

they were under the necessity of denying also that bodies could act upon each other.

It was in vain to object to them, the case of bodies which impinge against one another, and the change of their state, which results from it. Obstinately prepossessed in favour of the solidity of their reasoning, they scorned to abandon it: they chose rather to affirm, that every body, from its own nature, produces the change which befalls it, and that the collision has nothing to do with it; that it is a mere illusion which makes us believe the collision to be the cause of it; and they go off in triumph at the sublimity of a philosophy so far beyond the comprehension of the vulgar. You are now in a condition to estimate it according to its real importance.

25th November 1760.

LETTER LXXX.—OF THE NATURE OF SPIRITS.

I FLATTER MYSELF that you are now convinced of the solidity of the reasonings on which I have established the knowledge of bodies, and that of the powers which change the state of them. The whole is founded on experiments the most decisive, and on principles dictated by reason. They involve no absurdity, nor are they contradicted by other principles equally certain. It is not long since any successful progress was made in researches of this kind. Such strange ideas were formerly entertained respecting the nature of bodies, that all kinds of powers were ascribed to them, of which some must necessarily destroy the others.

Certain philosophers have even gone so far as to imagine, that matter itself might be endowed with the faculty of thought. These gentlemen, known by the name of *materialists*, maintain, that our souls

and all spirits in general, are material; or rather, they deny the existence of souls and spirits. But when once we have got into the right road to the knowledge of bodies—the *inertia*, by virtue of which they continue in their state—and *impenetrability*, that quality by which they are subjected to powers capable of changing it—all those phantoms of powers to, which I alluded vanish away, and nothing appears so more glaring absurdity than to affirm that matter is capable of thought. To think, to judge, to reason, to possess mental feeling, to reflect, and will, are qualities incompatible with the nature of bodies; and beings invested with them must be of a different nature. Such are souls and spirits; and He who possesses those qualities in the highest degree is God.

There is, then, an infinite difference between body and spirit. Extension, *inertia*, and impenetrability—qualities which exclude all thought—are the properties of body; but spirit is endowed with the faculty of thinking, of judging, of reasoning, of feeling, of reflecting, of willing, or of determining in favour of one object preferably to another. There is here neither extension, nor *inertia*, nor impenetrability; these material qualities are infinitely remote from spirit.

It is asked, What is a spirit? I acknowledge my ignorance in respect of this; and I reply, That we cannot tell what it is, as we know nothing of the nature of spirit.

But it is not the less certain, that this world contains two kinds of beings; beings *corporeal* or *material*, and beings *immaterial* or *spiritual*, which are of a nature entirely different, as they manifest themselves to us by properties which have no relation to each other. These two species of beings are, nevertheless, most intimately united; and upon their union, principally, depend all the wonders of the world,

which are the delight of intelligent beings, and lead them to glorify their CREATOR.

It is certain, that spirits constitute the principal part of the world, and that bodies are introduced into it merely to serve them. For this reason it is, that the souls of animals are in a union so intimate with their bodies. Not only do the souls perceive all the impressions made upon their bodies; but they have the power of acting upon these bodies, and of producing in them corresponding changes: and thus they exercise an active influence over the rest of the world.

This union of the soul with the body undoubtedly is, and ever will be, the greatest mystery of the divine Omnipotence—a mystery which we shall never be able to unfold. We are perfectly sensible, that the human soul cannot act immediately on all the parts of the body; as soon as a certain nerve is cut, I can no longer close my hand: from which it may be concluded, that the soul has power only over the extremities of the nerves, which all terminate and unite in a portion of the brain, the place of which the most skilful anatomist is unable exactly to assign. To this, then, the power of the soul is restricted. But that of God, being unlimited, extends to the whole universe, and exerts itself by means which far exceed our comprehension.

19th November 1760.

LETTER LXXXI.—OF THE UNION BETWEEN THE
SOUL AND THE BODY.

As spirits and bodies are beings, or substances, of a nature totally different, the world contains, then, two kinds of substances, the one *spiritual*, and the other *corporeal*, or *material*. The strict union which

subsists between them merits a very particular attention.

This union of soul and body, in every animal, is a most wonderful phenomenon. It is reduced to two things—the one, that the soul feels, or perceives, all the changes which befall its body, by means of the senses, which, as you know perfectly well, are five in number, namely, seeing, hearing, smelling, tasting, and touching. By these, then, the soul takes cognizance of every thing that passes, not only in its own body, but out of it. Touching and tasting represent to it those objects only which are in immediate contact with the body; smelling, objects at a small distance; hearing extends to distances much more remote; and sight procures for us the knowledge of the most distant objects.

All this knowledge is acquired only in so far as the objects make an impression on some one of our senses; but still this is not sufficient—it is necessary that the organ of such sense should be perfectly sound, and the nerves belonging to it must not be deranged. You will recollect, that in order to see, the objects must be painted distinctly in the bottom of the eye, on the retina; but still this representation is not the object of the soul; one may be blind, though it is perfectly well defined. The retina is a continuation of nerves, the continuation of which extends to the brain; and if this continuation is interrupted by any injury done to this nerve, called the *optic nerve*, there will be no sight, however perfect the representation on the retina may be.

