Leibniz to the Electress Sophie¹

Translated by Donald Rutherford

Hanover, 4 November 1696

Madame,

I am infinitely delighted at the approval one of the greatest princesses² gives to some meditations that Your Serene Highness deigned to send her. This is worth more than the judgment of masses of learned men. I published something on this topic in the Journal des savants last year,³ and individuals of great penetration have written to tell me that I might well have spoken the truth. Even the late M. Arnauld, though leader of the party and moreover condemned for Cartesianism, admitted to having been struck by some of my arguments when I exchanged letters with him on these matters. There have been clever Cartesians who have muttered about the fact that I have claimed to restore to beasts the right of having souls, that I go so far as to grant a species of duration to these souls, and that I even show that all bodies contain force and life, so far are they from being only simple extended masses. But I have learned that the success of my other discoveries has deprived some of them of the desire of making objections against me, since one is obliged to admit that even in mathematics, which was the strength of M. Descartes, my method goes far beyond his, a fact that has been recognized by M. le Marquis de l'Hospital in a notable work published recently. Still, I would always be happy to profit from the reflections of intelligent and moderate individuals, of whom there are many in France.

My fundamental meditations turn on two things, namely, on unity and on infinity. Souls are unities and bodies are multitudes, but infinite ones, such that the least speck of dust contains a world of an infinity of creatures. And microscopes have shown even to the eyes more than a million living animals in a drop of water. But the unities, though they are indivisible and without parts, do not fail to represent multitudes, almost as all the lines from the circumference [of a circle] are reunited in the center. It is in this reunion that the wonderful nature of sensation consists; it is also this that makes it that each soul is like a world apart, representing the great world in its own way and according to its point of view, and that consequently each soul, once it has begun to exist, must be as enduring as the world itself, of which it is a perpetual mirror. These mirrors themselves are universal, and each soul represents in a precise way the entire universe, because there

² According to Gerhardt, the reference is to Sophie's niece, Elisabeth Charlotte, Duchess of Orléans.

¹ GP VII 541-44.

³ "Système nouveau de la nature et de la communication des substances, aussi bien que de l'union qu'il y a entre l'ame et le corps" (*Journal des savants*, June-July 1695) (GP IV 471ff).

⁴ Analyse des infiniment petits pour l'intelligence des lignes courbes. Paris, 1696.

is nothing in the world that is not affected by all the rest, though the effect is less noticeable in proportion to the distance. But of all souls, there are none more elevated than those which are capable of understanding eternal truths, and of not only representing this universe in a confused way but also of understanding it and having distinct ideas of the beauty and the greatness of the sovereign substance. This is to be a mirror not only of the universe (as all souls are) but also of what is best in the universe—that is, of God himself, and this is what is reserved for minds or intelligences and which renders them capable of governing other created things in imitation of the creator.

Thus, as every soul faithfully represents the whole universe, and every mind also represents God himself in the universe, it is easy to conclude that minds are something greater than we think. For it is a certain truth that every substance must arrive at all the perfection of which it is capable and which is found already enveloped within it. It is also good to consider that in this sensible life we grow old after having matured, because we move closer to death, which is only a change of theater. However, as the perpetual life of souls is exempt from death, it is also exempt from old age. This is why they move forward and continually mature, like the universe itself of which they are images; for as nothing is outside the universe that could prevent it from doing so, the universe must continually advance and unfold itself.

One could object that this progress is not evident, and that it seems even that there is considerable disorder that makes the universe moves backwards, as it were. But this is only in appearance. We see this from the example of astronomy. The motion of the planets appears a confused thing to us who are on the face of the earth. It seems that the stars wander and that they move irregularly, that they sometimes move forwards and later backwards, and that they even stop from time to time. However, when with Copernicus we place ourselves in the sun, at least with the eyes of the mind, we discover a marvelous order. Thus, not only does everything proceed in order, but our minds, too, must become aware of more and more of it as they progress.

I return to animals, since nothing is lost or is neglected in the universe, not even your ladyship's dogs, which are so jealous of the goodness of their mistress as to be comparable to human beings.

That jealous Cartesian savant who was embarassed by your ladyship's question, whether in his jealousy he was a man or a machine, was not a beast or a machine in abandoning his party, for how could he answer correctly? I hope that there will be a gradual retreat in France from the mechanical sect and from the small notions that are held of the limited wealth of nature, as if it had accorded the privilege of having souls to us alone. And when they are better acquainted with the thoughts I have advanced on the infinite, they will have an entirely different idea of the majesty of the universe than to believe it is only the shop of an artisan, as the author of *On the Plurality of Worlds* believed, in speaking to his marquise. For each machine of nature has an infinity of organs, and what is still more marvelous by this means each animal is safe from all accidents and can never be

⁵ Bernard le Bovier de Fontenelle, *Entretiens sur la pluralité des mondes*, 1686.

destroyed, but only changed and preserved by death, just as a snake sloughs off its old skin; for birth and death are only developments and envelopments, in order to take on new nourishment and to leave it thereafter, after having extracted the quintessence, and above all after having received in oneself all the traces of sensations that one has had, which always remain and never are erased by a complete amnesia; although one may not always have an occasion for remembering them, these ideas never fail to be revived when needed and to be useful in the course of time. Thus, one can demonstrate mathematically that every action, as small as it might be, extends to infinity, both in respect to place and in respect to time, shining, as it were, throughout the universe and being preserved for all eternity. Hence, it is not only souls but also their actions which are preserved always, and indeed the action of each is preserved in every other in the whole universe on account of the concurrence and sympathy of all things, the world being a complete whole in all of its parts, but more distinctly in some than in others, and in this consists the advantage of minds, for which the sovereign intelligence has made all the rest, so that he may be known and loved, while multiplying himself, as it were, in all these living mirrors that represent him.