

**A DEFENSE
OF
THE REVELATION
AGAINST
THE OBJECTIONS
OF FREETHINKERS,
BY MR. EULER
FOLLOWED BY
THOUGHTS BY THE AUTHOR
ON RELIGION,
OMITTED FROM THE LAST EDITION
OF HIS
LETTERS
TO A PRINCESS OF GERMANY**

**PARIS,
Adrien Le Clere, Printer of Our Holy Father
the Pope, quai des Augustins 39.**

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BOOKSELLER'S NOTE

Thirty or forty years before his death, when he was already revered by the public as Europe's leading mathematician, Euler published a small piece in German called *Défense de la Révélation contre les objections des esprits-forts* [*A Defense of the Revelation against the Objections Freethinkers*]. This work made Euler's zeal for religion all the more remarkable, since these so-called freethinkers, against which he railed, dominated and had power over the direction of thought in the capital where he lived. But this work has become so rare today that we have searched in vain all over Germany for a copy. Fortunately, we knew that not long after it had been published, it had been translated into French and that this translation had been made available to the public in an old foreign journal that was printed in Göttingen and Leiden under the name of *Bibliothèque impartiale* [*Impartial Library*]. We had a very difficult time finding a copy of this journal, forgotten today like so many others; but finally, a copy fell into our hands, and we have been able to find out that it was in the months of June and October of the year 1755 that the translation of the work in question appeared. Some very knowledgeable people were asked to read it, and they assured us that it would be difficult to find any other reflections on religion that were more solid and profound and explained with as much order, precision and clarity. Thus, we believe to have performed an essential service for religion by reintroducing to the public a work so precious and which will have, for all types of readers, the additional benefit of being new.

We were advised to add to this writing by Euler various excerpts on religion that had appeared throughout his *Lettres à une princess d'Allemagne* [*Letters to a Princess of Germany*] and which were omitted by Mr. De Condorcet in the previous edition. These excerpts are probably very interesting in and of themselves, but without their original context or any connection whatsoever to each other, assembling them would have made for a very shapeless text. Thus, it seemed simpler to us to reproduce the article from the eleventh volume of our *Annales littéraires et morales* [*Literary and Moral Annals*]¹, where the last edition of Euler's *Letters* is compared with the first and where all the unpublished passages appear.

The omissions made in the Paris edition were soon noticed, and they did not escape the sharp eye of Madame de Genlis. This is what she said in one of her last works, *les Monumens religieux* [*Religious Monuments*], page 259: "Mr. Euler, the greatest mathematician in Germany, never trusted new doctrines. His *Letters to a Princess of Germany* were translated into all languages. They were translated into French twenty-five or twenty-six years ago²; but they are displeasing to many philosophers, because in this work, the author always applies science to the unshakeable foundation of religion. Not many years later, Mr. De Condorcet put out a new edition, announcing in the preface that he had omitted some parts due to *length*. These omissions were all the religious bits, which, far from being extraneous, essentially served as the links between the proofs established by the author. It is a fact that can be verified by comparing the last edition to the original work. This little philosophical trick, which is used so often, caused a veritable scandal in Germany, even among those who were not at all religious."

¹ These Annals, which have been published for about ten years, consist of two 48-page issues per month. The cost of subscription is 22.50 francs for the year and 12 francs for six months.

² Madame de Genlis should have said that they were published at that time. She completely forgot that Euler wrote the *Letters* in French and that the stylistic errors, which were easily corrected, provided De Condorcet with a plausible enough excuse to put out a new edition.

The first edition of Euler's *Letters* is out of stock. We searched in vain for a copy in all the bookstores in Germany and in France. This is not the case for De Condorcet's edition. The liberties taken by the author soon discredited him. The document that we are publishing, which includes all the parts that had been removed, could serve as an appendix: by appending it to this edition, it makes it more similar to the original. Consequently, a work so interesting for the sciences, and even for religion, will no longer be disdained by literary hacks who prefer works the way they were written by the authors. Moreover, *A Defense of the Revelation*, which is a leading example of these types of appendices, admirably clarifies and confirms the honorable testimony to religion that Euler was happy to share in his *Letters*.

A DEFENSE OF THE REVELATION AGAINST THE OBJECTIONS OF FREETHINKERS

I. The forces of the soul manifest through the exercising of two faculties, one of which goes by the name of understanding and the other by will. Since all happiness consists of perfection, the happiness of a soul can only be produced by the perfection of its understanding and will. By the same reasoning, a soul should be supposed all the happier for having increased these two types of perfection. This is also what man's true happiness consists of in general, since the benefits of the body have nothing to do with it unless they serve to increase the perfection of understanding or of the will. For if these benefits and all earthly possessions had no influence over the state of the soul, the happiness of mankind would not increase at all.

II. The perfection of understanding consists of the knowledge of truth, from which is simultaneously born the knowledge of good. The principal aim of this knowledge is God and His works, since all other truths to which reflection can lead mankind end with the Supreme Being and His works. For God is the truth, and the world is the work of His almightiness and His infinite wisdom. Thus, the more man learns to know God and His works, the further he will advance in the knowledge of the truth, which contributes just as much to the perfection of his understanding.

III. The greatest perfection of understanding consists, therefore, of a perfect knowledge of God and His works. But since such knowledge is infinite, no understanding of it is possible. Consequently, the sovereign perfection of understanding can only be attributed to a single God. Man, in his state, is only able to grasp this knowledge to a very small degree. However, with respect to this, there can be a very considerable difference that is based on the diversity of abilities to understand, so that one man might grasp much more of this knowledge than another. Thus, to attain happiness, which depends on understanding, one must use all one's efforts to expand more and more one's knowledge of God and His works. The further a man can expand this knowledge relative to the intellectual faculty, the happier he is supposed to be.

IV. The knowledge of truth is the necessary foundation for the knowledge of good. For a known truth is reputed to be good, insofar as it can contribute something to improve our condition; and since God is the source of all truth, it is also rightly so that God is named as the ultimate good. The knowledge of good presupposes the knowledge of truth, and thus, even if a man strives to guide his understanding to a greater degree of perfection, he acquires at the same time a more extensive and distinct knowledge of good. It is clear that the knowledge of evil is also included in this, for he who knows good knows how to distinguish it from evil.

V. Moving on to the other faculty of the soul, that is, the will, it must be noted above all else that the knowledge of good and evil results from the duties to which man must conform his actions if he wants to make his condition a happy one. These duties have their basis in the essence of good and must consequently be considered as coming from God Himself, as He is the true source of all good. That is why natural law, which determines the duties to which the lights of nature have subjected our actions, is named, with good reason, a divine law, since it is God Himself who wrote it in the hearts of men and who thus demanded that their actions be determined by the precepts of this law. Then whoever wants to pay so little attention to the actions of either himself or of other men will soon discover that actions are not all equivalent, but that there are some he is obliged to perform to advance his happiness and others whose omission is necessary for the same reason.

VI. It follows, then, that the observation of these duties is indispensably necessary to the happiness of man and that the violation of these duties and infraction of the law contradict Him to the highest degree. The natural consequences of this infraction are not only in direct and total opposition to true happiness, but since the natural law originates from God Himself, its violation can only be regarded as a rebellion against this Supreme Being. And since all our happiness ends with God and the sovereign good, the violation of His law must necessarily hasten us towards sovereign evil. Indeed, would it be likely that God would have stipulated a law for intelligent creatures without seriously wanting them to be observed and without formally punishing their infraction? Such foolishness cannot be supported without clearly blaspheming.