It is the same with respect to the other senses, all of which operate by means of nerves destined to convey the impression made on the organ employed in the sensation, up to its first origin in the brain. There is, then, in the brain, a certain place where all the nerves terminate; there the soul resides,

and there it perceives the impressions made upon it by means of the senses.

From these impressions, the soul derives all the knowledge it has of things out of itself; thence it derives its first ideas, and by their combination forms judgments, reflections, reasonings, and every thing necessary to perfect its knowledge; such is the work of the soul, in which the body has no share. But the first impression comes to it from the senses, through the bodily organs; and the first faculty of the soul is to perceive, or to feel, what passes in that part of the brain in which all the sensitive nerves terminate. This faculty is denominated *feeling*, or *sensation*; and the soul, nearly passive, does nothing, in the first instance, but receive the impressions which body presents to it.

But it possesses in its turn an active faculty, by means of which it has the power of influencing its body, and of producing motions in it at pleasure; in this consists its power over the body. Thus I am able to move my hands and my feet by an act of my will; and, What motions are my fingers making, as I write this letter? My soul, however, cannot act immediately on any one of my fingers: in order to put a single one in motion, it is necessary that several muscles should be put in action; and this action again exerts itself by means of nerves terminating in the brain—if such a nerve be injured, to no purpose will I wish my finger to move; it will no longer obey the orders of my soul. Thus the power of my soul extends only to a small portion of the brain, where all the nerves unite; sensation is likewise restricted to this place of the brain.

The soul, then, is united only with these extremities of the nerves, on which it has not only the power of acting, but by means of which it can view, as in a mirror, every thing that makes an impres-

sion on the organs of its body. What wonderful address, to be able to conclude, from the slight changes which take place in the extremity of the nerves, that which occasioned them out of the body!

A tree, for example, produces on the retina, by its rays, an image which is perfectly similar to it; but how feeble must the impression be which the nerves receive from it! It is this impression, however, continued along the nerves up to their origin, which excites in the soul the idea of that tree. Afterwards, the slightest impressions which the soul makes on the extremities of the nerves, are instantly communicated to the muscles, which, put in action, oblige the member which it wills to move, exactly to obey its orders.

Machines, which receive certain motions by the drawing of a string, present but a coarse mechanism, compared to our bodies and the bodies of animals. The works of the Creator infinitely surpass the productions of human skill.

2d December 1760.

LETTER LXXXII.—DIFFERENT SYSTEMS
RELATIVE TO THIS SUBJECT.

In order to elucidate the two-fold union of soul and body, we may compare the soul to a man, who contemplates, in a dark room, the external objects, and from their images derives the knowledge of what is passing out of the room. The soul viewing, in like manner, if I may so express myself, the extremities of the nerves which unite in a certain part of the brain, perceives all the impressions made upon the nerves, and arrives at the knowledge of the external objects which have made these impres-

sions on the organs of sense. Though we do not know wherein consists the resemblance of the impressions made on the extremities of the nerves, with the objects themselves which occasioned them, they are, however, very proper to supply the soul with a very just idea of them.

The action by which the soul, operating on the extremities of the nerves, can put in motion, at pleasure, the members of the body, may be compared to that of a player on puppets, who, by pulling a string, makes them strut about, and move their limbs as he pleases. This comparison is, however, very imperfect; for the union of the soul and body is infinitely more intimate.

The soul is not so indifferent, in respect to feelings, as the man placed in the dark room; it is much more deeply interested in what is going on. There are sensations highly agreeable to it, and others very disagreeable, and even painful. What more disagreeable than acute pain, though it proceed but from a bad tooth? This, however, is no more than a nerve irritated in a certain manner; and yet it excites in the soul pain intolerable.

In whatever light we consider the strict union of soul and body, which constitutes the essence of a living man, it must ever remain an inexplicable mystery; and in all ages philosophers have taken fruitless pains, in the hope of arriving at a satisfactory solution. Various systems have been devised for this purpose.

The first is, that by which a real influence is established of body on soul, and of soul on body; so that the body, by means of the senses, supplies the soul with its first perceptions of external things; and that the soul, by acting immediately on the nerves, in their origin, excites in the body the motion of its members; though it is at the same time

acknowledged, that the manner of this mutual influence is absolutely unknown to us. We must undoubtedly have recourse to the omnipotence of God, who has given to every soul a power over the portion of matter containing the extremities of the nerves of the body, so that the power of every soul is restricted to a small part of the body, whereas the power of God extends to all the bodies of the universe. This system seems the most conformable to truth, though we are very far from pretending to have a particular knowledge of it.

The other two systems are the invention of philosophers, who boldly deny the possibility of a real influence of spirit upon bodies; though they are under the necessity of allowing it to the Supreme Being. According to them, the body cannot supply the soul with the first ideas of external things, nor the soul produce any motion in the body.

One of these two systems was the invention of *Descartes*; it goes by the name of the *system of occasional causes*. According to this philosopher, when the organs of sense are excited by exterior bodies, God immediately impresses on the soul, at the same instant, the ideas of these bodies; and when the soul wills that any member of this body should move, still it is God, who immediately impresses on that member the motion desired; but all the while the soul is in no manner of connexion with its body. It was, therefore, altogether unnecessary that the body should be a machine of such admirable construction, as the dullest mass would have answered the purpose equally well.

This system, accordingly, soon lost much of its credit, when the celebrated *Leibnitz* substituted in its place that of the pre-established harmony, which you have no doubt frequently heard mentioned in conversation.

