

esis, let us consider how conscious perception may be explained.

To deduce consciousness would be, indeed, a bold undertaking; but it is really not necessary here, because by positing the material world we assume an aggregate of images, and, moreover, because it is impossible to assume anything else. No theory of matter escapes this necessity. Reduce matter to atoms in motion: these atoms, though denuded of physical qualities, are determined only in relation to an eventual vision and an eventual contact, the one without light and the other without materiality. Condense atoms into centers of force, dissolve them into vortices revolving in a continuous fluid: this fluid, these movements, these centers, can themselves be determined only in relation to an impotent touch, an ineffectual impulsion, a colorless light; they are still images. It is true that an image may *be* without *being perceived* – it may be present without being represented – and the distance between these two terms, presence and representation, seems just to measure the interval between matter itself and our conscious perception of matter. But let us examine the point more closely and see in what this difference consists. If there were *more* in the second term than in the first, if, in order to pass from presence to representation, it were necessary to add something, the barrier would indeed be insuperable, and the passage from matter to perception would remain wrapped in impenetrable mystery. It would not be the same if it were possible to pass from the first term to the second by way of diminution, and if the representation of an image were *less* than its presence; for it would then suffice that the images present should be compelled to abandon something of themselves in order that their mere presence should convert them into representations. Now, here is the image which I call a material object; I have the representation of it. How then does it not appear to be in itself that which it is for me? It is because, being bound up with all other images, it is continued in those which follow it,

just as it prolonged those which preceded it. To transform its existence into representation, it would be enough to suppress what follows it, what precedes it, and also all that fills it, and to retain only its external crust, its superficial skin. That which distinguishes it as a *present* image, as an objective reality, from a *represented* image is the necessity which obliges it to act through every one of its points upon all the points of all other images, to transmit the whole of what it receives, to oppose to every action an equal and contrary reaction, to be, in short, merely a road by which pass, in every direction, the modifications propagated throughout the immensity of the universe. I should convert it into representation if I could isolate it, especially if I could isolate its shell. Representation is there, but always virtual – being neutralized, at the very moment when it might become actual, by the obligation to continue itself and to lose itself in something else. To obtain this conversion from the virtual to the actual, it would be necessary, not to throw more light on the object, but, on the contrary, to obscure some of its aspects, to diminish it by the greater part of itself, so that the remainder, instead of being encased in its surroundings as a *thing*, should detach itself from them as a *picture*. Now, if living beings are, within the universe, just “centers of indetermination,” and if the degree of this indetermination is measured by the number and rank of their functions, we can conceive that their mere presence is equivalent to the suppression of all those parts of objects in which their functions find no interest. They allow to pass through them, so to speak, those external influences which are indifferent to them; the others isolated, become “perceptions” by their very isolation. Everything thus happens for us as though we reflected back to surfaces the light which emanates from them, the light which, had it passed on unopposed, would never have been revealed. The images which surround us will appear to turn toward our body the side, emphasized by the light upon it, which interests our body.

They will detach from themselves that which we have arrested on its way, that which we are capable of influencing. Indifferent to each other because of the radical mechanism which binds them together, they present each to the others all their sides at once: which means that they act and react mutually by all their elements, and that none of them perceives or is perceived consciously. Suppose, on the contrary, that they encounter somewhere a certain spontaneity of reaction: their action is so far diminished, and this diminution of their action is just the representation which we have of them. Our representation of things would thus arise from the fact that they are thrown back and reflected by our freedom.

When a ray of light passes from one medium into another, it usually traverses it with a change of direction. But the respective densities of the two media may be such that, for a given angle of incidence, refraction is no longer possible. Then we have total reflection. The luminous point gives rise to a *virtual* image which symbolizes, so to speak, the fact that the luminous rays cannot pursue their way. Perception is just a phenomenon of the same kind. That which is given is the totality of the images of the material world, with the totality of their internal elements. But, if we suppose centers of real, that is to say of spontaneous, activity, the rays which reach it, and which interest that activity, instead of passing through those centers, will appear to be reflected and thus to indicate the outlines of the object which emits them. There is nothing positive here, nothing added to the image, nothing new. The objects merely abandon something of their real action in order to manifest their virtual influence of the living being upon them. Perception therefore resembles those phenomena of reflexion which result from an impeded refraction; it is like an effect of mirage.

This is as much as to say that there is for images merely a difference of degree, and not of kind, between *being* and *being consciously perceived*. The reality of matter consists in the totality of its ele-

ments and of their actions of every kind. Our representation of matter is the measure of our possible action upon bodies: it results from the discarding of what has no interest for our needs, or more generally, for our functions. In one sense we might say that the perception of any unconscious material point whatever, in its instantaneousness, is infinitely greater and more complete than ours, since this point gathers and transmits the influences of all the points of the material universe, whereas our consciousness only attains to certain parts and to certain aspects of those parts. Consciousness – in regard to external perception – lies in just this choice. But there is, in this necessary poverty of our conscious perception, something that is positive, that foretells spirit: it is, in the etymological sense of the word, discernment.

The whole difficulty of the problem that occupies us comes from the fact that we imagine perception to be a kind of photographic view of things, taken from a fixed point by that special apparatus which is called an organ of perception – a photograph which would then be developed in the brain-matter by some unknown chemical and psychical process of elaboration. But is it not obvious that the photograph, if photograph there be, is already taken, already developed in the very heart of things and at all the points of space? No metaphysics, no physics even, can escape this conclusion. Build up the universe with atoms: each of them is subject to the action, variable in quantity and quality according to the distance, exerted on it by all material atoms. Bring in Faraday's centers of force: the lines of force emitted in every direction from every center bring to bear upon each the influences of the whole material world. Call up the Leibnizian monads: each is the mirror of the universe. All philosophers, then, agree on this point. Only if, when we consider any other given place in the universe, we can regard the action of all matter as passing through it without resistance and without loss, and the photograph of the whole as

translucent: here there is wanting behind the plate the black screen on which the image could be shown. Our "zones of indetermination" play in some sort the part of the screen. They add nothing to what is there; they effect merely this: that the real action passes through, the virtual action remains.

This is no hypothesis. We content ourselves with formulating data with which no theory of perception can dispense. For no philosopher can begin the study of external perception without assuming the possibility at least of a material world, that is to say, in the main, the virtual perception of all things. From this merely possible material mass he will then isolate the particular object which I call my body, and, in this body, centers of perception: he will show me the disturbance coming from a certain point in space, propagating itself along the nerves, and reaching the centers. But here I am confronted by a transformation scene from fairyland. The material world, which surrounds the body; the body, which shelters the brain; the brain, in which we distinguish centers; he abruptly dismisses, and, as by a magician's wand, he conjures up, as a thing entirely new the representation of what he began by postulating. This representation he drives out of space, so that it may have nothing in common with the matter from which he started. As for matter itself, he would fain go without it, but cannot, because its phenomena present relatively to each other an order so strict and so indifferent as to the point of origin chosen, that this regularity and this indifference really constitute an independent existence. So he must resign himself to retaining at least the phantasm of matter. But then he manages to deprive it of all the qualities which give it life. In an amorphous space he carves out moving figures; or else (and it comes to nearly the same thing), he imagines relations of magnitude which adjust themselves one to another, mathematical functions which go on evolving and developing their own content: representation, laden with the spoils of