiarities? Rickert's answer is that the cultural sciences aim to study whatever takes on meaning for the whole of humanity or at least whatever is meaningful for all the members of a community. In other words, from the point of view of their scientific treatment, it is in their relationship to values that cultural processes are distinguished from natural ones.

By distinguishing between, on the one hand, objects without meaning whose existence is determined by general laws and, on the other, objects that we apprehend in all their individuality by virtue of the contingent value that is attached to them, Rickert dealt a blow to the foundations of ontological dualism. More or less all reality can be apprehended through one or another of its aspects, according to whether it is considered in its brute and stubborn factuality or from the point of view of the desires and uses invested in it by those who have deliberately produced or preserved it. But such a clarification comes at the price of an implacable epistemological separation between two fields of investigation and two modes of understanding that are now perfectly heterogeneous. This separation is no doubt more impermeable than that which involves simply classifying the entities of the world into two independent registers of existence. Between the human and the nonhuman there no longer exists the radical discontinuity of transcendence or the ruptures introduced by the mechanization of the world. It is only in our eyes that they are differentiated, and differentiated according to the manner in which we choose to objectivize them, for "this antithesis between nature and culture, in so far as it refers to a difference between two groups of real *objects*, is the actual basis for the classification and division of the various sciences."<sup>40</sup> In short, the opposition does not lie in things themselves; it is constructed by an arrangement that makes it possible to discriminate between them, a mechanism that will become increasingly effective as the human sciences abandon speculation on origins in favor of empirical inquiries and, as they accumulate positive knowledge, begin to supply proof of their legitimacy. It matters little, here, that Rickert, like many of his contemporaries, was inclined to classify the study of *Naturvölker* (primitive peoples) among the natural sciences, for the general ruling that he

established was to carve out the space in which twentieth-century anthropology would be able to operate. It would be a study of cultural realities, as opposed to the study of natural realities.

### The Autonomy of Dualism

Anthropology was to reap the fruits of the long period of maturation that we have just presented, and this would place it in a quite embarrassing position. Let us see what it has made of the situation. Ferocious though the controversies that fuel this discipline may seem to those observing it from afar, they nevertheless rest upon a wide consensus as to its mission. Just as any private altercation implies some common ground that defines the nature and forms of expression of the disagreement, so too, anthropological disputes presuppose a background of habits of thought and shared references on the basis of which oppositions can emerge. That common fund of interests originates in the very terms in which anthropology defines its object, namely Culture, or cultures, understood as a system of mediation with Nature that human beings have managed to invent. This constitutes a distinctive attribute of *Homo sapiens* and involves technical skills, language, symbolic activities, and the capacity to organize individuals in communities that are to some extent not constrained by biological continuities. Whatever the theoretical divergences that run through the discipline, there really does exist a consensus on the fact that the field staked out by anthropology is one in which the universal constraints of life and the contingent rules of social organization—the need for humans to exist as organisms in environments that they themselves have only partially fashioned and their capacity to ascribe a myriad of particular meanings to their interactions with other entities in the world—intermingle and mutually affect one another. All the concrete objects of ethnological investigation lie within this zone of overlap between collective institutions and the biological and psychological factors that confer upon social life its substance but not its form. The autonomy that anthropology claims within the scholarly world is thus founded on the belief that all societies constitute compromises between Nature and Culture and that its task is to examine the many singular expressions of this compromise and, if possible, to try to discover the rules of their formation and destruction. In short, the duality of the world has become the original (in both senses) challenge to which this science of anthropology has tried to respond, deploying a rich fund of ingenuity in order to reduce the gap between the two orders of reality that it found waiting for it in its cradle. The implications carried in the initial definition of the object were bound to influence the way in which that object was grasped. If one agrees that human

experience is conditioned by the coexistence of two fields of phenomena that are accessible through two distinct modes of understanding, one inevitably approaches their interface from the starting point of one aspect rather than the other. This starting point may be the determinations that result from the use, control, or transformation of nature, which are universal in their effects but differentiated according to different environments, techniques, and social systems, or one may begin from the particularities of symbolic ways of treating a nature that is homogeneous within its own limits and mode of functioning—particularities that are recurrent because of the universality of the mechanisms mobilized and the unity of the object to which they are applied.

