The Old Ontology

Our goal is to understand the relations of consciousness and nature: organic, psychological or even social. By nature we understand here a multiplicity of events external to each other and bound together by relations of causality.

In Part One of this book, I developed an embodied account of perception on the basis of Merleau-Ponty's thought in the *Phenomenology of Perception*, deepened through an investigation of eating as a mode of perception, situating an embodied understanding of perception in the history of philosophy with reference to eating as a hidden theme of philosophical reflection. In Part Two, we will seek to bring the non-dualistic ontology that this account of perception implies to clearer expression. The present chapter forms a crossing-point between the two parts, in which we interrogate the old, Cartesian ontology and its problems, seeking to clarify the questions on which an alternative ontology must be brought to bear.

When Merleau-Ponty died unexpectedly in 1961, he left on his desk a copy of Descartes's *Optics*, a text to which he often returned. He had written notes on it in September and November 1959, and had dealt with it at length in *Eye and Mind*, his last writing published during his lifetime. Here he condemns it for the effects it has had on contemporary thought, saying "it is the breviary of a thought that wants no longer to abide in the visible and so decides to construct the visible according to a model-in-thought.

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It is worthwhile to remember this attempt and its failure.”³ As the intellectual historian Martin Jay suggests,⁴ Descartes is often considered to be the founding father of the visual paradigm of modern philosophy: precisely because he was no longer willing to “abide in the visual,” as Merleau-Ponty puts it, he must establish contact between the mind and the visual world by making the visual abide in him; that is to say, he develops a notion of representation which attempts to cross the dualist chasm. This is not to say that the Cartesian ontology, of the separation of mental substance from extended substance, which bequeaths to modern philosophy all the problems of finding a bridge between the two (in the problems of epistemology, of knowledge and illusion, of representation, of freedom and determination, of mechanism and vitalism) is totally new; rather, it makes concrete a new form of visual dominance that goes back to Homer and the Stoics, was present in Augustine, that began to turn in a new direction in the Middle Ages as the early medieval imbriication of the senses gave way to an externalized account of vision, that found a crucial visual formation in the Renaissance invention of perspective, and that reached its philosophical zenith some time later in Descartes’s formulation. For Rodolphe Gasché,

Although it is true that the Augustinian notion of reeditus in se ipsum—a return upon and into oneself constituting the medium of philosophy—prefigures the modern concept of reflection, the philosophy of reflection is generally considered to have begun with Descartes’s prima philosophia. There are good reasons for this assumption, for in Descartes the scholastic idea of the reeditus undergoes an epoch-making transformation, whereby reflection, instead of being merely the medium of metaphysics, becomes its very foundation. With Cartesian thought, the self-certainty of the thinking subject—a certainty apodictically found in the cogito me cogitare—becomes the unshakeable ground of philosophy itself.⁵

The theologian Catherine Pickstock writes that Descartes’s “departure from the pre-Scotist notion of being as something with unknowable and unanalyzable depth, inaugurates the ‘object’ as a phenomenon.”⁶ In this reduction of the thickness of experience to the pure surface of a geometrical conception of the world, because it must locate within that world the reality of a human perceiver and their subjective experience, a reality that is

⁴. Jay, Downcast Eyes, 70.
⁵. Gasché, The Tain of the Mirror, 17.
⁶. Pickstock, After Writing, 63.
fundamentally inimical to geometrical description, “there arises [. . .] an epistemological circuit whereby knowledge is based entirely on objects, whose ‘being’ does not exceed the extent to which they are known. Representation is now prior to ontology.”

For Descartes, this geometrization of external nature is established as an implication of the discovery of and progress in “the inventions which serve to augment” the power of sight, which are “among the most useful that there can be.” The discovery that light could be manipulated by lenses, that this could aid sight and correct it in its deficiencies, and that these lenses were discovered to be amenable to geometrical description and governed by geometrical laws made it seem clear that the operations of light are reducible to mathematics. Descartes makes an analogy through another form of a perception, with a blind man holding a stick. And though this analogy could possibly have been used to re-install vision in the circuit of the body and of action, to build a sense of “visual palpation,” the opposite was in fact the case. In fact, the man with the stick, the body, the eye, and the whole of nature (which thus required to have all psychic reality excised from it) were in this moment reduced to geometry. This finally confirmed Galileo’s claim that “this grand book the universe . . . is written in the language of mathematics, and its characters are triangles, circles, and other geometric figures without which it is humanly impossible to understand a single word of it; without these, one wanders about in a dark labyrinth,” and received mutual confirmation from it. As we see in the epigraph at the head of this chapter, Merleau-Ponty assumed the same conception of nature at the beginning of his first major work, *The Structure of Behaviour*. Nature is understood as an extended multiplicity of events, *partes extra partes*, in the phrase that Merleau-Ponty later came to use. The big question of Merleau-Ponty’s philosophy, then—that of the relations of consciousness and nature—is determined in terms of a pre-existing understanding of nature as essentially geometrical. This thought of nature, of course, though it gained dominance in modern philosophy, was not really new even with Galileo; as David Abram notices, it goes back at least as far as Euclid.

