

Leibniz to the Electress Sophie¹

Translated by Donald Rutherford

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I approve of the opinion of the learned gentleman... but I take another approach in order to establish it, his being wholly Cartesian, in which I have long since found certain problems. Still, I believe he will agree with me that we think not only about what comes from the senses, but also about thinking itself, which does not at all come to us from there. And that among the notions that come to us along with those of material things there are ideas of things which accompany matter without for that reason being corporeal: as for example notions of force, action, change, time, and likewise of one, true, good and a thousand others. And as to the material that enters the brain by the senses, it is not this material itself which enters the soul, but its idea or representation, which is not a body, but an effort or reaction. This can suffice for those who do not like a long discussion, but I will add what follow for those who want to probe the question more deeply.

In order to judge on rational grounds whether the soul is material or immaterial, it is necessary to conceive what the soul is and what matter is. Everyone agrees that *matter* has parts, and consequently it is a *multitude* of many substances, as would be a flock of sheep. But since every multitude presupposes *true unities*, it is obvious that these unities could not be material, otherwise they would still be multitudes and not at all true and pure unities, such as is necessary in order to produce a multitude from them. Thus, the unities are properly separate substances, which are not divisible, nor consequently perishable. For everything that is divisible has parts that can be distinguished in it even before they are separated. However, since it is a question of *unities of substance*, there would have to be force and perception in these same unities, for without those, there would be neither force nor perception in the whole which is formed from them, which can only contain repetitions and relations of what is already in the unities. It is therefore necessary that in bodies that have sensation there be *unique substances*, or unities, which have perception. And it is this simple substance, this unity of substance or this *monad*, which I call *soul*; thus souls, like all other unities of substance are immaterial, indivisible and imperishable, as every destruction of *substantial things* can be only a dissolution. And if these unities once have life, they must be immortal and live always. These unities truly constitute substances and each unity uniquely makes a substance by itself, the rest being only beings by aggregation, and masses or multitudes; or rather, they are accidents, that is, durable attributes or passing modification, which belong to substances.

But among the unities, souls are the highest, and among the souls, minds, which are rational souls, are the highest. Thus, although all the unities are indestructable, they are not all equally elevated, and in an organic body there is only a single dominant and principal unity, which is its soul. This is *the I* in us, which is again well above most other

¹ GP VII 552-5.

souls, because it is a mind and it reasons by means of universal, necessary and eternal truths, which are not all founded on sense, nor on induction from examples, but on the internal and divine natural light of ideas, which constitutes right reason. For when one has learned some truth by experience, the senses or experience can indeed make us assume that it will always be that way in instances that we have not yet experienced; but one will never be assured of the necessity of the matter without calling on the assistance of demonstrative reasoning, founded on the internal light that is independent of sense. This is what few people recognize, even among philosophers, because one is rarely a philosopher and a mathematician at the same time, and the demonstrations already known are only in mathematics.

It is good to give an example. Place the numbers in order:

0 1 2 3 4 5 6 7 8 9 10 etc.

and then their squares:

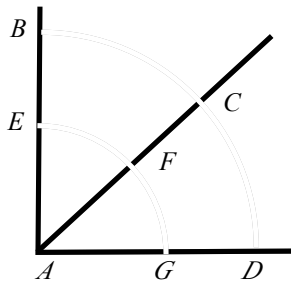
0 1 4 9 16 25 36 49 64 81 100 etc.

and the differences of these squares:

1 3 5 7 9 11 13 15 17 19 etc.

One sees that the differences of the squares of the numbers, placed in order, are the odd numbers also in order. After having tried a long series of numbers and found that this works out, one assumes with reason that it will always go in this way to infinity, but one has not seen in this either the necessity or the cause, which depend on certain demonstrative reasons, taken from the source, or *a priori*. Souls capable of such reasoning are called minds and one can say of them with justice that they are made in the image of God and that there is a society between God and them, in such a way that God is with respect to them not only what an architect is to his building but also what a prince is to his subjects.

As to the objection that has been made against the immateriality of the soul and thought, although it could be resolved already by what I have just said, it will still be useful to elaborate on it a bit more. It is true that the material that comes to us by way of the senses enters into our internal organs, such as the brain and the spirits or subtle fluids that are enclosed in it; but the material could not enter into a true unity which has no holes or doors, otherwise it would not be a unity, but a composite of many things. Therefore, what is in the unity is not the material, but the appearance or representation of the material, which represents what is extended, without itself being extended. It will be asked how this is possible. But aside from the fact that it is necessary that this be so, even if we understand nothing of it, we can still clarify it by means of an example drawn from mathematics, and especially from geometry, by helping ourselves to the comparison of the angles or inclinations of two lines between themselves.



For example, let there be two straight lines AB and AD which form what is called a right angle, BAD , that is, one of 90 degrees or the opening of a quarter of a circle. Now, it is obvious that this angle is not measured only by the large arc BCD , but also by a lesser one EFG , however small it might be, and the opening begins in a word from the point A , which is the center. Thus, even in this center there is found the angle or inclination of the two lines BA and DA , and consequently even in the center, as

completely indivisible as it is, there begins the same opening or same number of degrees as there is in the arcs EFG and BCD , so that one can say that these arcs, however many degrees they are, are represented or expressed in the center by the relation of the inclination to the center, which is in the lines when they leave from it. It is likewise with the half-right angle, which is 45 degrees or an eighth part of a circle; for this opening is also found in the large arc BC and in the smaller one EF , as small as it might be up to the point A , in which begins the inclination of the two lines BA and CA , which at first and from the point A or the center are only half of the inclination of the lines BA and DA . We see, therefore, that just as in the center degrees are represented, so unities of substance, and consequently souls, which are like centers, represent in themselves whatever happens in the multitudes that are given to them, according to the point of view of each unity or soul, without the souls or centers ceasing by that to be indivisible and without extension.

After having established my view, I add for you some reflections on the Cartesian reasoning of your learned gentleman.... I agree that our souls think and that our body has extension. I agree also that when two things have such different attributes that one can perfectly comprehend the one without thinking of the other, then the things themselves are of different natures. But there is room to doubt whether thought can be comprehended without thinking of extension. I agree also that there are some thoughts in which one does not have any images or figures in the mind, and that some of these thoughts are distinct. But I do not agree with all the examples that the Cartesians offer; for the figure of a thousand angles alleged here is no more extended distinctly than the idea of some huge number; it is a surd thought, as in algebra, in which one thinks using symbols in place of things. Thus often, in order to abbreviate, one employs words while thinking without analyzing their meaning, because it is not necessary at the time.

Finally, I do not agree that it is impossible for human reason to conceive in what consists the union of the soul with the body. I believe rather that this problem has been entirely solved now by a system explained elsewhere, for which what has just been said here may also be useful. And this same system confirms and explains better than any other the immortality of the soul.