That is why naturalist monism and culturalist relativism continue to prosper in mutually legitimating confrontations. They form the two poles of an epistemological continuum along which those trying to make sense of the relations between societies and their environments must position themselves. Because they have hardened in the course of polemics, the extreme positions reveal in a purified form all the contradictions within which anthropology has been trapped because of its adhesion to the postulate that the world can be divided between two types of reality whose interdependence needs to be shown. When apprehended in its most excessive formulations, the choice thus acquires a pedagogic value: either culture is fashioned by nature, whether this is composed of genes, instincts, and neuron networks or by geographical constraints, or else nature only takes on shape and relief as a potential reservoir of signs and symbols on which culture can draw. Formulated crudely, such an opposition may evoke certain features of the old Scholastic distinction between a *natura naturans* and a *natura naturata*, to which Spinoza imparted new life. For Spinoza *natura naturans* is the absolute cause, constituted by an infinite number of infinite attributes, and is identified with God, as the source of all causality. Meanwhile, *natura naturata* covers the whole collection of processes and objects and also the ways of apprehending them that stem from the existence of *natura naturans*.<sup>41</sup> As Spinoza's contemporaries soon spotted, there is nothing Christian about such a God: as an impersonal causal substance, both the definition and the sum total of all possibilities, *natura naturans* is simply the hypostasis of a logically prior Nature expressed in the phrase "God or Nature" (*Deus sive natura*). In this, the materialists of subsequent centuries were to find a convenient substitute for the divine prime mover. On the other hand, it may be objected that Spinoza's *natura naturata* has very little to do with the modern idea of the autonomy of culture as a distinctive shaping, differing according to the languages and usages of peoples, of organisms, and of objects that come into existence only by virtue of the codes by which they are objectivized. Without wishing to push the transposition too far or to slip into

anachronism, it is important to point out that, for Spinoza, *natura naturata* is constituted above all by modes—modes of being, of thinking, of acting, and of the relations between things—some of which are certainly universal but which are incommensurable with the cause that brings them about. They can therefore be studied in themselves, leaving aside that which determines them.

In opposition to an analogical use of the *natura naturans* and *natura naturata* pair, it could also be objected that the terms of such a distinction are mutually exclusive and do not allow for any intermediary states. Plenty of authors—anthropologists, sociologists, geographers, and philosophers—have tried to find a middle way between “crass determinism” (*le déterminisme crasse*) and “airy fancifulness” (*imaginarisme aérien*), to borrow Augustin Berque’s expressions;<sup>42</sup> a dialectic way out would make it possible to avoid a head-on clash between the two dogmatisms. These authors hope to establish themselves at an equal distance from, on the one hand, militant positivists and, on the other, the advocates of an unyielding hermeneutics; they endeavor to combine the ideal and the material, the concrete and the abstract, physical causes and the production of meaning. But such efforts at mediation are condemned to failure as long as they are based on the premises of a dualist cosmology and assume the existence of a universal nature to which multiple cultures adapt or which they codify. Along an axis leading from totally natural culture to totally cultural nature, it is not possible to find a point of equilibrium. One is reduced to compromises that are closer to either one pole or the other. In any case, the problem is as old as anthropology itself; as Marshall Sahlins graphically puts it, anthropology is, as it were, a prisoner forced for over a century to pace to and fro in its cell, trapped between the walls of mental constraints and practical causes.<sup>43</sup>