This Euclidean geometry, though, was soon to be called into question by Merleau-Ponty, in particular as he came under the influence of the thought of Husserl and took seriously Husserl’s conception of the crisis of

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7. Ibid., 63.
9. Ibid., 66–68.
the sciences. For Husserl, particularly in his text *On the Origin of Geometry* (to which we will return), the Galilean revolution, which began the reduction of nature to geometrical space and its simple contents, had forgotten that geometry was grounded in an ideal abstraction from nature, produced by the human mind, and came to be held up as what was true in itself. As Albert Rabil (a commentator on Merleau-Ponty’s thought) puts it,

> Galileo completed this revolutionary change by mathematizing all of nature, relegating the *Lebenswelt* so completely to the status of subjective appearance that the relation of knowledge of nature understood mathematically to men who live in the *Lebenswelt* became a problem. In short, the world was so objectified that subjectivity was completely lost. Galileo set the stage for the attempt, first made by Spinoza, to construct an ontology on the basis of geometry.  

Descartes simply carried this analysis to its logical next step by realizing the necessary separation of the psychical and the physical, because the construction of mathematical nature depends on an abstraction from the lived consciousness of things that are performed inside consciousness, and even when the abstraction of geometry is forgotten, there must be some geometer before whose mind the geometrical world is held. For Rabil, “Descartes’ *epoché* was not radical enough: he suspended the physical world but not the psychical soul. The result was that the soul was placed in the body as a reality distinct from it, but just as abstract.” This dualism failed, as it inevitably must, to bridge the infinite chasm between the two realities, and philosophy turned to the strategy of eliminating one of the two by reducing it to the other; this lead to the empiricism and intellectualism which Merleau-Ponty opposes from the first. The dominance of scientific naturalism, which, for Husserl, occasioned the recognition of a crisis in science and in philosophy, had led to what one commentator calls “a nihilistic conception of reason,” unable to approach questions of value, and, we would add, unable to think questions of situation, of freedom, and of relation: this is because the mathematization of nature, by its insistence that one point in space is homogeneous with but absolutely external to another, thinks that one point of observation is identical to another, that the observer always looks on dispassionately from an absolute distance, unable to form a notion of the mind among things because it is always governed by the contradictions of thinking of geometrical things as held in the mind as well

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13. Ibid.
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as existing in the pure space of physics, outside of every inside, and holding this together with the two realities considered as parallel but separate.

Exterior nature is then reduced, according to Descartes, to extension. Extension possesses two characteristics: it is indefinitely visible, and to the extent that we can speak of points of extension, we must consider them as non-substitutable for one another; that is, each has its own locality. Each part is nothing other than its alterity in relation to the others. Hence, the result is that each part is a plenitude of being. In effect, each point being nothing other than its alterity, extension is the same in all of its points, with neither heavens nor reliefs. Extension is everywhere equally full, because it is equally empty. It is only what it is. That is why the exterior world will be wholly actual: there is no place for a difference between actual beings and possible beings, nor for a reshaping of the past or an anticipation of the future. There is neither more nor less in its simultaneous parts, any more than in its unfolding across time. By being placed in the point of view, we understand that conservation is implied in creation. The laws according to which the World is conserved are inscribed in its structure: as soon as it is created, extension is necessary.15

This Cartesian conception of nature as extension not only reinforces a visual understanding of nature, but also develops into a geometrical understanding of vision. This extensive, geometrical understanding tends towards a conception of sight as passive and surveying, precisely because it does not know how the mind is installed in the world; it has made of this question an insoluble problem by defining nature in terms that already exclude the mind. Despite Descartes’s insistence on the intimate connection of mind and world,16 the subject, in the Cartesian conception of vision, always ends up looking on from a distance.

The Dominance of Linear Perspective

The mathematized conception of nature fed back into and reinforced the particular kind of visual understanding of nature that had brought it to birth, making the human being’s place in the world paradigmatically that


16. “Nature also teaches me, by these sensations of pain, hunger, thirst and so on, that I am not merely present in my body as a sailor is present in his ship, but that I am very closely joined and, as it were, intermingled with it, so that I and the body form a unit.” Descartes, Meditations, 56 (Meditation 6, 81).
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of a visual perceiver. We can see this happening quite clearly in Descartes’s *Optics*, which (as the very word “optics” suggests) explains vision in terms of a set of geometrical operations on light, that are ultimately “perceived” by an eye that is modeled on the camera. As Hwa Yol Jung has it, “This reductive abstraction is a Cartesian trap in which everything is streamlined to edify the epistemological Panopticon of the *cogito* which, by being mesmerized by the eye, is turned into a scopic regime and ocularcentric machine.”17 The Cartesian “scopic regime” has roots that go beyond Galileo’s mathematization of nature, though; the dominance of linear perspective had begun in the Middle Ages. Suzannah Biernoff, in her work *Sight and Embodiment in the Middle Ages*, notes that

It would not be an exaggeration to say that geometrical “perspective”—from *perspicere*, to survey or scrutinise, to investigate thoroughly, to “see through”—became the metadiscourse of the later Middle Ages. As David Lindberg observes, because “optics could reveal the essential nature of material reality, of cognition, and indeed of God himself, its pursuit became not only legitimate, but obligatory.” More than just an *object* of study, *perspectiva* was a way of seeing—and knowing—with certainty (*perspicue* means “with clarity of perception”).18