VII. Consequently, in order to attain happiness, it is completely necessary that men fulfill with the greatest exactitude the duties that God has stipulated for them; it is of this that consists the great endeavor of the will, insofar as is proper for the advancement of our happiness. Thus, just as understanding – through knowledge of the truth, the good and the duties that result from it – provides its share, so to speak, for the attainment of happiness, the share for the will also consists of accomplishing these duties. Thus, man must devote all his energy entirely to bending his will towards the observation of the law that God has prescribed for him and in such a way that his will satisfies the law with pleasure and derives the greatest satisfaction from doing so.

VIII. This makes it seem as if it is only a simple matter of external actions. Although the agreement of these actions with our duties may result in very beneficial consequences for man, it is nevertheless an indispensable necessity that the will itself submit perfectly to the law and rid itself entirely of all illusions that could cause it to stray from the path; that is to say, the will should be bent in such a way that it has not the slightest inclination towards anything that does not conform to the law and derives not the least pleasure from it. This disposition cannot be better described than by saying that the will of man should submit to the will of God in all respects and with the greatest exactitude. Since God is the source of all good, it is obvious that the man who wishes to bend his will in this way must necessarily be in the happiest state.

IX. On the contrary, as long as a man performs actions by force and with repugnance, even if the actions are virtuous, he can, to tell the truth, enjoy beneficial consequences that result naturally from these good actions, but he remains a great distance from true bliss. Indeed, as long as he feels within himself a resistance to the true good, that is, the will of God, this in itself is a sure sign of worry and internal agitation from which true bliss must be completely exempt. Thus, there is nothing that is capable of making man perfectly happy except, firstly, a sufficient knowledge of God and his works, and secondly, complete submission to His will and to the divine will.

X. Thus, since understanding cannot be in a happier state than when it makes uninterrupted progress towards the knowledge of God and His works, the will cannot be happier than when it achieves a boundless submission to the divine will. For true peace of the soul consists only of this, a peace which not only Christians, but even many pagan philosophers, have credited with the sovereign good. And when one reflects on it a bit, one quickly perceives that in this life, as in the next, there is no other way possible, neither for men nor for any species of creature with the gift of intelligence and will, to attain true bliss than the one just described.

XI. But we other men encounter the greatest difficulties in attaining this happy state of understanding and will. If one knows anything about history, one cannot ignore how many false and completely absurd ideas most men have of God and of divine things. The cause of this distraction seems not to have been in understanding alone, for although most men misuse this understanding in many respects, in particular in the knowledge of God, dissolute desires and passions appear to be the primary influence over them. The power of these passions is so great that, despite all the efforts of man to oppose them, it is still impossible for him to attain such a happy state of understanding and will.

XII. As considerable are the obstacles which halt the progress of knowledge of our understanding, those which prevent the improvement of the will are even greater obstacles. It would be superfluous to go into any detail to show how tiresome it is to restrain our passions; in this respect, all work consists of this. There is still a way to aid and direct understanding fairly well, using healthy instruction. But a will that is corrupt and given over to sensual delights usually resists all exhortations and all the strongest presentations. It is rare that these methods, the only ones that can influence man, experience much success. Because equally insurmountable difficulties are linked to the attainment of happiness, it is demonstrated that men are in a sovereignly depraved state.

XIII. All inclinations of the will required to attain a degree of happiness always presuppose a certain degree of knowledge of God; for in order to submit to His divine will, one must first know it. This can only take place through understanding. It is also easy to see that the more one knows God, the more duties there are to perform for God. For creatures who have no knowledge, or only a very limited amount of knowledge, can only have very few duties, or none at all, to fulfill; on the contrary, the greater the degree of knowledge, which a rational creature can attain, the purer and more important the duties that befit him and the stronger the obligation also to bend his will.

XIV. On the contrary, understanding can make rather considerable progress in the knowledge of God and even in the duties that depend on this knowledge without improving the will, for improvement of the will can be laden with difficulties of a nature and force that resist all presentations of reason. Experience provides us with rather convincing proof: nothing is more common than to see people who combine an abundance of spirit with very little virtue, while others have very little understanding but a notable degree of virtue, of which consists true improvement of the will. How many people are completely convinced of the duties and obligations they have to fulfill but behave in such a way that is the directly opposite! If we did not have this conviction based on experience, we would have a very hard time deducing the possibility of such strange behavior from the essence of a rational creature.

XV. Since there is no doubt about this, why would there not also be an intelligence that far surpasses man's understanding that is given over to a malevolence that is similar or even greater than his? Since God, by all appearances, has produced all manner of creatures possible, we do not have the slightest reason to doubt the existence of similar beings who far surpass us in

both knowledge and malice. These we call evil spirits or devils, and they make us see that the freethinkers show very little judgment when they mock us and when they treat everything we say as fables.

XVI. The most important thing to note here is that a lack of knowledge can exist without altering true bliss in the slightest and that it can rarely be counted as a sin, because most often it is not in our power to attain a higher degree of knowledge. On the contrary, once we have come to recognize, through understanding, the omission of our duties, it should always be seen effectively as a sin against God. Thus, he who allows his evil desires the force to turn his will away from the submission it owes to the known will of God commits the greatest of all sins, voluntarily depriving himself of the happiness that only he can obtain for himself and making himself completely unsuitable to possess it.

XVII. Proportional to the measure of knowledge that a reasoning creature can acquire, he cannot be happier than when he guides his will in a manner that conforms perfectly to the duties known to him and when he tames the affectations that could oppose them with so much success that there are none left that do not conform to these duties. Any man who has reached this state enjoys true tranquility of soul, and there is no longer anything capable of altering his tranquility. Nor can anything increase it, since it is only when understanding reaches the most perfect knowledge that the will also improves because of this knowledge and submits itself more and more to the will of God.

XVIII. As long as the will remains in a corrupted state and does not acquire the dispositions that correspond to its known duties, there is no task more important than that of repressing, and even destroying entirely, all the desires that battle against these duties. Until then, new degrees of knowledge, far from contributing to the advancement of our happiness, will only make us unhappier. Indeed, the further our knowledge advances (and by these means we recognize the necessity of conforming to the duties already known to us and to those that we have yet to discover), the greater the sin that we commit by neglecting these duties. In such circumstances as these, we are called to exert all our efforts both to brighten the lights of our understanding and especially to improve our will.

XIX. Either there is a divine revelation or there isn't. Nobody yet has dared to maintain the absolute impossibility of a revelation, and the freethinkers are limited to uniting all their forces to eliminate the characteristics of a divine revelation from the Holy Scripture. God did not simply create man; because He simultaneously accorded them everything necessary to attain true happiness, it is distinctly clear that God must have a hand in the salvation of men. Consequently, if the revelation can contribute to the advancement of their happiness, then not only is the revelation not impossible, but it is even to be presumed that God proved His kindness to man in this regard.

XX. But if there is a divine revelation, we should be persuaded that its object is the true happiness of man. Since we have already seen what this true happiness consists of and what is required to attain it, this is already enough to entirely destroy most of the characteristics that the freethinkers claim should exist in a revelation and which they do not find in the Holy Scripture. They claim that if God had wanted to make His will and perfections known to men by way of a revelation, His Majesty should have done it in a most extraordinary manner and with the greatest pomp in order to create the strongest impression on men and not to leave anyone with the slightest doubt as to the truth of such a revelation.

XXI. It is easy to show that such behavior would have led to a loss for men rather than to their salvation. For even though it would have had the effect of elevating human understanding

of God to a higher degree, the will would not have experienced any improvement, or would have experienced very little, though it is the principal objective of true happiness. Increasing such knowledge of God would have multiplied the duties imposed upon us and worsened the sins whose omission makes us guilty. For, all else being equal, the more our understanding becomes clear without influencing the improvement of the will, the more considerable and criminal the infraction of our duties becomes. This has the consequence of making our situation all the sadder.