According to this system of *pre-established harmony*, the soul and the body are two substances out of all connexion, and exercising no manner of influence on each other. The soul is a spiritual substance, which, from its own nature, receives, or assumes, all its ideas, its thoughts, its perceptions, without the body's having the least share in the matter; and the body is a machine most ingeniously constructed, like a clock, which produces all its motions in succession, without any manner of influence on the part of the soul. But God, having foreseen from the beginning all the resolutions which every soul would at every instant form, arranged the machine of the body so that its motions should, at every instant, harmonize with the resolutions of the soul. Thus, when I at this moment raise my hand, *Leibnitz* says, that God having foreseen my soul would will, at this moment, my hand to be raised, disposed the machine of my body in such a manner, that in virtue of its proper organization, my hand should necessarily rise at the same instant; and, in like manner, that all the motions of the members of the body are performed in virtue of their proper organization, which has been from the beginning so disposed, as to be at all times in harmony with the determinations of the soul.

6th December 1760.

LETTER LXXXIII.—EXAMINATION OF THE SYSTEM OF PRE-ESTABLISHED HARMONY. AN OBJECTION TO IT.

THERE was a time, when the system of pre-established harmony had acquired such a high reputation over all Germany, that to dare to call it in question was to incur the imputation of ignorance,

or bigotry. The supporters of this system boasted, that by means of it the omnipotence and omniscience of the Supreme Being were set in their clearest light, and that it was impossible for any one, who believed in these exalted perfections of God, to entertain a doubt of the truth of this sublime system.

In fact, say they, we see that poor pitiful mortals are capable of constructing machines so ingeniously, as to fill the vulgar spectator with astonishment: how much stronger reason, then, have we to admit, that God having known, from all eternity, all that my soul would wish and desire, at every instant, should have been able to construct such a machine, which, at every instant, should produce motions conformable to the determinations of my soul? Now, this machine is precisely my body, which is united to my soul only by this harmony; so that if the organization of my body were deranged to such a degree as to be no longer in harmony with my soul, this body would no more belong to me, than the body of a rhinoceros in the heart of Africa: and if, in the case of a derangement of my body, God should adjust that of a rhinoceros, so that its motions were in such harmony with the determinations of my soul, as to raise its paw at the moment I willed it, this body would then be mine, and would belong to my soul, as my present body now belongs to it, without having undergone itself, on that account, any change whatever.

Mr. Leibnitz himself has compared the soul and the body to two clocks, which continually indicate the same hour. A clown who should see this beautiful harmony of these two clocks, would undoubtedly conclude, that they acted upon each other; but he would be under a mistake, for the one performs its motions independently of the other. The soul and the body are likewise two machines totally independent, the one being spiritual, the other mate-

rial ; but their operations are always in a harmony so complete, that we are induced to believe them to belong to each other, and that the one has a real influence upon the other, which is, however, a mere illusion.

In order to form a judgment of this system, I remark, first, That it cannot be denied to be possible for God to create a machine which should be always in harmony with the operations of my soul ; but it appears to me that my body belongs to me by other rights than such a harmony, however beautiful it may be : and, I believe, you will not be disposed hastily to adopt a system which is founded on this principle alone, that no spirit can act upon a body ; and that, reciprocally, a body cannot act upon, or supply ideas to, a spirit. This principle is, besides, destitute of all proof, the chimeras of its partisans respecting simple beings having been completely refuted. And if God, who is a spirit, has the power of acting upon bodies, it is not absolutely impossible that a spirit, such as the human soul, should be able likewise to act upon a body. Accordingly, we do not pretend to say, that our soul acts upon all bodies, but only upon a small particle of matter, with respect to which it has received the power of God himself, though to exercise it in a manner which we are utterly unable to comprehend.

Farther, the system of pre-established harmony labours under other great difficulties. According to it the soul derives all its knowledge from its own proper fund, without any contribution on the part of the body and the senses. Thus, when I read in the Gazette that the Pope is dead, and I come to the knowledge of the Pope's death, the Gazette and my reading have nothing to do with the communication of this knowledge, as these circumstances respect only my body and my senses, which have no manner of connexion with my soul. But, conformably to

this system, my soul derives, at the same time, from its own proper fund, the ideas which it has of this same Pope. It concludes he must absolutely be dead, and this knowledge comes to it with the reading of the Gazette, so that I imagine the reading of the Gazette furnished me with this knowledge, though I really derived it from the proper fund of my soul.

But this idea is perfectly absurd. How was it possible for me so boldly to assert that the Pope must necessarily have died at the moment mentioned in the Gazette, and that only from the idea which I had of the Pope's condition and health, though perhaps I knew nothing about him, while I am infinitely better acquainted with my own situation, without knowing, however, what shall befall me to-morrow.

In like manner, when you do me the honour to read these letters, and derive the knowledge of some truth from them, it is your soul which extracts that truth from its own proper fund, without my contributing at all to it by my letters. The reading of them serves only to maintain the harmony which the Creator meant to establish between the soul and the body. It is only a formality altogether superfluous with respect to the knowledge itself. I shall, nevertheless, continue to tender you my instructions.

9th December 1760.

LETTER LXXXIV.—ANOTHER OBJECTION.