This optics, crucially, was not an attempt to understand sight in its relation to bodies as they move around the world, to take seriously the importance of the location of the viewer in the formulation of perspective. Rather, it pretended to understand the nature not only of material reality but of God; that is to say, that perspective gives us an ideal of knowledge in which everything is in its place, viewed by a neutral and absolute observer. As Biernoff tells us, for observers such as Umberto Eco the development of the scopic regime was overwhelmingly positive; it is a move away from a fundamentally neurotic conception of the world. For Eco, what is missing in the pre-Renaissance understanding “was any conception, however slight, that nature had a structure of itself and was intelligible in itself.”19 Perspectivism constituted a move away from a symbolism that was the rejection of concrete reality, and of the attempt to understand nature in its own terms, preferring to understand it in terms of “a supernatural world of order and

unity.” 20 This claim is in the last instance a historical one that is not of primary concern here. But it seems problematic, in that the use of the idea of “the supernatural” is anachronistic and perhaps already begs the question: by excluding the dimensions of depth and meaning from a picture of nature, Eco relegates them to the “supernatural.” But before the advent of a mathematized ontology, which called “nature” only that which could be understood on a geometrical model, there was no “supernatural” in this sense: there were hidden and poorly-understood aspects of reality, whose connections to the observed world we cannot fathom, as there still are. The notion of the supernatural that Eco rejects depends on a geometrical conception of nature, and so is unlikely to make sense of the medieval understanding.

My work here will be to present a case against Eco’s claim. I will not expend great energy in an attempt to establish that a geometrical-perspectival account of nature is incomplete, although it should become obvious as we progress that such is the case. Rather, I will focus our attention on establishing that a different, non-geometrical account of nature is more plausible. I have nothing at stake in defending the worldview of the Middle Ages; but this worldview may to some degree agree with the ontology I will develop as an account of nature. Suzannah Biernoff seems to think so, claiming that

Of modern theorists, Maurice Merleau-Ponty’s insistence on the mind’s incarnation (in a generalized “flesh” that exceeds individual bodies), and his metaphor of perceptual intertwining perhaps brings us closest to the reciprocal, corporeal flux of medieval vision. 21

And this, for Merleau-Ponty, does not mean a return to the obfuscatory “theology” that renders the medieval thought of nature inaccessible to most.

We could believe that the universe of facticity appeared at the moment theology was excluded from science. Yet this is not at all the case. There are theological perspectives that include facticity, and there are non-theological thought [sic] that do not have the feeling for it: “I do not need the hypothesis of God to explain the universe,” Laplace will say, but this is in no way decisive. The very concept of Nature, such as it is often allowed by scientists, belongs to a conception that is entirely theological in its infrastructure. 22

21. Ibid., 5.
Indeed, in these 1956–57 lectures on nature, Merleau-Ponty makes the striking claim, of Laplace’s idea of nature (and in particular his causalism) that “at bottom, this conception is a theological affirmation, the affirmation of a view of totality capable of subtending all evolution of the world.”  

This is Laplace who, in his oft-cited reply to Napoleon’s question about what place God held in his system, claimed “I have no need of that hypothesis.” Laplace proposed a thoroughgoing causalism, such that if one knew the position and motion of every atom at a given point in time, one would know the whole history and future of the world. But this conception is essentially the ultimate formulation of a certain kind of dogma, and it is not a dogma that is able to stand any longer. “The determinist conception of intraworldy necessity is synonymous with Cartesian ontology, condemned by modern science.”

Science and the Observer

For Merleau-Ponty,

To suppose Nature as being one sole truth is to posit a spectator for which this unique truth exists. Evidently, for Laplace, it is a matter of the mind of the scientist. But in making this argument, he defines thereby the ideal of knowing more than the mind of the knower. In fact, by positing such a natural being, such a thought posits a nature as kosmotheoros.  

The separation of the lived world from an idealized, mathematized nature transforms the scope of knowledge. Where knowledge had been based on what could be observed of the in-principle finite world in which we live, as knowledge became assimilated to mathematics it became possible to think of “grand theories” whose applicability is inexhaustible; everything became subsumed to the universal knowledge of geometry, and rather than knowledge of things being predicated on what is, being became predicated on what could be known: possibility came to be understood not as determined in terms of the limits of the world in which we live, but as logical possibility, as conceivability and calculability, and reinforced a promethean science to which it was linked. For Carolyn Merchant,

The Baconian–Cartesian–Newtonian project is premised on the power of technology to subdue and dominate nature, on

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23. Ibid., 89.
24. Ibid.
the certainty of mathematical law, and on the unification of natural laws into a single framework of explanation. Just as the alchemists had tried to speed up nature's labour through human intervention in the transformation of base metals into gold, so science and technology as the way to control nature and hence recover the right to the garden given to the first parents. “Man by the fall, fell at the same time from his state of innocency and from his dominion over creation. Both of these losses can in this life be in some part repaired; the former by religion and faith; the latter by arts and science.” Humans, he asserted, could “recover that right over nature which belongs to it by divine bequest,” and should endeavour “to establish and extend the power and dominion of the human race itself over the [entire] universe.”