I am ready to concede that such a prison does have its advantages. Dualism is not an evil in itself and it is ingenuous to stigmatize it for purely moral reasons in the manner of ecologically friendly philosophies of the environment or to blame it for all the evils of the modern era, ranging from colonial expansion to the destruction of nonrenewable resources and including the reification of sexual identities and class distinctions. We need at least to give dualism credit not only for its wager that nature is subject to laws of its own but also for its formidable stimulation of the development of the natural sciences. We are also indebted to it not only for the belief that humanity becomes gradually civilized by increasing its control over nature and disciplining its instincts more efficiently but also for certain advantages, in particular political ones, engendered by an aspiration toward progress. Anthropology is the daughter of these trends and of scientific thought and a belief in evolution; and we have no reason to feel ashamed of the circumstances of its birth

or condemn it to disappear in expiation of its youthful errors. All the same, its role is hampered by this heritage—for that role is to gain an understanding of how peoples who do not share our cosmology came to invent for themselves realities that are distinct from our own, thereby manifesting a creativity that cannot be judged according to the criteria of our own accomplishments. And this is something that anthropology cannot do so long as it takes our reality for granted as a universal fact of experience, along with our ways of identifying discontinuities and discerning constant relationships in the world and our manner of distributing entities and phenomena, processes and modes of action, in categories thought to be predetermined by the texture and structure of things.

To be sure, we do not apprehend other cultures as completely analogous to our own, for this would hardly be likely. But we see them through the prism of no more than a limited part of our own cosmology, as so many singular expressions of Culture, which stands in contrast to a unique and universal Nature. We thus regard them as cultures that are very diverse but that all fit into the canon of what this double abstraction means to us. Because it is deeply rooted in our habits, this ethnocentrism is very difficult to eradicate. As Roy Wagner rightly notes, in the view of most anthropologists cultures on the periphery of the modern West “do not contrast with our culture or offer counter-examples to it, as a total system of conceptualization; but rather, invite comparison as ‘other ways’ of dealing with *our own reality*.”<sup>44</sup> By turning modern dualism into the standard for all world systems, we are forced into a kind of well-meaning cannibalism, as we repeatedly incorporate nonmoderns’ objectivization of themselves into our own objectivization of ourselves. Primitive peoples were long reputed to be radically “other” and consequently were used as foils to civic morality or as models of now-vanished virtues. But now they are regarded as almost transparent neighbors, no longer the “naked philosophers” praised by Montaigne but preliminary sketches of citizens, protonaturalists, quasi historians, and nascent economists: in short, precursors who fumble at a way of apprehending things and human beings that we ourselves are believed to have discovered and codified better than anyone else. Of course, that is one way of expressing respect for them, but amalgamating them into the categories to which we belong is also the surest way of wiping out their distinctive contribution to the intelligibility of the human condition.

Such ethnocentricity does not make it unjustifiable to study kinship or technical systems using our own terms, but it does become a formidable obstacle to an accurate comprehension of ontologies and cosmologies whose premises differ from our own. Given its essential dualism, anthropology was bound to treat this degree of objectivization of the real that nonmoderns

seemed not to have managed to achieve as a clumsy prefiguration or a more or less convincing echo of the objectivization that we ourselves have perfected, a motley mixture of baseless inferences, half-baked logic, and expressive projections bearing witness to the childhood of reason and the contemporary sources of superstition—in short, a residue of positive knowledge that, for us, takes on form and meaning only when set alongside the solid mass from which it has become detached. Ever since Frazer, this remnant of knowledge about nature has been the meat and drink of religious anthropology; and nothing is more symptomatic of the consequent status of the phenomena that interest it than the epithet “supernatural,” by which they are still qualified. For even if one watches out for it, it is hard to avoid the illusion that, for many peoples, the supernatural is the part of nature that they have been unable to explain, and that an intuition of a supernatural causality anticipates the idea of a natural causality that could correct that intuition. After all, it is a seductive illusion to surmise that when “magical thought” interprets a rainbow, a flood, or an illness as the result of some invisible force endowed with intentionality, it is betting on a universal determinism that it can identify by its effects, but without discerning its true causes. Yet, as Durkheim saw, quite the reverse seems more plausible: “In order to call certain phenomena supernatural, one must already have a sense that there is *a natural order of things*, in other words that the phenomena of the universe are connected to one another according to certain necessary relationships called laws. Once this principle is established, anything that violates these laws necessarily appears to be beyond nature, and so beyond reason.”<sup>45</sup> As Durkheim stresses, such clarifications become possible only late in the history of humanity, since they resulted from the development of the positive sciences undertaken by the Moderns. Far from indicating an incomplete determinism, the supernatural is an invention of naturalism, which casts a complacent glance at its mythical genesis, a sort of imaginary receptacle into which one can dump all the excessive significations produced by minds said to be attentive to the regularities of the physical world but, without the help of the exact sciences, not yet capable of forming an accurate idea of them.