XXII. Thus, it would have been to our greatest misfortune if it had pleased God to reveal Himself, if He had done it according to the false ideas of the freethinkers; on the contrary, we are well convinced that God, by way of his infinite kindness, has chosen other paths to make us part of the revelation and that these paths, far from increasing our misery, are destined to procure our true good. Thus, a revelation for our true good and conforming to divine kindness should have the primary goal of improving our will and should provide us with the most efficient motives to achieve this and, at the same time, only reveal what infinite perfections of God that we can comprehend without worsening our sins in the present state of depravity of our will.

XXIII. As soon as one presupposes this characteristic to be essential to a true divine revelation, all objections that the incredulity and malice of men form against the Holy Scripture disappear almost entirely – for we find in our Holy books the aforementioned characteristic – in such a perfect way that we have no reason to maintain the least doubt about its heavenly origin. Indeed, we perceive, with all the evidence possible, that the Holy Scripture not only provides the most beneficial means and assistance to those who seriously apply themselves to the reformation of their own hearts, but that it also leads to a deeper knowledge of God, and at the same time, it does not throw those who do not want to conform to its precepts into a much more considerable degree of misfortune.

XXIV. That which unbelievers criticize the most about the Holy Scripture is that, first of all, the characteristic of its heavenly origin is not universally appreciated; but far from being a legitimate objection, it is, on the contrary, a necessary mark of a genuine divine revelation. For the object of such a revelation is to achieve the salvation of men and not to increase their misfortune by exacerbating the suffering caused by the violation of their duties; a stronger conviction on the subject of the divinity of the revelation would be useless to salvation and would serve only to turn sinners into criminals. Indeed, if a non-believer, once convinced of the divinity of the Holy Scripture, refused to conform his will to the enlightenment he would have achieved, this enlightenment would have no other use than to exacerbate his sin.

XXV. On the contrary, all those who work sincerely towards the improvement of their will cannot fail to find the most distinct characteristics of divine origin in the Holy Scripture. For, firstly, we have the purest and most abundant source of all duties to which we are obligated by divine law, the accomplishment of which gives our will a disposition that is indispensable to our happiness. This source is found in the love of God and our fellow man which is commended to us in such a purposeful way, and all our duties flow so naturally and necessarily from it, that all men who love God with all their heart and who love their fellow man as they love themselves will certainly never be guilty of violating the smallest duty.

XXVI. The most adept of the ancient philosophers applied themselves in particular to discovering the source of all our duties and to deducing the rules necessary for governing our lives. But all that they were able to advance on the subject is partly very arcane and partly very imperfect: it is almost simply a matter of finding ways to govern our external actions without bettering our hearts. Since the writings of the greatest philosophers on this important matter

have such fundamental flaws, while the authors of the sacred books, whom freethinkers regard as very limited geniuses, demonstrate everywhere the unique and true source of all our duties in the most distinct and purposeful manner, it follows that the Holy Scripture is very superior in this regard to all other books; and since, as non-believers profess, this superiority cannot be attributed to the talents of its authors, it comes as no surprise that we regard this Scripture as having come from God.

XXVII. In regard to God's ideas and His perfections that we draw from the Holy Scripture, they are so pure and befitting to the essence of this Supreme Being that one only has to compare them to the ideas of the most enlightened philosophers of paganism to be struck by their excellence. For although the freethinkers find here and there some statements on the subject of divinity that they do not find befitting, such as anger, hate, vengeance and repentance, these alleged problems have long been completely resolved. One only has to thoroughly examine all the passages where these terms are found, noting their true relationship, and compare them to the general notion of God that the Scripture gives us, and it is soon seen most clearly that these statements do not diminish God's sovereign majesty in the slightest.

XXVIII. But the Scripture does not only contain the unique and true source of all duties, the observation of which is required in order to lead us to true happiness; we also find within it the most effective motives and aids to determine the accomplishment of these duties. The specific and general doctrine of providence is related to this in particular, and it is through this doctrine that we learn that there will never be a circumstance in our lives that the sovereign wisdom and infinite grace of God has not determined in advance. From this comes the unshakeable confidence that not a single hair falls from our head without the will of our Heavenly Father. Thus, by giving this doctrine all the attention that it merits and by taking care to apply it, one places oneself in a state to submit one's will, in all sorts of circumstances, without suffering and even with pleasure, to the will of God and to thus attain true happiness.

XXIX. By this we recognize that all actions of other men with whom we live can be seen from two points of view. On one hand, we can imagine them in relation to the goal that men demonstrate by their actions, by virtue of which they agree with their duties or repel them. This makes them susceptible to imputation. But on the other hand, we can judge by these actions, since they are related to us and to our well-being or our disadvantage, in which case the preceding point of view must be entirely separate from the latter, and we must strongly persuade ourselves that these actions and their relation to us has been directly sent to us by God. This is not only a necessary consequence of what we have said so far, but the same thing is found distinctly and positively expressed in several passages of the Holy Scripture.

XXX. There is also no consideration more effective to preserve us from all unchecked emotions, such as anger, hate, envy and vengeance, and to make us destroy them entirely within ourselves. All intelligent beings have always regarded these emotions as the source of all vice and have carefully searched for all the ways to make the ugliness of these emotions felt to man and to deliver him from them.

XXXI. This notion of the providence of God truly and perfectly ending the source of all vice is also the most powerful way to lead us to all sorts of virtues. The love of God is very easily excited and fortified in us when we reflect upon the fact that all that we experience has been determined by God and that thus, we find in ourselves a sort of perpetual contract with this Supreme Being. This same consideration calls out to us for true love, not only for our friends, but even for our enemies. For as soon as we are obliged to see with a completely different eye the attacks that our enemies form against us, as much as we feel the effects, all the causes for

hate cease at once, and we find ourselves in a state to accomplish the will of God by loving our most violent enemies without hypocrisy.

XXXII. Thus, if we find in the Holy Scripture, with the pure doctrine of God, the true source of all virtues and the most magnificent and powerful ways to lead us there, offered in the most explicit manner, it necessarily follows that this book will contribute to the advancement of our true happiness. And even if one does not want to attribute it to a divine origin, one is at least forced to acknowledge this unmistakable consequence: that the author of this book had not only some distinct ideas on the essence of true happiness, but that he also worked diligently to keep men from all vices and to lead them down the path of virtue. Would it not be just as absurd as it is unjust to want to denounce this author as crazy or even as a liar?

XXXIII. It follows that when authors of sacred texts, sensibly and with an integrity of which we are perfectly convinced, recount things that seem incredible to us, it would be most unjust to reject them simply and absolutely. The Holy Scripture tells us in a detailed manner about several things concerning the miracles performed by people glorying in a divine mission. Despite the incredibility of these miracles, believing in the arguments of the freethinkers, arguments which are born partly from a wild imagination and partly from ignorance, would be even more incredible, for it would mean that God had blinded men to lend support and credence to their masquerade.

XXXIV. The apostles and a multitude of Christians unanimously agree not only that Jesus Christ rose from the dead, but also that they have seen him with their own eyes since the resurrection and that they even communicated with Him. If one has paid attention to the doctrine and to the constancy with which it been maintained, one cannot say with any semblance of truth that one has believed nothing of what has been said in this regard and that it is thus an obvious lie. One would be even less likely to say that the apostles were seduced by false imagination and that their facts were nothing but an illusion. Either that or we will be forced to state that God had miraculously blinded them all at the same time in order to propagate a false doctrine.