There is no doubt that a mathematized conception of nature enabled great progress to be made in the sciences. Taking measurable extension as basic to the real made solving the problems of measurable extension possible in a new way: so it is that Galileo was able, by abstracting himself from his earthly position, to show that earth is revolving, in orbit around the sun, and orbited by its moon, and so on for the other known planets. The importance of this discovery and the scientific development in which it plays its part is not to be underestimated. But the success of this way of looking at the world has led to an unhinged commitment to it that can get in the way of human engagement with the world. Max Picard complains that

in science today there is no real meeting between man and the object of his investigation. […] Formerly the encounter between man and the object was an event: it was like a dialogue between man and the object under investigation. The object was given into man's care and keeping, and through the personal meeting with man the object became more and man became more because through the meeting he had helped the object to become more than it was before the meeting.

This encounter, which Picard sees as desirable, in fact gets in the way of modern science since it undermines the division between neutral, mathematizable nature and the meaningfulness of human life. Fundamentally, it undermines the Cartesian distinction. As we will discuss later, Einsteinian relativity tried to think the relationship between the observer and the observed, and of course modern physics depends on thinking this relation. But, as Merleau-Ponty claims, Einstein does not go the whole way, he does

not yet reinstall the thinker as a body in the lived world; even after Einstein, science still tends to think of the world as present to an absolute observer who is outside it.

In Husserl’s notion of the “Crisis of the European Sciences,” the crisis is essentially this: that we are no longer able to think our situation, our situatedness amongst the things. Husserl’s original project was that of seeking a rigorous, scientific grounding for philosophy, and his understanding of this project developed in such a way that he no longer understood the extant sciences to be a sufficient model for philosophy; for they themselves were not rigorously grounded in that phenomenal experience of our relation to the world. Whilst Merleau-Ponty was sympathetic to judgments against Descartes’s philosophy, and especially those Husserl makes in the Crisis:

The complexity of his position would be underestimated if he were to be classified as unequivocally critical of Descartes or as sharing Husserl’s attachment to a specifically European destiny. [. . .] It is the Cartesian legacy that is primarily blamed here for having become a straight jacket that closed off Descartes’s originally more open questioning. Descartes himself is credited with being a more complex and ambiguous thinker who was torn between radical doubt and edifying certainty.28

This whole notion of nature as pure externality excludes from itself notions that do not fit its requirements for clear and distinct perception and measurability. So, as we will see, mind must be totally abstracted from nature, and the connection between the two becomes the philosophical problem. Further, God, as Absolute Mind or as incarnate transcendence, must be excluded from the workings of the world (though a God may be postulated as its original source) except where no better explanation can be found; that is, God is pushed into the “gaps” in human knowledge; God becomes the best available hypothesis for the explanation of certain phenomena. God is also the only solution to the epistemological problem, the last and only bulwark against skepticism; in this role God really must be held apart from humanity in a kind of dogmatic deism. If this God were to surprise us, to step out of the determinations that epistemology lays down for him, a chaos of knowledge and all manner of trouble would result.

This is what Pickstock calls “ontology prised away from theology.”29 But by “theology” Pickstock means here something like “Christian Orthodoxy,” and it will be crucial to understand that, though Pickstock is right that there are very deep ontological implications of the rejection of medieval theology,

29. Pickstock, After Writing, 64.
The new situation does not leave ontology devoid of theology. It may, as we have suggested, derive its theology from its ontology rather than starting with theology, just as Descartes’s philosophy requires a certain kind of God, to play a role that only a god can fill, that of guaranteeing his epistemology. The reality is likely that neither one nor the other is prior, but that this ontological change comes hand in hand with a theological development. What is “prised away” is the robust conception that the Middle Ages had of human beings’ rich, sensual entwining in a world that exceeds them. The discovery of a geometrical conception of the world, which we have suggested comes partly through the discovery of optical technology, forces a question on us: If nature is essentially mathematical, am I? If nature works like a mechanism, am I also fundamentally mechanical? The medieval conception of the sensual imbrication of self, body, and world was, at least in part, linked to a theology that took seriously the doctrine of incarnation and the concept of incarnation. For Merleau-Ponty

Descartes comes to conceive this type of extension by a method of purification, which is a step toward an essence. He undoes the unreflected communion with the World by striving to discern “objective reality” and to reduce it to what it can signify when we think it clearly and distinctly.30

Science (and indeed the whole of humanity) is now faced with pressing questions about the effects of human behavior on our ecosystem. The repercussions of those effects on forms of life, including our own, make the problem of the relationship between the observer and the observed world in science more urgent than ever. The objectivist conception of nature is not serving us well, and there is sudden shift in emphasis to an arena in which our science finds itself unable to maintain a neutral distance from its object, since its object (the climate, how it is changing, and how such changes affect life on earth) determines the future of humanity, and not only that, but also one's own future and that of one's children. For the environmental philosopher Ted Toadvine, “scientific naturalism is an insufficient basis for thinking the human relation with nature, as it relies on an ontology of positive beings that exist partes extra partes,” and moves towards systems theory do not do away with that assumption. “The naturalistic tendencies of ‘environmental’ thought are therefore metaphysical in Heidegger's sense, adopting a standpoint outside the phusis they purport to describe, and treating nature, the human subject, and their relations in terms of presence and availability—ultimately in terms of Bestand, ‘standing reserve.’”31 This

limited understanding of environmental thought, which rests on the flattened, mathematical ontology that finds concrete formulation in Descartes’s philosophy, “reveals the need for a richer, multifaceted philosophical investigation of nature, one that includes its ontological, epistemological, aesthetic, and theological dimensions, and that also appreciates the intertwining of the history of philosophical reflection on nature with the concept of nature itself.”32