THERE is another objection to be made to the system of pre-established harmony ; namely, that it is utterly destructive of human liberty. In fact, if the bodies of men are machines, similar to a watch, all their actions are a necessary consequence of their construction. Thus, when a thief steals my purse,

the motion made by his hands is an effect as necessary of the machine of his body, as the motion of the hand of my clock, now pointing to nine. You will readily comprehend what must be the conclusion. As it would be unjust, nay ridiculous, to think of being angry at the clock, and of chastising it, because it pointed to nine, it would be equally so with respect to the thief, whom it would be absurd to punish for having stolen my purse.

Of this we had a well-known example in the reign of his late Majesty, when *Mr. Wolff* taught at Halle the system of the pre-established harmony. The King informed himself of this doctrine, which was then making a prodigious noise; and one of his Court having suggested to him, that according to *Mr. Wolff's* doctrine, soldiers were mere machines, and that when one deserted, it was a necessary consequence of his particular structure, and therefore ought not to subject him to punishment, as would be the case, were a machine an object of punishment, for having performed such and such a motion; the King was so provoked at this representation, that he gave orders to banish *Wolff* from Halle, with certification, that if he was found there at the end of twenty-four hours, he should be hanged up. The philosopher upon this took refuge at Marburg, where I conversed with him soon after.

But the partisans of this system have always maintained that the pre-established harmony by no means encroached on human liberty. They admit that the exterior actions of men are necessary effects of the organization of the body, and that, in this respect, they take place as necessarily as the motions of a watch: but that the mental determination enjoyed perfect liberty: that these may be deserving of punishment, though the corporeal action was necessary: that the criminality of an action consists less in the

act, or motions of the body, than in the resolution or intention of the soul, which remains entirely free. Let us conceive, say they, the soul of a thief, determining, at a certain time, to commit a robbery: God having foreseen this intention, has provided it with a body, organized in such a manner as to produce, precisely at the same time, the motions requisite for the commission of this robbery: the action, say they, is itself the necessary effect of the organization of the body, but that the intention of the thief is a free act of his soul, which is not, on that account, less culpable and less punishable.

Notwithstanding this reasoning, the supporters of the system of pre-established harmony will always find themselves very much embarrassed to maintain the liberty of the determinations of the soul. For, according to them, the soul is itself similar to a machine, though of a nature totally different from that of the body; the representations produced in it are occasioned by those which precede, and these again by others anterior to them, and so on, so that they follow each other as necessarily as the motions of a machine. In fact, say they, men act always from certain motives, founded on the representations of the soul, which succeed each other, conformably to its state.

You will recollect that, according to this system, the soul derives no one idea from the body, not being in any real connexion with it; but all from its own proper fund. Present ideas flow from those which preceded, and are a necessary consequence of them; so that the soul is nothing less than master of its own ideas, which generates its resolutions, and which are therefore as little under its power; and consequently all its actions are founded on its present state—that on the immediately preceding, and so on, are a necessary effect of the first state in which

it was created, over which it certainly could have no power, and of consequence could not be free. In depriving men of their liberty, all their actions become necessary, and can no longer be considered as either right or criminal.

No one of these philosophers has hitherto been able to remove these difficulties; and their adversaries have a right to object to them, that this opinion is subversive of all morality, and makes every crime which men commit to recoil on God himself, which is undoubtedly the grossest impiety. We must not, however, load them with the imputation of such consequences, though they flow very naturally from their principles. The article of liberty is a stumbling-block in philosophy; and it is extremely difficult to steer clear of the dangers which press on all sides.

13th December 1760.

LETTER LXXXV.—OF THE LIBERTY OF SPIRITS;
AND A REPLY TO OBJECTIONS AGAINST LIBERTY.

THE greatest difficulties on the subject of liberty, even those which appear insurmountable, arise from want of distinguishing with sufficient attention between the nature of spirit and that of body. The Wolffian philosophers even go so far as to put spirits and the elements of body on the same footing, and give to both the one and the other the name of *monads*, the nature of which, according to them, consists in the power of changing their state; from whence result all the changes in bodies, and all the representations and actions of spirits.

Since, then, in this system, the actual state of bodies and of spirits derives its determination from that which immediately preceded, and as the actions

of spirits are derived, like those of bodies, from their preceding state, it is evident that liberty is no more an attribute of spirit than it is of body. As to body, it is impossible to conceive the least shadow of liberty in it; for liberty always supposes the power of committing, of admitting, or of suspending an action, and this is directly opposite to all that passes in body. Would it not, then, be ridiculous to expect that a watch should point to any other hour than what it actually does, and to think of punishing it on that account? Would it not be absurd to fly into a passion at a puppet, because, after several other gestures, it had turned its back to us.

All the changes which take place in bodies, and which are all reducible to their state of rest, or of motion, are the necessary consequence of the powers which act upon them; and their action once admitted, no changes in bodies can take place, but precisely such as do take place: what respects body, therefore, is an object of neither praise nor blame. However ingeniously a piece of mechanism may be constructed, the commendation which we bestow upon it reverts to the artist; the machine itself has no interest in what passes; the artist, too, is alone responsible for the defects of a clumsy and awkward machine; the machine itself is perfectly innocent. While, therefore, the inquiry is restricted to bodies, they are clearly in no respect responsible; no reward, no punishment can possibly attach to them; all the changes and motions produced in them are the necessary consequences of their structure.