XXXV. Using the evidence that the strongest of objections has been long refuted, it seems to me that the considerations I have proposed so far on the purity of the doctrine taught in the Holy Scripture and its perfect harmony with the happiness of man manage to destroy all doubts that incredulity alone is capable of forming, especially if one reflects at the same time on the nature of a true divine revelation which has already been stated. For such a revelation should not be accompanied by evidence that is too great, and it is enough that it includes all that can lead to the salvation of men who want to work diligently towards the reformation of their heart. This destroys without exception all the arguments that form unceasingly on the manner in which the Christian religion is spread throughout the world.

XXXVI. The resurrection of Jesus Christ is also an incontestable fact, and since such a miracle can only be the work of God alone, it is thus impossible to doubt the divinity of the Savior's mission. Consequently, the doctrine of Christ and his apostles is divine, and since its goal is our true happiness, we can be most assured of our belief in all the promises that the Gospel has made to us, both for this life and the one to come, and we can regard the Christian religion as a work of God who is tied to our salvation. It is not necessary to expand any further on these reflections, since it is impossible for anyone, once they are convinced of the resurrection of Jesus Christ, to retain the slightest doubt about the divinity of the Holy Scripture.

XXXVII. The freethinkers cannot put forward anything plausible against this bedrock on which the divinity of the Holy Scripture firmly rests. When they are forced to turn their attentions to this, they do all they can not to address the root of the question. They resort to all

manner of loopholes to change the subject and attack other items, where they claim to find incomprehensible things and even contradictions. Most often, their reasoning does not have to do with the doctrines contained in formal terms in the Holy Scripture but with other writings from which only certain conclusions can be drawn. Although these conclusions are mostly legitimately derived, their process lacks rigor when, in raging against these conclusions, they try to persuade men that they are sufficient to entirely discredit the Holy Scripture.

XXXVIII. When the credibility of a writing is attacked using methods foreign to the bedrock on which the credibility rests, there is a certain indication of hidden malice. To judge by those who behave in this way, if there existed another divine revelation besides the Holy Scripture, they would not be any more inclined to believe in it, since divine truths can never allow any prejudices or passions which guide them. Thus, we can grant the freethinkers that the Holy Scripture must contain things that they do not agree with and which seem unreasonable to them. Contrarily, this agreement between the Scripture's doctrine and the ideas of the freethinkers is one of the most harmful things to the Holy Scripture.

XXXIX. As for the arguments formed by these adversaries and the apparent contradictions they claim are in the Holy Scripture, it would not be useless to begin by remarking that there is no science, no matter how solid its foundation, against which one cannot make objections just as strong or even stronger. There are also apparent contradictions which, at first glance, seem impossible to resolve. But since we are in a position to return to the primary principles of these sciences, this provides the means by which to destroy these arguments. However, when they are not seen through to the end, these sciences lose nothing of their certainty. Why would such similar reasons be enough to remove all authority from the Holy Scripture?

XL. Mathematics is regarded as a science in which nothing is assumed that cannot be derived in the most distinct way from the primary principles of our knowledge. Nevertheless, there have been people far above average who have believed to have found great problems in mathematics, whose solutions are impossible; by this they imagined themselves to have deprived this science of all its certainty. Indeed, this reasoning that they propose is so deceptively attractive that much effort and insight is required to refute them precisely. However, mathematics is not lessened in the eyes of sensible people, even when it does not clear up these problems entirely. So then what right do freethinkers unwaveringly think they have to reject the Holy Scripture because of a few nuisances which mostly are not nearly as considerable as the ones in mathematics?

XLI. In mathematics, one also encounters rigorously demonstrated propositions that, when not examined with the highest degree of attention, seem to contradict one another. I could produce several examples here if their complexity did not require a deeper knowledge of mathematics than I suppose most readers to have. But I can at least say with assurance that these apparent contradictions are much more significant than those that are supposedly found in the Holy Scripture. Despite this, no one suggests dismissing the certainty of mathematics. This doubt does not even exist in those who do not have the capacity required to refute these contradictions and to demonstrate that they do not hold.

XLII. The other sciences have even more such inconveniences. They appear especially when we want to subject the primary principles of our knowledge to a more thorough examination. No one, for example, doubts that there are bodies in the universe. We are equally certain, or not, that they are composed of simple beings. But deciding upon one of these two opinions is so difficult that no one has yet been able to defend one of them in a way that fully

satisfies those who support the opposing argument. If one wanted to conclude that neither of these two opinions represented the truth, it would be necessary to resort to denying the existence of the bodies. Although some fanatics have indeed taken this side, no man who uses his faculties of reasoning would imitate them.

XLIII. We have also seen people who absolutely deny all movement. They say that if a body moves itself, it must be either in the place it currently occupies or in another. The first case cannot happen, for as long as a body stays in its place, no movement can be attributed to it. The second is even more absurd, for how could a body move itself to where it is not? Perhaps there are a few people who are capable of resolving this sophism, but this will lead them to question the very least possibility of movement. Is it not then the greatest recklessness conceivable to utter an unappealable decision against the Holy Scripture as soon as one imagines to have encountered some difficulties whose solutions do not come to mind?

XLIV. Without going into a detailed examination of all the objections to the Holy Scripture, we can draw from all we have said thus far the certain conclusion that the enemies of this sacred book act most unjustly and inexcusably when, because of some difficulties that seem to them impossible to resolve, they dare deny the revelation entirely. Most of them are forced to admit that it would be entirely beyond their capabilities to respond to the objections that mathematics offers against the existence of bodies and the possibility of movement. Yet it has never occurred to them to reject the truth and to contest the existence of these things. Thus, it is a sure sign that the methods they use are not borne out of love for the truth, but originate from another source entirely, an impure source.

XLV. One thing that should be considered is that the Holy Scripture is limited to revealing to us things which we could not reason our ourselves, or at least not without great difficulty; for it would completely contradict the purpose of a divine revelation to only include knowledge that anyone could plainly see. But if the things themselves, which are the result of reason, are examined so closely that they sometimes seem to contain contradictions, then it necessarily follows that the revealed doctrine, which depends on principles superior to those of reason, contain ones that are at least as great and that it would be even more wrong to be scandalized by them.

XLVI. These reflections should well and truly destroy the objections of the freethinkers, but they seem to be much more substantial than they really are. The freethinkers have yet to produce any objections that have not long been refuted most thoroughly. But since they are not motivated by the love of truth, and since they have an entirely different point of view, we should not be surprised that the best refutations count for nothing and that the weakest and most ridiculous reasoning, which has so often been shown to be baseless, is continuously repeated. If these people maintained the slightest rigor, the slightest taste for the truth, it would be quite easy to steer them away from their errors; but their tendency towards stubbornness makes this completely impossible.

XLVII. Moreover, almost everything they find in the Scripture is, for them, a stumbling block, while the completely unfounded tales that other books give them seem very believable to them as long as they are in opposition to the Bible. One thing in particular that to them seems entirely unbelievable is that the world had a beginning and, what's more, that it must have an end. They are afraid that, by admitting these truths, they acknowledge a direct action of God on the universe and on our present state, which is impossible for them to reconcile with the rest of their opinions. According to them, everything can be thought of as the result of ordinary forces

of nature. They believe they are making progress and imagine that they are able to completely deny the direct works of God.

XLVIII. But, thanks to God, we find ourselves at present in a state to fully refute this error, even though there does not exist any revelation on this. The great astronomer Halley has already noted that the moon now completes its orbit around the earth in less time than it used to.³ And if one carefully compares all the observations of the sun that have been made since the most ancient of times up to today, one will notice that the year is shorter today than it once was. We can even determine by how much each year is decreasing in each century, and this decrease can be calculated to within a few seconds. Nor is there any doubt that the same thing has happened with the amount of time the other planets take to complete their orbit around the sun. This phenomenon manifests itself even more distinctly in all the comets that we have had the fortune to observe at various times.