The tendency to pass legitimate knowledge and symbolic residues through a naturalist sieve is illustrated by a taxonomic mania for picking out specialized fields of inquiry that are given the name of a recognized science preceded by the prefix “ethno-.” The first two of these were ethnobotany and ethnozoology, but they have now been joined by ethnomedicine, ethnopsychiatry, ethnoecology, ethnopharmacology, ethnoastronomy, ethnoentomology, and many others too. This procedure makes it possible to reify certain

blocks of native knowledge by dint of rendering them compatible with the modern division of sciences, for the frontiers of each domain are established a priori in accordance with the classes of entities and phenomena that the corresponding disciplines have gradually picked out from the fabric of the world as their own particular objects. Once each of these ethnosciences has won its institutional autonomy, with its own journals, congresses, professorial chairs, and controversies, it becomes increasingly difficult to escape from the illusion that the objectivation of reality is everywhere organized following a similar natural tendency the progress of which is blocked here and there by big blocks of magical thinking, moving testaments to a still imperfect recognition of the regularities of the physical world and an ambition to exercise firmer control over it. At this point, the distribution of anthropological work becomes inevitable. Specialists in the ethnosciences are responsible for revealing “folk” classifications and knowledge that constitute approximate variants of the scholarly disquisitions of which they are the prototypes; meanwhile, the specialists in “culture” appropriate the study of symbolism, beliefs, and rituals, the precious surface froth that bestows upon a people its own inimitable style.

Yet the multiple and tangled links that every individual is constantly weaving with his or her environment hardly sanction such a cut-and-dried distinction between practical knowledge and symbolic representations—at least not if one allows some credit to the meaning that the members of a collectivity attach to their actions. When an Achuar hunter finds himself within striking distance of his intended prey and sings it an *anent*, a plea designed to win the animal over and lull its mistrust by means of misleading promises, is he suddenly switching from rationality into irrationality and from instrumentalized knowledge into a fantasy? Has he moved into a quite different register, following the long period of stalking the animal, in which he has mobilized all his ethological expertise, his deep knowledge of the environment, and all his tracker’s skills: all the qualities that have allowed him, almost by instinct, to link together a multitude of clues and create a thread that will lead him to his prey? In short, should the magic song be interpreted as an illusory representation needlessly introduced into a chain of operations molded out of a combination of know-how, effective knowledge, and confirmed automatic reflexes? Not at all. For if I regard an animal as a person endowed with faculties analogous to my own, an intentional being attentive to whatever I may tell it, it is no more abnormal to speak to it with all the appearance of civility than it is to provide myself with the technical means of slaughtering it. The two attitudes are both part of the tissue of relations that I establish with it, and each has a role to play in the configuration of my behavior toward it.