But spirits are of a very different nature, and their actions depend on principles directly opposite. Liberty, entirely excluded from the nature of body, is the essential portion of spirit, to such a degree, that without liberty a spirit could not exist; and this it

is which renders it responsible for its actions. This property is as essential to spirit as extension or impenetrability is to body; and as it would be impossible for the divine Omnipotence itself to divest body of these qualities, it would be equally impossible for it to divest spirits of liberty. A spirit without liberty would no longer be a spirit, as a body without extension would no longer be a body.

It has in all ages been a subject of eager inquiry among philosophers, how God could have permitted sin to enter into the world? Had they reflected, that the souls of men are beings necessarily free from their very nature, the controversy would have been easily settled.

The objections commonly made to human liberty are these: A spirit, it is said, or a man, is never determined to an action but from motives; and after having carefully weighed the reasons on both sides, he finally decides in favour of that which he deems the preferable. Hence they conclude that motives determine the actions of men, just as the motion of a ball on the billiard table is determined by the stroke impressed upon it, and that the actions of men are no more free than the motion of the ball. But it must be considered, that the motives which engage a man to undertake any enterprise, refer very differently to the soul from what the stroke does to the ball. The stroke produces its effect necessarily; but a motive, however powerful, prevents not the action from being voluntary. I had very powerful motives to undertake a journey to Magdeburg—a regard to my promise—the prospect of enjoying the felicity of paying my respects to your Highness; but I am perfectly sensible, at the same time, that I was not forced to it; and that it was entirely in my own power to take that journey, or to

have remained at Berlin. But a body impelled by any power necessarily obeys, and it cannot be affirmed that it was at liberty to obey or not as it pleased.

The motive which determines a spirit to regulate its resolves, is of a nature wholly different from a *cause* or *force* acting upon body. Here the effect is produced necessarily, and there the effect remains always voluntary, and the soul has power over it. On this is founded the *imputability* of the actions of a spirit, which makes it responsible for them, and which is the true foundation of right and wrong. As soon as we have settled this infinite difference between spirit and body, the question respecting liberty presents very little difficulty.

16th December 1760.

LETTER LXXXVI.—THE SAME SUBJECT CONTINUED.

THE difference which I have just established between the *motives* conformably to which spirits act, and the *causes* or *powers* which act on bodies, discovers to us the true foundation of liberty.

Imagine a puppet so artfully constructed with wheels and springs, as to be able to approach any pocket, and to pick out my watch, without my perceiving it. This action being a necessary consequence of the organization of the machine, could not be considered as a robbery; and I should render myself ridiculous if I got into a passion at it, and insisted on having the machine hanged. Every one would say that the puppet was innocent, and incapable of committing a blamable action; it would be, besides, equally indifferent to the puppet to be hanged, or placed on a throne. But if the artist had contrived this machine on purpose to

steal, and to enrich himself by such means, however much I might admire the ingenuity displayed on the mechanism, I should reckon myself obliged to bring him to justice as a thief. It follows, then, that even in this case the criminality reverts upon an intelligent being, or a spirit, and that spirits alone are responsible for their actions.

Let every man examine his own actions, and he will always find that he was not forced into them, though he might be induced by motives. If his actions are commendable, he is perfectly conscious of meriting the praises bestowed upon him. However he might be deceived in his other judgments, he cannot in this case; the sentiment of his liberty is so intimately connected with that liberty itself, that they are inseparable. It is possible to entertain a doubt where the liberty of another is concerned, but it is impossible ever to be deceived respecting one's own. A clown, for example, on seeing the puppet above described, might easily imagine it to be a real thief, and that it likewise was a free agent: in this he would be mistaken; but with respect to his own liberty, it is impossible for him to mistake; as he deems himself free, he is so in fact. It might likewise happen, that the clown in question, undeceived as to the puppet, should afterwards consider a deceiverous thief as a machine, destitute of all sentiment, and of liberty: here he would fall into the opposite error; but as to his own actions, he will never be mistaken.

It would therefore be ridiculous to affirm, that it might be possible for a watch to imagine that its hand turned freely, and to believe that it now points to nine, because it pleases to do so, but could point to any other hour, if it thought proper: the watch would undoubtedly deceive itself. But the whole supposition is manifestly absurd. You must first

ascribe to the watch sentiment and imagination, and accordingly suppose it a spirit or soul, which necessarily implies liberty; and afterwards consider it as a mere machine, divested of liberty, which is a manifest contradiction.

Another objection, however, is started against liberty, founded on the divine *prescience*. God, it is said, foresaw from all eternity every resolution which I should form, and every action which I should do during every instant of my life. If God foresaw I should just now continue to write, that I should by and bye lay down my pen, and rise to take a walk, my action would be no longer free, for I am under the necessity of writing, of laying down the pen, and of rising to walk; and it would be impossible for me to act otherwise, as it was impossible God should be deceived in what he foresees.

The reply is obvious. Because God foresaw, from all eternity, that I should perform, on such a day, such an action, it does not follow that I shall perform it because God foresaw it. For it is evident that it ought not to be alleged, in the cause supposed, that I go on to write, *because* God foresaw I should go on to write; but, on the contrary, as I judge it proper to go on to write, God foresaw that I would do so. Thus the prescience of God by no means encroaches on my liberty; and all my actions remain equally at liberty, whether God foresaw them or not.