XLIX. We can be even more confident in the results derived from these observations, since they agree perfectly with the natural causes that are clearly known to us. Since the earth and the other planets move in the subtle and thin air of the heavens, they must consequently encounter minor resistance in their movement. Surely if this resistance did not exist, the planets would always follow the same orbits around the sun; but because their movement is slightly slowed by this resistance to the ether, they are less capable of resisting the force that draws them towards the sun and consequently must move closer to this star. This is the cause of the decrease in the planets' orbits, which happens in a way that complies with the laws of motion and which also agrees with our observations.

L. Obviously, it follows that the earth must always be getting closer and closer to the sun. Unless some miracle causes a change in the current state of the world, the earth will finish by being so close to the sun that neither men nor animals will be able to survive. Thus, it is impossible for the world to remain forever in its present state, and there will necessarily come a time when the earth will lose all of its inhabitants. Thus, when the Scripture tells us of the destruction of the earth and of the changes that will take place in the current structure of the universe, there is nothing in it that contradicts reason, as the freethinkers claim; on the contrary, it agrees most exactly with the natural occurrences that we have come to know.

LI. Furthermore, since the earth and the planets were previously located much further from the sun than we observe them today, if the world had existed for all eternity, they would have to have been at distances ten times, a hundred times, a thousand times greater from this star than they currently are. Then there would have been a time when they were closer to another fixed star than the sun. However, according to the laws of astronomy, they would have to have traced their orbit around this fixed star. Given this, it would be impossible for them to have ever

³ The acceleration observed by Halley with regards to the orbit of the moon, and the other variations of the same type that had been observed for other planets, however real, does not increase indefinitely as was formerly believed and as it was entirely natural to believe. But it has been discovered, we are told, that after having increased up to a certain point, they decrease by the same degree, so that everything reestablishes itself in the long run, and our entire planetary system, as Delaplace proved, only deviates slightly from the average state. It follows from this discovery, which had not been made at the time Euler was writing, that his first argument against the eternity of the world was based on a false assumption. But the other argument, which he founded on the resistance the planets encounter while moving through space, is still fully valid; for either space is filled with an extremely thin air, as Euler believed, or, although it is empty according to Newton's theories, it is crossed by threads of light that emanate constantly from the sun and stars. In both cases, the planets must encounter a bit of resistance in their path. However slight, however immeasurable this resistance is supposed to be in a given time, its effect would become very noticeable if the world was eternal. All the conclusions drawn by Euler from the progressive decrease in the movement of the planets remain incontestable.

reached our sun. This provides an incontestable proof that the present structure of the world cannot be eternal, but that it must have been produced at a particular time by the immediate intervention of God.

LII. If one still wanted to object that perhaps, in ancient times, fixed stars were always proportionally further from the sun, so that the planets were never able to be closer to another fixed star than the sun, one would still have to admit that the earth was once so far from the sun that, due to insufficient heat, it was not able to support men or animals. Since no natural cause could ever give rise to these inhabitants on Earth, it incontestably follows that they are the work of God, who created them within a finite time. When freethinkers are forced to recognize the creation and future destruction of the human race, all their objections against religion collapse.

LIII. No matter how obvious and unwavering the principles on which we have just founded the divinity of the Holy Scripture, there is no hope that they are effective enough to save the freethinkers and libertines from their foolish behavior and to make them renounce their evil ways. On the contrary, the Holy Scripture assures us that their impudence will continue to increase, especially towards the end, and the exact fulfillment of this prophecy is not the least of the proofs of the divinity and the revelation. However, I hope with all my heart that these reflections will be the salvation of some people who are not completely corrupted and will return to the right path those who had the imprudence and misfortune to listen to dangerous ideas.

COMPARISON
TO THE LAST EDITION
OF
EULER'S LETTERS
PUBLISHED BY DE CONDORCET,
WITH THE ORIGINAL EDITION

There is no one in the literary world to whom the name Euler, who only died in 1783, is unknown. A physicist and especially a mathematician of the highest caliber, he was the king of the advanced sciences in the North. He was, as De Condorcet said in the *Eloge de M. Euler* [*Praise for Euler*], which was read at the science academy, one of the greatest and most extraordinary men that nature has ever produced, who was more prolific than one dares to expect of human forces, and whose work was nevertheless original each time. A German princess, the niece of the king of Prussia, proposed to Euler that he give her some physics lessons. The scientist willingly acquiesced to his desires, and this was the subject of a series of letters that he wrote to her during the years 1760, 1761 and 1762, which were published – the first two volumes in Petersburg in 1768 and the third in Frankfurt in 1774 – under the title *Lettres à une princesse d'Allemagne, sur divers sujets de physique et de philosophie* [*Letters to a Princess of Germany on Various Subjects of Physics and Philosophy*].⁴ The first volume of these letters were reprinted in Paris in 1787, the second in 1788 and the third in 1789. The titles of these volumes contain the words *new edition with additions by the Marquis De Condorcet*, etc.

A note tells us what characterizes this new edition and what should make it more interesting than the first. *Stylistic errors have been corrected*, it says, and it must be admitted that there were a fair number of them. This is not at all surprising, since it should be noted that Euler was writing in a language that was not his first. There were also some omissions: *these omissions affect mainly the ideas that belong less to science and philosophy than theology, and often even the dogmas of communion, by which Euler lived* (that is, the supposedly reformed Church). *Thus it is not necessary to note why we have omitted them*. The published additions have constituted a fourth volume that we do not know of and which we believe never to have been published⁵, for a very small number of short notes, sprinkled throughout the first three volumes, should not count as additions.

A certain audience believed, and still believes, that there was no other motive behind these omissions than to suppress the ideas that caused Euler to greatly disdain non-believers and to hold a deep conviction for the revelation's truth and to thus eliminate the suffrage and authority of such an illustrious scientist from the Christian religion.

We were curious to compare the second edition with the first and to find out for ourselves if De Condorcet's criticism was warranted. Here is the result of our work, which, besides proving that the academician was not at all faithful to the original text, offers a multitude of thoughts of great interest.

The first letter containing an example of an omission is the eighteenth; it is also the first one that is about religion. Euler believes he has proven that it is a great error to believe Newton's theory that light rays come from a current emanation the sun. He adds, "Newton is without a

⁴ We have in front of us an edition of these letters that says that the first two volumes were published in Miteau and Leipzig in 1770 and the third in Frankfurt and Leipzig in 1774.

⁵ We have learned that it has just been published. It is a purely mathematical work titled *Elemens du calcul des probabilités* [*Elements of the Calculation of Probabilities*], which bears no relation whatsoever to Euler's letters.

doubt one of the greatest geniuses that has ever lived. His profound science and his penetration into nature's most hidden mysteries will forever remain the most brilliant objects of our admiration and posterity. But the errors of this great man should serve to humble us and to demonstrate the weakness of the human mind, which, having been elevated to the highest degree of which men are capable, nevertheless run the risk of running into the greatest mistakes.”

In the second edition, the eighteenth letter ends there; but here is what is also included in the first:

“If we are prone to such sad mistakes in our research on the phenomena in this visible world, a world which we can sense, how unfortunate would we be if God had abandoned us to ourselves with regards to the invisible world and our eternal salvation. On this important point, a revelation is absolutely necessary to us. We should make the most of it with the greatest veneration; and when this revelation presents us with things that seem inconceivable, we have but to remember the weaknesses of our mind, which strays so easily, even for the visible things. Each time I hear these freethinkers criticize the truths of our religion and even mock it with the most impertinent self-importance, I think and say to myself, “Puny mortals, no matter how lightly you gloss over these things and how many you ignore, they are more sublime and elevated than those on which the great Newton was so grossly mistaken. I hope that Your Highness never forgets this thought; the times when you are in need of it come all too often.”