The limitations of the old, problematic conception of nature are beginning to be addressed by Husserl in the Crisis, but as the quote at the beginning of this section suggests, Merleau-Ponty needs more than the extant phenomenology of his time to overcome it. As David Wood sees, “Phenomenology was born out of resistance to the threat of naturalism.” But to be able to think nature anew, “it must either rescue nature itself from naturalism, or work out a new relationship to what it had perceived as the danger of naturalism. Or both.”33

For this investigation, the method of phenomenology alone will not suffice, and it is for this reason that Merleau-Ponty, as his thought progresses towards its final, ontological mode, draws on the thought of early twentieth-century intuitionist philosopher Henri Bergson, and his close contemporary, the process philosopher Alfred North Whitehead, in particular. Phenomenology’s method of epoché, of reduction, and its commitment to intentionality are crucial, but the study of phenomena demands an understanding of its (bodily) situation, and it is here that Merleau-Ponty is influenced by Bergson’s method of intuition. Bergson contrasts the analytic method of science to the intuitive method of what he calls metaphysics. In An Introduction to Metaphysics, he contrasts the absolute with the infinite, an analytical concept with which it has become confused. For him,

An absolute could only be given in an intuition, whilst everything else falls within the province of analysis. By intuition is meant the kind of intellectual sympathy by which one places oneself within an object in order to coincide with what is unique in it and consequently inexpressible. Analysis, on the contrary, is the operation which reduces the object to elements already known, that is, to elements common both to it and other objects.34

This intuitive method thus takes seriously the notion that there is more to be understood than the unfolding of some pre-established way of things in time, whether according to mechanistic law or to a finalistic

32. Ibid., 6.
33. Wood, “What is Eco-Phenomenology?,” 211.
pre-established harmony. As Thomas Goudge puts it, “if things are merely realizing a program previously arranged, no creativity and therefore no genuine change are occurring. In that case, ‘time is useless’.”35

The Exclusion of Mind from Nature

The geometrical-perspectival conception of nature, we have said, made possible modern science in all its success. It now grounds the attempts of some brain science to identify the physical bases of consciousness, not solely as that which makes consciousness possible, but as that to which consciousness can, finally, be reduced. If the mind just is the brain then thoughts just are physical events, and the Cartesian enigma, the problem of how mental substance can interact with physical substance, can be dissolved. Unfortunately it is not clear that this will be possible; not because it is too difficult, but because it would seem that there is more to thought than physical events, even if it can be explained entirely in terms of them.

To describe thoughts in terms of electro-chemical interactions will be to miss what is important about them, i.e., to fail to really describe thoughts. To explain to someone how their behavior is absolutely mechanistically determined, or probabilistically determined, in virtue of its being part of a very complex determinate physical mechanism or of some kind of quantum system, will not do away with the necessity of their choosing. Whatever consciousness looks like from the “outside,” it will still have an inside that cannot be captured in the same way. In an essay on Merleau-Ponty’s relationship to the thought of Gilbert Ryle, Gabrielle Bennet Jackson writes,

Gilbert Ryle is credited with identifying and opposing “the Dogma of the Ghost in the Machine.” But Ryle was not just interested in exorcising the Ghost. He was also occupied in dismantling the Machine. [. . .] Ryle simply was not interested in defending the claim that all statements about the mind are translateable into statements about mechanical bodily behavior. Indeed, he rejected this claim outright. “If my argument is successful,” he wrote, “the hallowed contrast between Mind and Matter will be dissipated, but dissipated not by either of the equally hallowed absorptions of Mind by Matter or of Matter by Mind, but in quite a different way.”36

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This is in part due to the fact that thought deals with structured patterns of part and whole that cannot be adequately accounted for by a three-dimensional geometry. Merleau-Ponty takes up this idea in his early work, drawing on the thought of the gestalt psychologists: As Toadvine has it, “the position established in The Structure of Behaviour is foundational because it aims to reconcile mind and nature” and so to move from the purely transcendental Husserlian philosophy to a philosophy that is reinstated in the body and the lived world “by starting from the holistic and meaningful configurations already encountered in the perceptual world.” Merleau-Ponty’s notion of “structure” is the necessary ground for the possibility of “behavior,” which cannot be determined in any simple way, but must in some sense organize itself. “Structure characterizes the natural world as a self-organizing system of ‘gestalts’—embodied and meaningful relational configurations or structures. Physical matter, organic life, and conscious minds are increasingly complex strata of such gestalts.”37 This helps to explain the necessity, for Merleau-Ponty, of thinking the perceived world not as distinguished from the world as it is but as grounding any idea we might have of the world as it is: “the function, ‘figure and ground,’ has a meaning only in the perceived world: it is there that we learn what it is to be a figure and what it is to be a ground. The perceived would be explicable by the perceived itself, and not by psychological processes.” Reducing perception to atomic physical sensations will fail to get to grips with perception as a structured phenomenon at all.