Some, however, in the view of supporting liberty, have gone so far as to deny the divine prescience; but you will have little difficulty in detecting the falsehood of this opinion. Is it so surprising that the Supreme Being, who is acquainted with all my propensities, should be able to foresee the effect which every motive will produce on my soul, and, consequently, all the resolutions which I shall form in

conformity to these effects, when simple mortals, such as we are, frequently exercise a similar prescience? You can easily imagine to yourself a man extremely covetous, who has a fair opportunity of making a considerable advantage. You know for certain he will not fail to avail himself of it. Your knowledge of this, however, has no influence upon the man; he goes into it with the full determination of his own mind, as if you had never spent a thought upon him. Now, as God is infinitely better acquainted with men, and all their dispositions, it is not to be doubted that he could have foreseen their actions, in all situations. The prescience of God, with respect to the free actions of spirits, is nevertheless founded on another principle than that of the changes which *must* take place in the corporeal world, where all is under the power of necessity. This distinction shall be the subject of my next letter.

20th December 1760.

LETTER LXXXVII.—INFLUENCE OF THE LIBERTY OF SPIRITS UPON EVENTS.

If the world contained bodies only, and if the changes which take place in it, were necessary consequences of the laws of motion, conformably to the powers with which they act upon each other, all events would be necessary, and would depend on the first arrangement which the Creator had established of the bodies of the universe; so that this arrangement once established, it should be impossible for other events afterwards to take place, than those which happen in the actual order of things. The world would undoubtedly be in this case a mere

machine, similar to a watch, which once wound up, afterwards produces all the motions by which we measure time.

Imagine to yourself a musical clock; such a clock, once regulated, all the motions which it performs, and the airs which it plays, are produced in virtue of its construction, without any fresh application of the hand of the master, and, in that case, we say it is done mechanically. If the artist touches it, by changing the notch, or the cylinder, which regulates the airs, or by winding it up, it is an external action, which, not being founded on the organization of the machine, no longer appertains to it. And if God, as Lord of the universe, should change immediately any thing in the course of successive events, this change would no longer appertain to the machine: it would then be a *miracle*.

A miracle, consequently, is an immediate effect of the divine Omnipotence, which could not have taken place, had God left the machine of the universe freely to take its course. Such would be the state of the universe if it contained bodies only; in that case it might be said, that all events take place in it from an absolute necessity, each of them being a necessary effect of the structure of the universe; unless it pleased God to work miracles.

The same thing would happen, on admitting the system of pre-established harmony, though it allows the existence of spirits; for, according to this system, spirits do not act upon bodies, but these perform all their motions and actions only in virtue of their structure, once established; so that when I raise my arm, this motion is an effect as necessary of the organization of my body, as that of the wheels in a watch. My soul in no respect contributes to it; it is God who, from the beginning, arranged the matter, so that the action of my body must neces-

sarily result from it, at a certain time, and raise the arm at the instant that my soul willed it. Thus, my soul has no influence upon my body, any more than upon those of other men and of animals; and, consequently, according to this system, the universe is merely corporeal, and events are a necessary effect of the primitive organization which God has established in the universe.

But if we allow to the souls of men and of animals the power of producing motion in their bodies, which their organization alone would not have produced, the system of the universe is not a mere machine, and events do not necessarily take place as in the preceding case.

The universe will present events of two kinds; the one, those over which spirits have no manner of influence, which are corporeal, or dependent on the machine, as the motion and phenomena of the heavenly bodies; these take place as necessarily as those of a watch, and depend entirely on the primitive establishment of the universe. The others depend on the soul, united to the body of men and animals, and are no longer necessary, as the preceding, but result from the liberty, as from the will, of these spiritual beings.

These two kinds of events distinguish the universe from a mere machine, and raise it to a rank infinitely more worthy of the Almighty Creator who formed it. The government of this universe will likewise ever inspire us with the most sublime idea of the sovereign wisdom and goodness of God.

It is certain, therefore, that liberty, which is absolutely essential to spirits, has a very great influence on the events of the world. You have only to consider the fatal consequences of these wars, which all result from human actions, determined by their will or their caprice.

It is likewise certain, at the same time, that the events which take place do not depend only on the will of men and animals. Their power is very limited, being restricted to a small portion of the brain, in which all the nerves terminate; and this action is confined to the communication of an impression of a certain motion on the members, which many afterwards operate on other bodies, and these again on others, so that the slightest motion of my body may have a great influence on a multitude of events.

Man, however, though master of the first motion of his body which occasions these events, is not so of the consequences of his actions. These depend on so many circumstances, that the most sagacious mind is incapable of foreseeing them: accordingly, we every day see the best concerted projects failing. But it is here that we must acknowledge the government and providence of God, who having from all eternity foreseen all the counsels, the projects, and the voluntary actions of men, arranged the corporeal world in such a manner, that it brings about, at all times, circumstances which cause those enterprises to fail or to succeed, according as his infinite wisdom judges to be most fit. God thus remains absolute sovereign of all events, notwithstanding the liberty of men, all whose actions, though free, are from the beginning part of the plan which God intended to execute, when he created this universe.