Whether the light emission system that gave rise to this thought by Euler is a great error or a great truth is of little importance now. The thought is no less wise, nor less interesting for it. This reflection does not belong to *theology* per se, either Catholic or Protestant; it falls clearly in the domain of philosophy. The title of Euler’s work calls them letters on questions of philosophy and physics. Thus, we do not see what honest and reasonable motive one could have given for suggesting this omission.

In the twentieth letter is an omission that is admittedly not very significant when considered alone, but which indicates a certain attempt not to name the characters whose existence is only known to us through the Holy Scripture.

Euler proves that although a beam of light leaving the sun takes only eight minutes to arrive to Earth, that is, to cross a distance of 36 million leagues, a beam of light leaving the star closest to Earth will, because of the Earth's distance from this star, take about six years to reach us. Thus, when we see a fixed star that is the brightest and consequently probably the closest one to us, it is a truth to say that the light that we see, which represents this star, left it about six years ago.

Euler continues, “If, at the beginning of the world, the stars had been created at about the same time as Adam, he would not have been able to see even the closest ones for six years; he would have had to wait even longer before discovering the others, since they are even farther from the Earth.” This entire last sentence was omitted, and it can be presumed that this omission was made for no other reason than the fact that it mentioned Adam as the first man in the world.

The twenty-first letter again supposes the prodigious distance between the stars and the Earth. Euler observes that if a great noise, such as that of a canon, produced on the star closest to Earth, could be transmitted to us, it would take 5,400,000 [illegible] for it to reach our ears. He goes on to say that it is very likely that the stars that seem the smallest to us are ten times farther from us, or even more, than those that are brightest and that are probably the closest. From this he concludes that it would be an entire century before the light from these stars reached us. If, right now, such a star were destroyed or even merely eclipsed, we would continue to see the star for the next hundred years, since the last rays of light that left it would not reach us until then.

Here is Euler's postscript: "We usually form ideas about the world that are too small and too limited. These minds that believe themselves to be so strong see this world as a work of little importance that pure chance would have been able to produce and that barely merits their attention. Your Highness would agree that these same minds, however strong they believe themselves to be, are very limited intellects, and Your Highness will be greatly moved by the most profound respect for the great sovereign whose power extends in such an immense space where everything inside it is subject to His absolute power. But what admiration we should have when we consider that all these immense bodies that exist in the world are arranged according to the greatest wisdom so that the more knowledge we gain about this world, however infinitely imperfect it always is, the more we discover in this knowledge subjects whose order and perfections we admire. In comparison with all these bodies and works, in which even our admiration goes astray, what is this Earth we inhabit? A veritable nothing. And yet we experience every day the most dazzling marks of a providence specific to the great master of our universe. The eloquence escapes me for demonstrating these things in all their grandeur. Your Highness will compensate for it by the thoughts that she can make herself on objects of such importance."

This is a piece that would not be out of place in the writings of Plato, Cicero or Seneca and that thus does not belong to theology per se; yet the editors omitted most of it.

The forty-first letter opens with this important thought: "I am now capable of explaining to Your Highness how vision comes to be in the eyes of men and animals, which is undoubtedly the most marvelous thing the human mind has ever been able to achieve, though it requires much of us to understand it perfectly. However, the little we know of it is more than sufficient to convince us of the omnipotence and infinite wisdom of the Creator. These marvels should delight our minds and make them adore the Supreme Being. We recognize in the structure of the eyes perfections that the most enlightened mind could never improve upon. The most skilled artist could never invent a machine of this type that was not infinitely inferior to what we discover in the eyes, even if we allowed the artist to fashion the material however he wanted and gave him deepest insight man is capable of."

We cannot criticize the new editors for having omitted this article, but we can criticize them for having lost a significant part of its force and energy through these deletions and corrections.

The letter ends with a pious reflection of the same genre, but it is not found in the new edition.

Euler, after having observed that rays of light that form images of objects at the back of the eye stimulate the small nerves of the retina, and that this stimulation is transmitted further by the optic nerve to the brain, and that this is doubtlessly where the soul perceives the image, adds that the most clever anatomist is not capable of following the nerves to their origin. This will forever remain a mystery to us, a mystery that includes the link between our body and soul. He concludes: *However one envisions this link, one must recognize it as the most dazzling miracle of God's omnipotence, a miracle that we could never improve upon. Freethinkers, who reject all that their limited intellects cannot comprehend, must be confounded by this thought!*

This thought has been omitted.

These types of thoughts and conclusions should not be looked down upon by men who are wise and true. These thoughts serve to undermine the foundations of the objections to the mysteries of the Christian religion, objections that non-believers base principally on their incomprehensibility. These thoughts also further demonstrate the faith in mysteries and the

sincere zeal of the author of Letters to a Princess, a zeal and faith that are all the more remarkable for the fact that he was writing in a city where, as he himself observed to the princess, *people mocked the truths of religion with the most impertinent self-importance.*

We have several minor observations to make on the beginning of the forty-third letter, but we do not want to be suspected of being punctilious; we are content to say that we do not see any plausible reason whatsoever for the editors to omit, towards the end of the letter, a statement by Euler, who, after having proved the infinite wisdom of God in the construction of the eye, exclaims, *What a fine object of admiration; the psalmist was only too right to have led us to this important question: Would He who made the eye not be able to see? And He who made the ear, would he not be able to hear?*

But we are truly justified in criticizing an omission that took place in the body of the forty-fourth letter. Euler, who never tired of repeating and proving that the eye infinitely surpasses all the machines that human skills are capable of producing, adds the following, which disappeared entirely from the new edition.

“However, atheists have the audacity to maintain that eyes, as well as the entire world, are but the product of chance. They find nothing in it that merits their attention, they acknowledge no mark of wisdom in the structure of the eye. Rather they believe to be very right to criticize its imperfections, because they can see neither in the dark nor through a wall, nor distinguish the smallest objects on bodies far away, such as the moon and other celestial bodies. They proclaim that the eye was not made on purpose, that it was formed by chance, like silt encountered in the countryside, and that it is absurd to say that we have eyes in order to be able to see; rather, we should say that, having received eyes by chance, we take as much advantage of them as their nature allows. Your Highness will be indignant to learn that such beliefs exist, and yet these are all too common today among people who believe they alone are wise and who loudly mock those who find in the world the most prominent signs of a Creator who is sovereignly powerful and just. It is useless to get involved in a debate with these people. They remain unshakable in their belief and deny the most respectable truths. What the psalmist says is true: Only fools believe in their heart that there is no God.”

There is most certainly nothing in this passage that touches on theology. There are only atheists painted with colors that suit them and treated with a severity that they deserve all too well.

The forty-fifth letter presents a unique substitution. Euler assumes that all bodies that we know have mass: *I say, Euler continues, that we know, for maybe there are bodies without mass, like the bodies of angels who appeared long ago.* The editors omitted this example and cite in its place other bodies as possible exceptions to the general law of mass. *Some examples may be, they say, light, elementary fire, electric fluid and magnets.* Whatever these bodies may be, this omission and substitution, which is not noted anywhere, are veritable infidelities, and we can confidently suspect that the editors did not want readers to know that Euler believed in the existence and real apparition of angels and, consequently, the truth of the Holy Scripture, which is the only source that vouches for their existence.