Does this lead one back to an intellectualist idea that might explain hunting magic by a particular belief of those who resort to it, namely a theory of the world in which such actions are invested with an operational efficacy? Not at all. No Achuar would claim that the *anent*, on its own, makes it possible to flush out his prey and be sure of killing it. The *anent* is but one of the elements that establishes the ontological status of a particular animal, in combination with a whole collection of other, equally relevant criteria relating to its customary behavior, its habitat, and whatever one knows about the circumstances that, at one particular moment, have made it possible for this animal to become associated with the hunter's biography and his past encounters with other members of the same species. The magic incantation is not operational because it is performative or because it may bring about the result that it suggests or make this seem possible in the eyes of the singer. It is operational because it helps to characterize and therefore to render effective the relationship that is established at a particular moment between one particular man and one particular animal; it recalls the links between the hunter and other members of the animal's species, it describes those links using the language of kinship, and underlines the ties of solidarity between the two parties that are present; in short, it picks out from the attributes of each party those that will impart to their confrontation a greater existential reality. So a hunting *anent* cannot be isolated as a symbolic dross that accompanies a technical process. To obtain a useful result is not its primary purpose; it is neither an additive nor a palliative; what it does is make it possible to set up a system of relations already virtually existent, in such a way as to give meaning to a chance interaction between the man and the animal by delivering an unambiguous reminder of their respective positions. In Amazonia, as among ourselves, an organism is established as a significant entity in the environment not solely on the strength of the material and cognitive attributes that make it possible to identify it, kill it, and eat it but also by taking into account a whole collection of properties that are attributed to it and that, in return, call for particular types of behavior and mediation that are appropriate to the nature ascribed to it. Are vegetarians really so different from an Achuar hunter when they refuse to eat veal but not spinach, and are international organizations when they forbid the capture of dolphins but not that of herrings? Are not the differing ways in which we treat different species likewise based on the type of relations that we think we have established with this or that segment of the living world? Rather than regard the former as obvious superstitions and the latter as covert ones, linked more or less reasonably to a system of positive knowledge, would it not be preferable to treat the "symbolic" dimension of our actions in the world simply as one means, among others, of distinguish-

ing, out of the whole network of things, certain ways of proceeding that, as we shall later see, are less random than they may appear?

### The Autonomy of Worlds

As we near the end of this outline, what more needs to be said? Is it still plausible to classify as a cross-cultural universal an opposition between nature and culture that was introduced scarcely more than a century ago? Should we continue to scour the four corners of the planet in order to discover how the most diverse of peoples may have expressed such an opposition, meanwhile quite forgetting the altogether exceptional circumstances in which we ourselves belatedly forged it? Is it really so shocking to recognize that the Jivaro, the Samoyed, and the Papuan may not be conscious of the fact that humans are classed as different from nonhumans by the systems of analysis now applied to them, when our own great-grandparents were not conscious of the fact? In short, should we cling to such a historically determined way of dividing up the world in order to account for cosmologies that are clearly still very much alive in plenty of civilizations or that, now relegated to the shelves of our libraries, await only our curiosity in order to come to life once more? As I am sure must be clear by now, I myself do not think so.

One objection that may spring to readers' minds is the following: my critique of dualism may be either naïve or sophistic; it seems to skim the surface of the insubstantial tissue of words and confuse the absence of concepts with the nonexistence of the realities that they designate. Just because the opposition between nature and culture acquired its definitive form and its operational efficacy only at the beginning of the twentieth century, it does not necessarily follow that people earlier and elsewhere were in practice incapable of discriminating between the two orders of reality that we classify using those terms. In short, I have failed to resist an ingenuous variant of the nominalist perversion. However, the ambition of the present book is to show that this is not at all the case and that a rejection of dualism leads neither to absolute relativism nor to a return to modes of thought that today's context has rendered obsolete, and that it is possible to reflect upon the diversity of customs in the world without succumbing either to a fascination with the exceptional or to a refusal of the positive sciences. I will limit myself, for the moment, to a brief declaration of faith.

It is unlikely that anyone can have failed to notice that nonhumans do not, ordinarily, use language, that it is impossible to have productive sexual relations with them, and that many are incapable of moving by themselves or of growing and of reproducing themselves. Perhaps we should even lend credit

to developmental psychologists when they tell us that all children, whatever the environment in which they are raised, tend very early on to draw distinctions between entities that they perceive to be endowed with intentionality and others that are not.<sup>46</sup> In short, in all probability an observer ideally removed from any cultural influences could accumulate many signs indicating that, between himself and what we customarily call natural objects, a whole range of differences exists—differences in appearance, in behavior, and in the manner of being present in the world. However, the signs that indicate a gradual continuity are equally numerous and have not failed to attract the notice of a handful of rebellious spirits who, from Montaigne to Haeckel and including Condillac and La Mettrie, never ceased to oppose the dominant doctrine.<sup>47</sup> Why should the frontier be drawn at language or poesis rather than at independence of movement? Or at independence of movement rather than at life? Or at life rather than at material solidity, spatial proximity, and acoustic effects? As Whitehead observes, admittedly in a different context, “nature as perceived always has a ragged edge.”<sup>48</sup> The ethnographical and historical ground that we have covered so far shows clearly enough that a consciousness of certain discontinuities between humans and nonhumans is not in itself enough to create a dualist cosmology. The multiplicity of forms of existence that we witness all around us may offer a more fertile terrain for ontological discriminations than the tiny quantum by which we distinguish ourselves from what Merleau-Ponty calls “associated bodies” (*les corps associés*).<sup>49</sup> The world presents itself to us as a proliferating continuum, and one would have to adhere to a truly myopic realism of essences to consider it cut up in advance into discontinuous domains that the brain is designed, always and everywhere, to identify in the same manner.