This reflection plunges us into an abyss of wonder and adoration at the infinite perfections of the Creator; while we consider that there is nothing so mean in itself as not to be, from the beginning of the world, an object worthy of entering into the original plan which God proposed to himself.

23d December 1760.

LETTER LXXXVIII.—OF EVENTS, NATURAL, SUPERNATURAL, AND MORAL.

IN common life we carefully distinguish events produced by corporeal causes, from those in which men and animals co-operate. Those of the former description are denominated *natural events*, or produced by natural causes; such are the phenomena of natural causes; such are the phenomena of the heavenly bodies, eclipses, tempests, whirlwinds, earthquakes, &c. These are called natural phenomena, because it is understood that neither men nor animals are active in the production of them.

If we see a tree torn up by the roots, through the violence of the wind, we call it a natural effect; but if it were done by the strength of man, or the proboscis of an elephant, no one would call this a natural effect. When our plains are deluged by an inundation, or destroyed by the hail, we say the cause of this calamity was natural; but if the mischief were done by the invasion of an enemy, we would no longer deem the cause of it to be natural.

If such an evil were to be produced by a miracle, or by the immediate power of God, we would say the cause of it was *supernatural*; but if the event were occasioned by men or animals, we would not, in that case, give it the name of either natural or supernatural. We would characterize such an event simply by the name of *action*, which denotes an effect that is neither natural nor supernatural. It might with greater propriety be denominated *moral*, as it depends on the liberty of an intelligent agent.

Thus, when Quintus Curtius gives us a detail of the actions of Alexander the Great, he communicates to us the knowledge of the events brought about by

the voluntary determinations of that hero. Such an action always supposes freedom of resolution in a spiritual being; a power of determination which depends upon his will, and of which he is master. I say, of which he is master; for there is a great variety of motions, the production of which, were we to determine to will them ever so much, we should not, however, be obeyed, because over such movements we have no power.

I am not master even of all the motions performed in my own body; that of my heart and of my blood is not subject to my power, or to the empire of my soul, as the action which I perform when I write this letter. There are other motions which partake of the nature of both these, such as respiration, which it is in my power to accelerate or to retard to a certain degree, but of which I am by no means the absolute master.

Language is not sufficiently rich to express, by one appropriate term, all these different kinds of events. There are some produced by natural causes merely, and which are necessary consequences of the arrangement of bodies in the universe; and as these necessarily come to pass, the knowledge of this arrangement enables us to foretel a great number of them, such as the situation of the heavenly bodies, eclipses, and other phenomena depending on them, for any given time whatever. There are other events which depend only on the will of free and spiritual beings, as the actions of every man and of every animal. It is impossible for us to foresee any thing of these, in particular, unless by conjecture merely; and in this we are frequently very grossly mistaken. God alone possesses this knowledge in a supreme degree.

From these two kinds of events there arises a third, in which natural causes concur with such as

are voluntary, and dependent on a being exercising its liberty. Of this the billiard table furnishes an example. The strokes impressed on the balls depend on the will of the players; but as soon as motion is communicated to them, the continuation of that motion, and their collision with each other, or with the cushion, are necessary consequences of the laws of motion.

In general, most of the events which take place on the earth, must be referred to this species, as there are scarcely any over which men and animals have not some influence. The cultivation and produce of our fields require, in the first instance, the voluntary exertions of men or beasts; but the sequel is an effect of causes purely natural. It is accordingly of impotence to remark, that God acts in a manner totally different toward bodies and spirits. God has established for bodies laws of rest and motion, conformably to which all changes *necessarily* take place; as bodies are merely passive beings which preserve themselves in their state, or necessarily obey impressions made upon them by others, as I formerly explained; whereas spirits are susceptible of no force or constraint, but are governed of God by precepts and prohibitions.

With respect to bodies, the will of God is always perfectly accomplished; but with respect to spiritual beings, such as men, the contrary very often happens. When it is said to be the will of God that men should love one another, we mean by that expression a commandment which men ought to obey; but this is very far from being the case. God does not force men to it, for this would be contrary to the liberty which is essential to them; but He endeavours to engage men to the observance of this commandment, by proposing to them motives the most powerful; but it always depends on the will of

man, whether he is to obey or not. In this sense we are to understand the will of God, when it refers to the free actions of spiritual beings.

27th December 1760.

LETTER LXXXIX.—OF THE QUESTION RESPECTING THE BEST WORLD POSSIBLE; AND OF THE ORIGIN OF EVIL.

You know well, that it has been made a question, Whether this world be the best possible? It cannot be doubted, that the world perfectly corresponds to the plan which God proposed to himself when he created it.

As to bodies and material productions, their arrangement and structure are such, that certainly they could not have been better. Please to recollect the wonderful structure of the eye, and you will see the necessity of admitting, that the conformation of all its parts is perfectly adapted to fulfil the end in view, that of representing distinctly exterior objects. How much address is necessary to keep up the eye in that state, during the course of a whole life? The juices which compose it must be preserved from corruption; it was necessary to make provision, that they should be constantly renewed, and maintained in a suitable state.

A structure equally marvellous is observable in all the other parts of our bodies, in those of all animals, and even of the vilest insects. And the structure of these last is so much the more admirable, on account of their smallness, that it should perfectly satisfy all the wants which are peculiar to each species. Let us examine only the sense of seeing in these insects, by which they distinguish objects so minute, and so near, as to escape our eyes,

and this examination alone will fill us with astonishment.