On the basis of a word as a physical phenomenon, as an ensemble of vibrations in the air, no physiological phenomenon capable of serving as a substrate for the signification of the word could be described in the brain; for we have seen that, in audition and also in speaking, a word as an ensemble of motor or afferent excitations presupposes a word as a melodic structure and this latter presupposes a sentence as a unity of signification.38

The idea of a melody is often used to explain this gestalt notion. As the ecological philosopher Arne Naess puts it, “Whatever the part of the melody that is heard, the particular character of the whole influences the experience of the part.” A melody is not made up of parts, just as a perception is not made up of atomic sensations. “A ‘part’ of a gestalt is more than a part. That is, if we listen to a part of an unknown melody the experience is different from listening to that part when the melody is known.”39

The melody example is helpful insofar as it introduces the dimension of time, in the sense that Bergson’s thought demanded: time as felt *durée* rather than as space stretched out along a line. Euclid’s geometry, of course, was not concerned to deal with time but only with space. Galileo, however, in plotting the paths of the planets around the sun had to conceive of a time that was absolute and linear, like a fourth dimension of Euclidean geometry. No longer was this notion of time tied to the time of the earth as structured by years, seasons, day and night, but rather was stretched out as an “empty container,” like Euclid’s space, in the unstructured time of the sun, which relativizes the structured times of the motions of the planets. This notion of time, and of the universe working as a great machine or a celestial clock, occasions the development of geometrism into mechanism.

As we moved from a picture of the world constructed and operating according to the unchanging laws of a God or gods to one based on the ability of humans to construct self-regulating systems in the form of machines, the “geometric” view of the physical world as a pure for-itself, divided from an in-itself that is totally alien to nature, develops into the “mechanistic” view, which seeks to explain the apparent appearance of the for-itself (as subjectivity, desire, freedom, intentionality, and purpose) in terms of the in-itself: what looks like something alien to the “natural world” of particles in motion is in fact just a very complicated machine that is ultimately reducible to them. In this way I understand mechanism as a development of geometrism that presents fundamentally the same problems (though they may be superficially different). David Abram, a Merleau-Pontyan environmental philosopher, argues that it was Descartes who firmly established in modern thought the notion that material reality could be spoken of in strictly mechanical terms, building on Galileo’s abstraction of physicality from all subjective experience.  

Spinoza, on the contrary, does not recognize this opposition between real extension and extension in thought. The relation between the two terms is a wholly different relation; an intrinsic relation, a correlation between the idea and its *ideatum* (*idéat*).  

The idea of intelligible space and the idea of perceived space are separated only by a difference of more or less finite ideation. Likewise, mechanism is also not found in Spinoza: mathematics envelops all. Physical actions are no longer reduced to the transports of movement, but rather to intelligible relations. The possible and the actual are equivalent.\textsuperscript{42}

The mechanical notion of nature, it seems clear, lies behind that empiricist realism, which Merleau-Ponty rejected along with a rationalist intellectualism which would seem to derive from the mathematized notion of nature that paved the way for mechanism. Thus, though their philosophical out-workings might be different, they stem from the same root, and, as we saw in the first chapter, they share the same fundamental problems.

In \textit{The Structure of Behaviour}, animality constitutes for Merleau-Ponty a level of being that exceeds the purely physical. This is not to say that it is non-physical; it is closer to Aristotle's understanding of the animal as possessor of an “animal soul,” which is not a substance but its “principle of life.” An animal, unlike the non-living, displays behavior properly speaking. To say that the animal behaves is to say that what it does is not to be understood in terms of mechanical cause and effect but rather in \textit{vital} terms; what it does is not simply obey the laws of physics but rather obey some kind of internal law. In his first major work, Merleau-Ponty gives an extended analysis of reflex behaviors in humans and animals, showing how reflexes that seem to be explained by a theory of pre-established correlations, on a mechanistic model, between stimulus and response,\textsuperscript{43} in fact respond to and are conditioned by global elements as well as by immediate stimuli. In this way experimental results problematize the mechanistic understanding of reflexes.

Merleau-Ponty uses gestalt theory to develop an understanding of reflex behaviors as a basic case of behavior properly speaking, which responds to its environment, its milieu, in a manner that is not mechanistic but that takes account of the animal’s total situation, relating this to the notion of \textit{Umwelt} in the proto-ecologist Jacob von Uexküll. Merleau-Ponty gives many examples, just one is that of a person whose reflex response to a jarring mis-step varies according to whether he is walking uphill or downhill: If I mis-step, for example I catch my foot on root, while walking uphill, “the flexor muscles of the foot are suddenly relaxed and the organism reacts by accentuating this relaxation, which will liberate my foot.” But the reflex response is different when I am walking down a hill. “If [. . . ] I miss my step

\textsuperscript{42} Ibid., 15–16.

\textsuperscript{43} Merleau-Ponty, \textit{The Structure of Behaviour}, 8.
while coming down a mountain and my heel strikes the ground sharply before the sole of the foot, the flexor muscles are once again relaxed suddenly, but the organism reacts instantly by a contraction.”