Readers might furthermore argue that the great divide is an illusion since Moderns never have conformed in practice to the radical distinction upon which their representation of the world is founded. This original hypothesis, proposed by Latour, goes as follows: ever since the mechanistic revolution of the seventeenth century, scientific and technical activity has never ceased to create mixtures of nature and culture in networks of increasingly complex structure in which objects and humans, and material effects and social conventions, coexist in a situation of mutual “translation”; such a proliferation of mixed realities was itself rendered possible only through a parallel endeavor of critical “purification” designed to guarantee the separation of humans and nonhumans into two hermetically sealed ontological regions.<sup>50</sup> In short, Moderns neither do what they say nor say what they do. The only thing that distinguishes them from premoderns is the presence of a dualist “constitution” designed to speed up the production of hybrids and render it more effective,

at the same time concealing the conditions in which this is accomplished. As for premoderns, they—it is claimed—concentrated their efforts on the conceptualization of hybrids, thereby preventing the latter from multiplying. All in all, the argument is very convincing. But in no way does it call into question the absolutely exceptional nature of modern cosmology—a point that, it is true, Latour has no hesitation in conceding.<sup>51</sup> The fact that dualism masks a practice that contradicts it does not eliminate its directive role in the organization of the sciences, nor does it efface the fact that ethnology derives constant inspiration from an opposition that most of the peoples it describes and interprets do perfectly well without. What primarily interests me are the deforming effects of this perspective on ethnology, for it is here that its creation of illusions is the most pernicious. A sociologist of the sciences may well incur Latour's criticism if he believes that humans and nonhumans exist in separate domains, but nevertheless he will remain faithful to one dimension of his object. In contrast, an ethnologist who thinks that the Makuna and the Chewong believe in such a dichotomy would be betraying the thought of those he studied.

I know that the idea of the great divide has had a bad press for some time. Ever since ethnology liberated itself from the grand evolutionist schemas of the nineteenth century under the combined influence of British functionalism and North American culturalism, it has persisted in seeing the magic, myths, and rituals of nonmoderns as prefigurations of, or fumbings toward, scientific thought, as attempts—that are both justifiable and plausible, given the circumstances—to explain natural phenomena and ensure control over them and at the same time as expressions, bizarre in form but basically reasonable, of the universality of humanity's physiological and cognitive constraints. Its intentions were honorable: the aim was to dissipate the fog of prejudices surrounding "primitives" by showing that good sense, observational skills, an aptitude for inferring properties, and ingenuity and resourcefulness are all part of an equally shared human heritage. As a result, it is now hard to refer to any difference between Us and Others without finding oneself accused of imperialistic arrogance, incipient racism, or impenitent nostalgia for the past, resurgences of thought both malign and retrograde that should promptly be consigned to the oblivion of history, there to join the ghosts of Gustave Le Bon and Lucien Lévy-Bruhl. I agree that it may have been useful, in a particular period, to declare that peoples long considered "savages" were nevertheless not in thrall to Nature since, just like us, they were capable of conceptualizing its otherness. The argument was effective when used against those who doubted the unity of the human condition and the equal dignity of all its various cultural manifestations. But there is now more to gain from try-

ing to situate our own exoticism as one particular case within a general grammar of cosmologies rather than continuing to attribute to our own vision of the world the value of a standard by which to judge the manner in which thousands of civilizations have managed to acquire some obscure inkling of that vision.