We discover the same perfection in plants: every thing in them concurs to their formation, to their growth, and to the production of their flowers, of their fruits, or of their seeds. What a prodigy, to behold a plant, a tree, spring from a small grain cast into the earth, by the help of the nutritious juices with which the soil supplies it! The productions found in the bowels of the earth are no less wonderful: every part of nature is capable of exhausting our utmost powers of research, without permitting us to penetrate all the wonders of its construction. Nay, we are utterly lost, while we reflect, how every substance—earth, water, air, and fire—concur in the production of all organized bodies; and, finally, how the arrangement of all the heavenly bodies is so admirably contrived, as perfectly to fulfil all these particular destinations.

After having reflected in this manner, it will be difficult for you to believe, that there should have been men who maintained, that the universe was the effect of mere chance, without any design. But there always have been, and there still are persons of this description; those, however, who have a solid knowledge of nature, and whom fear of the justice of God does not prevent from acknowledging Him, are convinced with us, that there is a Supreme Being, who created the whole universe, and, from the remarks which I have just been suggesting to you respecting bodies, every thing has been created in the highest perfection.

As to spirits, the wickedness of man seems to be an infringement of this perfection, as it is but too capable of introducing the greatest evils into the world; and these evils have, at all times, appeared incompatible with the sovereign goodness of God.

This is, the weapon usually employed by infidels against religion, and the existence of God. If God, say they, was the author of the world, He must also be the author of the evil which it contains, and of the crimes committed in it.

This question, respecting the origin of evil—the difficulty of explaining, How it can consist with the sovereign goodness of God, has always greatly perplexed philosophers and divines. Some have endeavoured to give a solution, but it has satisfied only themselves. Others have gone so far as to maintain, that God was, in fact, the author of moral evil, and of crimes; always protesting, at the same time, that this opinion ought to bring no imputation on the goodness and holiness of God. Others, finally, consider this question as a mystery which we cannot comprehend; and these last, undoubtedly, have embraced the preferable sentiment.

God is supremely good and holy; He is the author of the world, and that world swarms with crimes and calamities. These are three truths which it is, apparently, difficult to reconcile; but, in my opinion, a great part of the difficulty vanishes, as soon as we have formed a just idea of spirit, and of the liberty so essential to it, that God himself cannot divest it of this quality.

God having created spirits, and the souls of men, I remark, first, that spirits are beings infinitely more excellent than bodies; and, secondly, that, at the moment of creation, spirits were all good: for time is requisite to the formation of evil inclinations there is, therefore, no difficulty in affirming, that God created spirits. But it being the essence of spirits to be free, and liberty not being capable of subsisting without a power to sin, to create a spirit possessed of the power of sinning, has nothing in-

consistent with divine perfection, because a spirit could not be created destitute of that power.

God has, besides, done every thing to prevent crimes, by prescribing to spirits, precepts, the observance of which must always render them good and happy. There is no other method of treating spirits, which cannot be subject to any constraint; and if some of them have abused their liberty, and transgressed these commandments, they are responsible for it, and worthy of punishment, without any impeachment of the Deity.

There remains only one objection more to be considered—namely, that it would have been better not to create such spirits, as God foresaw they must sink into criminality. But this far surpasses human understanding; for we know not, whether the plan of the world could subsist without them. We know, on the contrary, by experience, that the wickedness of some men frequently contributes to the correction and amendment of others, and thereby conducts them to happiness. This consideration alone is sufficient to justify the existence of evil spirits. And, as God has all power over the consequences of human wickedness, every one may rest assured, that in conforming to the commandments of God, all events which come to pass, however calamitous they may appear to him, are always under the direction of Providence, and finally terminate in his true happiness.

This providence of God, which extends to every individual, in particular, thus furnishes the most satisfactory solution of the question respecting the permission and the origin of evil. This likewise is the foundation of all religion, the alone “object of which is to promote the salvation of mankind.”

30th December 1760.

LETTER XC.—CONNECTION OF THE PRECEDING CONSIDERATIONS WITH RELIGION. REPLY TO THE OBJECTIONS OF THE PHILOSOPHICAL SYSTEMS AGAINST PRAYER.

BEFORE I proceed farther in my lessons on philosophy and physics, I think it my duty to point out to you their connexion with religion.

However extravagant and absurd the sentiments of certain philosophers may be, they are so obstinately prepossessed in favour of them, that they reject every religious opinion and doctrine, which is not conformable to their system of philosophy. From this source are derived most of the sects and heresies in religion. Several philosophical systems are really contradictory to religion; but in that case divine truth ought surely to be preferred to the reasonings of men, if the pride of philosophers knew what it was to yield. Should sound philosophy sometimes seem in opposition to religion, that opposition is more apparent than real; and we must not suffer ourselves to be dazzled with the speciousness of objection.

I begin with considering an objection, which almost all the philosophical systems have started, against prayer. Religion prescribes this as our duty, with an assurance, that God will hear and answer our vows and prayers, provided they are conformable to the precepts which he has given us. Philosophy, on the other hand, instructs us, that all events take place in strict conformity to the course of nature, established from the beginning, and that our prayers can effect no change whatever; unless we pretend to expect that God should be continually working miracles, in compliance with our prayers. This objection has the greater weight, that religion itself