In the forty-eighth letter, the editors have omitted a joke about antipodes, which was uncalled for. There is nothing to criticize about this omission; but there is in the same letter an omission that they did not make and that they should have made if they had been more logical and knowledgeable. I say *more logical* because the omitted passage seems to be theological, and these gentlemen had intended to omit all passages of this kind. I say *more knowledgeable* because the fact which Euler assumes and cites is nothing less than an unrelenting fact. Euler

repeats, according to several Protestant authors, that *the feeling towards antipodes encountered contradictions* such as the fact that *some fathers of the Church consider it to be a great heresy and declared it an anathema against those who believed in the existence of antipodes*. There is more, and we can even guarantee that the fact is false. Some fathers did believe in antipodes, which were believed in by all uninformed writers and by all men of their time. But when they thought that the sentiment that established the existence of antipodes could be dangerous and contrary to the Scriptures, it was not exactly because there would have been men who opposed us; it was because the defenders of this belief seemed to assume that there was not and could not be any communication between us and the antipodes. Thus, it seems that one might be right to conclude that there was a race of men on Earth whose origin was not the same as ours, which would effectively contradict the Holy Scripture.

Leibnitz was wiser on this point and more equitable than these Protestant writers, though he was Protestant himself. He thinks and proves in his new *Essays on Human Understanding* that this alleged heresy of antipodes is a lie.

But this lie tends to discredit the Holy Father; this is a reason to preserve it.

In the sixtieth letter, Euler speaks of the plurality of worlds, and he observes that several philosophers maintain that the one that exists now is the best of all possible worlds that could exist. These philosophers, says Euler, imagine God to be an architect who, wanting to create the world, tried several plans, all different. From these plans, He chose the best, the one in which all perfections were united to the highest degree, and He created the one that was preferable to all others.

Then he added: *This belief seems to be confirmed by the story of creation, where He expressly states that it was good*. The editors omitted this sentence. Again, it is difficult not to suspect that this omission, in conjunction with so many others, is part of a formal plan not to leave anything in Euler's letters that has to do with the revelation and which demonstrates the author's faith in the divine Scriptures.

We come to the second volume of letters. First of all, here is a general observation: In the first volume, the editors meticulously removed everything that had to do with religion or the revelation. But they were surprised and forced to restrain themselves when they came to the second volume and examined its contents more closely; for in the second volume, there are a very large number of letters absolutely outside of physics, in which Euler addresses only questions of metaphysics, which are fundamentals or bases of religion. The editors were forced either to leave the letters as they were or, by omitting them, noticeably shorten the text that they were reintroducing to the public; they chose the former. But how many odious omission and infidelities may we also criticize in the second volume. We say *infidelities*, as we must call these omissions which left the public unaware of how profoundly convinced Euler was of the truth of Christianity, the extent of his zeal for religion and his scorn for the new philosophers.

The subject of the first letter of the second volume is the nature of the mind. The editors did not omit the part about Euler's objection to materialism and his teachings on the distinction between the body and the mind. They would have had to omit the entire letter; however, they permitted themselves some rather significant omissions.

Euler said that some philosophers believed that matter could derive the ability to think through a certain arrangement of its parts. He refutes them and adds the following, which the editors omitted: "Other philosophers, not knowing what to think, believe that it is entirely possible that God gave matter the ability to think. It is these same philosophers who insist that God gave bodies the ability to attract each other. Since the fact of bodies being attracted to one

another would be the same thing as saying God actively pushed the bodies towards each other, we have proved in the preceding letters that it would be the same if the ability to think had been granted to bodies. This would be God Himself who was thinking and not the bodies. But I am completely convinced that I think on my own, and nothing could be more certain than that. Thus, it is not my body that thinks through an ability that was granted to it, it is a completely different being: it is my soul that is my mind.”

It seems to us that this reflection was done to please faithful editors. Undoubtedly, the following thought, which disappeared from the new edition, will be judged just as favorably. “Some ask what a soul is... Similar questions are asked by materialists, who are still proud to call themselves freethinkers, though they want to ban the existence of souls, that is, intelligent and reasoning beings, from the world. But all this imaginary wisdom in which the self-proclaimed freethinkers bask, wanting to distinguish themselves from ordinary people, this imaginary wisdom, as I call it, originates from the tedious manner in which they have pondered the nature of the body, which is not so glorious. Often, they even vaunt their ignorance and say that we know next to nothing about bodies. Thus, they add, it is entirely possible that a body thinks and performs all the functions that people regard as the sharing of souls. It would be quite superfluous to want to further refute this bizarre belief after the clarifications that I have had the honor of presenting to Your Highness.”

All the following letters, up to the ninetieth, cover the union of the soul with the body, the freedom of man and the origin of good and evil. We recognize with pleasure that, in general, the editors have respected these letters. But why did they not leave alone this short sentence which ends the eighty-ninth letter: *All religion, whose only goal is to lead man to salvation, is founded on the providence of God, which extends to each and every individual.* Above all, why did they remove the following observation from the beginning of the ninetieth letter? Before continuing his thoughts on philosophy and physics, Euler stated that it was of great importance to note the connection with religion. He adds the following, which we are vexed to find was removed from the old edition.

“However bizarre and absurd a philosopher’s beliefs, he is so stubborn about them that he does not admit any belief or dogma in religion that does not conform to his system of philosophy. It is from this that most of the sects and heresies in religion originate. Several philosophical systems contradict religion greatly, but divine truths would prevail over human daydreams if the pride of the philosophers did not pose an obstacle. But if true philosophy sometimes appears to contradict religion, this contradiction is only apparent; one must never allow oneself to be dazzled by objections.”

Again in this letter there is an omission that is possibly even more significant, though it affects only one sentence.

Euler responds to non-believers’ objection to prayer which rests on the argument that God would be forced to constantly change the course of things that had been decided since the world began and to perform continuous miracles to answer the prayers that the faithful address to Him. He says that God, having foreseen and heard our prayers for all eternity, and having often judged them worthy of being answered, has purposely organized the world as a consequence of these prayers so that their fulfillment is in the natural course of events. Thus, he continues, God answers the prayers of the faithful without performing miracles: *though there is no reason, he adds, to deny that God has performed, and sometimes still performs, true miracles.* It is this last sentence that the editors have omitted.

The ninety-first letter offers an excerpt that could be said, with a certain degree of truth, to belong to theology, though in the end it still lies in the realm of philosophy. The editors, following the pattern of omissions described, seem to have felt justified in leaving out this excerpt. However, this excerpt, which addresses the manner in which God converts sinners and influences the will of man, does not come from Protestant theology. On the contrary, it formally contradicts the rigid Calvinism which De Condorcet claimed that Euler constantly professed.

In the ninety-sixth letter, Euler speaks of certain philosophers, whom he calls *idealists*, who deny the existence of the body, and of others who go even further and claim that nothing exists except their soul. Euler notes that these philosophers are the opposite of *materialists*, who deny the existence of all souls, maintain that everything that exists is matter, and believe that what we call our soul is no more than very subtle matter and is consequently capable of thinking. Speaking about the beliefs of materialists, Euler adds: *This belief is much more absurd than that of the [idealists]. There are invincible arguments to counter them.* We have searched for a reason why the editors omitted this phrase, which demonstrates so well the extent to which Euler believed materialism to be absurd. We have not been able to discover any other reason than the garnering of attention for the materialists who deserve so little of it.

The letters that follow, up to the one hundred and ninth, address ideas, language, syllogisms and their forms and styles. Then Euler continues with the origin and permission of evil. He says in the one hundred and eleventh letter:

“Sin is without a doubt the greatest evil and imperfection that can exist. Indeed, with regard to souls, there is no greater disorder than when they stray from the eternal laws of virtue and give themselves over to vice. Virtue is the only way to make a soul happy, and it would be impossible for God to make a vicious soul happy. Any soul given over to vice is necessarily unhappy, and as long as it does not return to virtue, *which may very well be impossible*, its misfortunes can never be ended. This is the image I have of devils, of evil souls and of hell, which seems to me to be very much in agreement with what the Holy Scripture teaches us about them.”