The variation in response is conditioned by what psychologist Kurt Goldstein calls “the holistic utilization of stimuli,” and the response is conditioned by the meaning of the situation to the organism. Merleau-Ponty deals with manifold examples, many of them quite complex, in the first two sections of Structure, on “Reflex Behaviour” and “Higher Forms of Behaviour,” which demonstrate animal behavior of this kind: what Merleau-Ponty calls behavior is precisely this kind of action that responds to a total situation understood as a structured relation between the animal and his environment. In his late lectures on Nature, Merleau-Ponty’s thought is still determined by this structured behavior; there he writes, “The body belongs to a dynamic of behaviour. Behaviour is sunk into corporeity. The organism does not exist as a thing endowed with absolute properties, as fragments of Cartesian space.” This understanding of behavior must totally escape the geometrical conception of nature.

Merleau-Ponty’s use of the word “behavior” is a response to the behaviorism that held sway amongst many psychologists in his time, and continues to do so. According to Albert Rabil, “If the adequacy of a scientific theory depends on its ability to account for the phenomena, then behaviorism fails,” because, as Merleau-Ponty has shown, it cannot account for the changing reactions according to global, structural conditions at the level of the organism and because the notion of “stimulus” itself cannot be adequately defined without reference to the organism’s structured relation to its Umwelt. In the philosopher Mary Midgley’s striking phrase, the division between behaviorism and introspectionism in psychology has reduced that field “to the state in which the study of teapots would be if one half of the people engaged in it were sworn as a matter of professional pride never to mention the inside of a teapot, while the other half were just as unwilling ever to mention the outside.”

And as Rabil is keen to make clear, this dispute is not simply a methodological one. It is a philosophical matter, with roots that go back at least as

44. Ibid., 45.
47. Rabil, Merleau-Ponty, 6.
far as Plato, that seeks to isolate a simply-defined domain of the “real” that escapes the complexity and ambiguity of our primary intuitions.

The problem is to give a philosophical explanation of the structure of behavior which will not be subject to the criticisms that can be brought against idealism and materialism. What is necessary for this task is an “enlarged reason” which can deal with the lived world without reducing it to mind or matter, without bifurcating it, and without declaring it unintelligible.49

Merleau-Ponty uses the notion of Umwelt (deriving from von Uexküll, via Husserl) as the correlate of the notion of behavior. His project in The Structure of Behaviour involves showing that reflex actions are not purely mechanistically determined. They can no longer be thought to belong purely to the order of the in-itself. But neither are they of the order of the for-itself: they are not the result of acts of will nor of freedom on any normal understanding of that word; neither are they compelled or determined. They belong to the order of the living being acting in response to its world; not its bloße Sachen physical surroundings but its Umwelt, its environment.

So behavior is not a result of consciousness or of thinking, of the cognitive order, but of the vital order of animality. This order will ground the mental and bind it to the physical order, but behavior, as contemporary Merleau-Pontyan philosophers William Hamrick and Jan van der Veken observe, does not depend on consciousness.50

**Gestalt Ontology and Human Exceptionalism**

Arne Naess, in his short article “Reflections on Gestalt Ontology,” notes that “thinking in terms of gestalt ontology implies rejection of at least one central part of Gestalt Psychology, but certainly not all.”51 He notes that Husserl almost entirely rejected gestalt psychology, and certainly Merleau-Ponty criticizes its adherents for, in the words of Forrest Williams, “failing to live up to their own findings [. . .] he in effect accused them [in The Structure of Behaviour] of running with the hares of gestalt theory while hunting with the hounds of Cartesian dualism.”52 That is to say, they were willing to investigate the operations of the mind in gestalt terms, but not to apply these

52. Williams, “Appendix 1: Merleau-Ponty’s Early Project Concerning Perception,” 147.
terms to their understanding of the “real world”: they confine structure to the mind and expel it from nature.

The “gestalt ontology” proposed in Structure anticipates later systems-theoretical descriptions of nature by treating physical, vital, and mental structures as nested sets of holistic relations. Yet gestalts in Merleau-Ponty’s sense are irreducible to systems in the realist’s sense of this term, no matter how holistic or relational, because the gestalts of which reality is composed are essentially perceptual. Nature at its most fundamental level is meaningful and experiential; its structures manifest the kind of unity and coherence that characterizes perceptual wholes.\footnote{Toadvine, Merleau-Ponty’s Philosophy of Nature, 21.}

This claim, made by Ted Toadvine, might initially seem confusing: on the one hand, gestalts are not systems in the realist’s sense, they are structures of perception. Yet nature itself is fundamentally characterized by these structures. We would normally think that perception belongs in the mind, and not in the extended reality of nature. But this helps us to see that we are still too Cartesian. For Merleau-Ponty, the perceived world is basic, the fundament from which extended nature must be abstracted. And the perceived world is always already structured. Toadvine goes on,

According to Merleau-Ponty’s analysis, vital form is more than simply a complex physical system because it introduces original and irreducible properties inexplicable at the physical level. […] Consequently, the organism is oriented toward a “milieu” or “environment” distinct from the world described by physics.\footnote{Ibid., 82.}

Toadvine goes on to spell out that just as the vital order cannot be reduced to the physical order, so for Merleau-Ponty in The Structure of Behaviour, the human order cannot be reduced to the vital.