The above remains in the new edition, except for this short phrase, *which may very well be impossible*. This phrase, however, is far from insignificant, for it is easy to see by it that Euler does not want to allow anyone to suspect that his belief, normally so wise and philosophical, is in opposition to the orthodox faith, which teaches us that devils cannot return to, or at least never will return to, virtue.

Euler continues, “Freethinkers make fun when they hear devils being discussed, but since men cannot claim to be the best of all thinking beings, neither can they boast about being the most evil. Undoubtedly there are beings much more evil than the most evil of men, and they are what we call devils.”

We have no serious quarrel with the editors on this excerpt. We only make two or three small observations. The first is that in the first phrase “sin is the greatest evil,” they have substituted the word *crime* for *sin*. Apparently, the latter word seemed too bourgeois and ecclesiastic for them. The second is that in every instance where Euler has written *devils*, they have substituted the word *demons*. Indeed, the second word is less harsh and less frightening than the word *devils*. The third is that, in this excerpt, the editors have allowed the name *freethinkers* to remain, apparently by mistake; for this name, which Euler ordinarily and quite frequently uses to designate non-believers, had, up to that point, been systematically removed.

The one hundred thirteenth letter ends with these important conclusions that are very surprisingly missing from the new edition.

“Through the abuse of all these paths that should lead us to virtue, we become more and more vicious, and we stray from the only path that leads us to happiness.

“Thus we understand the truth of the dogmas of our holy religion, which teaches us that sin distances men from God and makes them incapable of attaining true happiness.

“We are only too convinced that all men are steeped in sin and that the ordinary motives provided by events in the world would not be enough to free us of its holds. Thus, it was necessary to use extraordinary methods to break the chains that attach us to vice, which is what the infinite grace of God did when he sent us our divine savior. It is a mystery too deep for our feeble enlightenments. But although non-believers find rebuttals, experience clearly shows us that it is a very good way to lead men back to virtue. One only has to look at the apostles and the first Christians to be convinced. Their lives, their deaths, and especially their suffering shows us not only the most sublime virtue, but also the purest love of God. This alone is enough to show us the truth and divinity of the Christian religion; for it is most certain that the work and effect of some illusions or of some guile of men cannot make us truly happy.”

Fairness obliges us to say that the editors left the following letter, the one hundred and fourteenth, intact but that the preceding excerpt was eliminated and squeezed almost entirely into it, following Euler’s habit of repeating the previous letter in the next one and emphasizing the most important parts. But it would have been very difficult for the editors to have acted differently without greatly changing the letter or omitting it entirely. At least there is always room to complain that the omissions that the editors judged appropriate to make are generally only applied to the excerpts that speak of the revelation.

In the one hundred fifteenth letter, and in those that follow, Euler makes the most judicious and important observations on the different kinds of certainty. There are three classes of truths, he says, which are the sources of all our knowledge. The first is the truth of the senses, that is, the truths we discover through our senses. The second is the truth of understanding, that is, the truths we discover through reasoning. The third is the truth of faith, that is, those that we believe based on the teachings of people worthy of faith. It is difficult to say, observes Euler in the one hundred sixteenth letter, “which of these three sources contributes the most towards increasing our knowledge. For Adam and Eve, it seems that they only drew their knowledge from the first two sources. However, God revealed to them a number of things, the knowledge of which should be credited to the third source, since neither their own experience nor their reasoning led them to it. Then the devil imparted new ideas to them and Adam believed the knowledge given to him by Eve.” All of these latter sentences disappeared from the new edition.

Euler remarks in the same letter that for truths of each of these three classes, we must be content with the proofs that are appropriate for the nature of each one and that it would be ridiculous to demand a mathematical proof of experiential or historical truths. *It is ordinarily*, he continues, *a fault of the freethinkers, and of those who abuse their insight into the intellectual truths, to demand mathematical proofs to prove all the religious truths that belong mainly to the third class.* The editors have retained this article but have omitted the words “*It is ordinarily a fault of the freethinkers.*” For what purpose? It is easy to see.

But in the following letter, the one hundred seventeenth, we see a more affected omission.

In this letter, Euler responds to the Pyrrhonians’ objection to the certainty of truths perceived by the senses. Sometimes our senses fool us. And thus, Euler notes, *these subtle philosophers, who boast about doubting everything, draw the conclusion that we can never trust our senses. But, Euler says, it has happened to me more than once that in meeting a stranger in*

the street, I take him for someone that I know. Then, since I am mistaken, nothing prevents me from always being mistaken. Consequently, I can never be sure that the person I am speaking to is actually who I imagine him to be. He cites some other examples of equally absurd conclusions and continues, “*What conclusions! Yet these are natural conclusions drawn from these philosophers’ beliefs. Your Highness will easily understand that they not only lead to the greatest absurdities, but that they also contradict all the fundamentals of society.*” What follows directly after, and which ends the letter, disappear from the new edition.

“Yet it is from this source that these freethinkers form their objections against religion. Most of these objections are based on this wonderful piece of reasoning. There are examples of someone mistaking one man for another, and thus the apostles were also mistaken when they said they saw Jesus Christ after His resurrection. In any other situation, they would be mocked for their false spirit, but when it comes to religion, they have all too many admirers.”

Thus ends our task of comparison. The second volume which follows and the entire third volume do not address religion at all and consequently do not contain anything that could give rise to any omissions.

But there are enough to recognize the fidelity with which the editors executed what they announced in their warning. *As for the omissions, they said, they concern almost exclusively reflections that belong less to science and philosophy than to theology, and often even to the communion dogmas by which Euler lived.*

We have looked at all these omissions and we see firstly that there are none that belong to theology, that is, to this science that draws its conclusions from principles revealed and for which our new philosophers would like to inspire so much scorn. All these conclusions are the result of natural philosophy or present only the author’s simple testimony to Christianity. Secondly, there are absolutely no omitted reflections that belong to the dogmas specific to the Protestant religion; for if there were one, it would be in the ninety-first letter, which speaks of the *conciliation of the liberty of man with the omnipotence of God in the conversion of sinners*. In fact, the path of conciliation opened by Euler is far removed from the belief common to Protestant theologians and ends with Molina’s and Suarez’s system. Thirdly, the editors wanted to fool the public in regards to the type of omissions they took the liberty of making; or perhaps when they wrote their warning, the omissions had not yet been made and they had not read all of Euler’s letters carefully enough. But the ulterior conclusion is that we were right to believe that the editors would very much have liked for Euler’s Christianity to remain unknown and to relieve non-believers of the weight of his authority which burdens and disconcerts them, because it is impossible to renew here their ordinary accusation of weakness and smallness of spirit. Euler’s example, along with those of so many top-notch scientists, demonstrates with evidence that one can combine the deepest conviction of the revealed truths with the most insightful genius and the vastest knowledge.

Yet what shame that, in defending their cause, our philosophers are reduced to using such deceptions, which are as contrary to honesty as they are to good faith. How these unworthy ruses reveal the little confidence they have in their methods. Euler’s works are not the only ones from which people have tried to eliminate all traces of Christianity. Those of Linnaeus, Newton, Bacon⁶, etc. contain equally scandalous examples.

Moreover, only those who know Euler only through his writings in physics and mathematics could have a hope of having hidden from them his religion and Christianity. People who have some knowledge of his private life are certain of it. De Condorcet himself, in an ode

⁶ See *Les Annales philosophiques* [*The Philosophical Annals*], 1801, volume III, page 208.

he wrote and which he published several years before the new edition of the *Letters*, was forced to attest to it. Euler, he said, *was very religious. While he maintained his beliefs, he would gather his children, his servants and those of his students who lived with him, for group prayer each evening. He would read them a chapter of the Bible and sometimes accompanied this reading with an exhortation.*