On the one hand, the description of the vital level allows us to reconceive the emergence of human consciousness from a level of perceptual involvement within which it remains oriented toward the physiognomies and sensible configurations of the world, rather than the “true” objects of the scientific realist. But the specifically human dialectic transcends this “lived consciousness.”\footnote{Ibid., 82–83.}
In the previous chapter we proposed that we might consider the human being as “the hungry animal.” Do we need to look for the difference between human beings and other animals, and other forms of life? In part, as Teilhard de Chardin suggests, we do need to understand humanity in its difference from other animals, because we are human. And on the face of things, humans seem to play a different role on the life of the planet than do most other animals.

But does Merleau-Ponty’s distinction between the “vital” and the “human” in *The Structure of Behaviour* betray his anti-dualistic motivation and constitute a problematic exceptionalism? It is a good start, at least, to acknowledge that humans are animals and that their humanity is not divorced from their animality, as Merleau-Ponty does. And we may think that his use of the term “human” to name the highest order of being is incidental; it is an order that we encounter in other human beings, and there is nothing in principle that would prevent us from acknowledging it in other beings if we were to find it in them. Further, as Merleau-Ponty’s philosophy develops he ceases to use the term “human” to describe the order of thought, as his complex reflections on animality in the lectures on nature show. Nevertheless, there remains a structural difference between some human behavior and common animal behavior, of which we may sensibly try to give an account. Midgley suggests that “instead of a single distinguishing mark for man, we look rather for a knot of general structural properties.”56 Indeed, to think about nature is to demand that we be able to give an account of our difference from it. As the contemporary philosopher Kate Soper puts it

> all ecological injunctions—whether to sacrifice our own interests to those of nature, or to preserve nature in the interests of our future well being, to keep our hands off it, or to harness it in sustainable ways, to appreciate the threat we pose to nature or to recognize our kinship with it—are clearly rooted in the idea of human distinctiveness. For insofar as the appeal is to humanity to alter its ways, it presupposes our possession of capacities by which we are singled out from other living creatures and inorganic matter.57

For animals, their engagement with the world is determined by a relatively fixed orientation to their environment that is for the most part given by the demands of their species. These demands may be labile at an evolutionary level; indeed, they must be so if one species is to emerge from another. But this lability belongs to the animal in its lived dialectic with its

Umwelt and to the interaction of animal and world in a way that is very different from human lability. Animals are not, for the most part, labile at the lived level. This need not be a matter of absolutes, and indeed later, as the implications of Merleau-Ponty’s thought on this matter are being worked out more fully in the notes for the lectures on Nature, Merleau-Ponty will take the view that animality does attain this lived lability, precisely where we see what is properly human prefigured in animality. He writes of “strange anticipations or caricatures of the human in the animal,” as the human body emerges “as different from the animal, not by the addition of reason, but [...] in the Ineinander with the animal [...] just as higher life appeared as singular points of physical Nature.”58 So “we must say: Animality and human being are given only together, within a whole of Being that would have been visible ahead of time in the first animal had there been someone to read it.”59

On Hamrick and Van der Veken’s understanding, Merleau-Ponty needs, if he is to establish a new ontology, to achieve a “double overcoming,” doing away with the philosophy of consciousness that is still suggested by his earlier thought, and overthrowing “the Galilean-Cartesian concept of Nature that, as he stated in his first nature course, ‘still overhangs contemporary ideas about Nature,’”60 and that we all too often fail to notice in their privileged position, still highly determinative of our thought. Merleau-Ponty addresses both these problems in the terms of his continued development of a new understanding of perception, one that continues to privilege vision but that does so in order to overturn the Cartesian scopic regime. We will turn, in the following chapter, to interrogate and to develop a Merleau-Pontyan understanding of vision, as a route towards this “double overcoming.” This will lay the ground for the positive development of the ontology of flesh, which is brought to expression in the human orientation to the virtual: “humans have the capacity to vary their points of view and adopt an orientation toward the virtual as such, toward the ‘structure of structure’ itself,”61 writes Toadvine, and this orientation to the virtual, which arises from and is prefigured in perception, reorientates life towards a single, “true” world of inter-corporeality, reconfiguring the physical through expression and desire. For Merleau-Ponty, in the notes for his Nature lectures, “the human body is symbolism—not in the superficial sense, i.e., where a representative

59. Ibid., 271.
60. Hamrick and Van der Veken, Nature and Logos, 2. The citation is from Merleau-Ponty, Themes from the Lectures, 67.
term takes the place of another,—but in the fundamental sense of: expressive of another. Perception and movement symbolize. But this symbolism leads us not into a world of thought determined by symbols, not into intertextuality, but into history. My own body in its historicity rejoins nature, and sediments there its operations of expression and desire, to find itself necessarily involved in the world of praxis and of politics, as Merleau-Ponty had already anticipated in 1947:

What accounts for there being a human history is that man is a being who externalizes himself, who needs others and nature to fulfill himself, who individualizes himself by appropriating certain goods and thereby enters into conflict with other men.63