the *materia prima*, but for the opposite reason. The latter was only one side of substance, *i.e.* something imperfect. The former, again, is composed of many substances. It is not *substantia*, but *substantiæ*, and, though it is regarded as a substance, it is only a *substantiatum* (*ad Des Bosses*, p. 440; *à Montmort*, p. 736). Such a combination of non-extended simple substances becomes extended through our perception of it, which is confused. We see the milky way or a cloud of dust as *continua*, because our eye is not sharp enough to distinguish clearly the individual stars or particles of dust. Similarly, through our confused perception of a number of simple things, there arise within us, in the first place, those *entia mentalia*, space, extension, which are no more real than time is, but are mere *ordines coexistendi* (*à Bayle*, p. 159; *à Clarke*, *passim*), and in the second place, extended bodies, which must be called *entia semimentalia*, *phænomena bene fundata*, because, like the rainbow, they have a real cause, though they only assume the form in which they appear to us, through our confused perception of them. (Particularly the letters to Des Bosses.) Just as the presence of another eye increases the number of the rainbows without a drop of water being added, so, in order to make the number of bodies larger, God only requires to raise some monads to the level of souls with a power of apperception. Bodies, therefore, are combinations of monads viewed as extended. They are phenomenal. Like them, motion too, or successive change of position, is a phenomenon, an appearance (*De phæn. real.*, p. 444; *à Bayle*, p. 159). The phenomena of bodies in motion, which are distinguished from our dreams by their conformity to laws, are therefore most assuredly not real in the aspect in which we view them; and what we ought to say is, that the phenomenon of a collision of bodies is always followed by the phenomenon of a combined motion. Instead of this, Leibnitz uses the language of those who see in motion a reality, saying that the modification of the motion is the result of the collision; and he puts forward as an excuse the fact that even a Copernican speaks of sunrise (*ad Des Bosses*, p. 435). But further, just as the phenomenon of greater or less extension has its ultimate ground in the real distinction between a larger or smaller number of monads simultaneously perceived, so too more or less motion will manifest itself according as the phenomenon is occasioned by more or less of motive power and its effect. It must not, however, be forgotten, that exactly

as two bullets, when melted into one, produce certainly a larger surface, but not one equal to the sum of the two previous surfaces, so the motion is not to be regarded as the measure of the motive power, or as at all equivalent to it. This is the great mistake of Descartes, whose fundamental law, that the sum of motions always remains the same, is very easily disproved by experiment. For, if it were true, a *perpetuum mobile* would present no difficulty. What remains always constant is only the sum of the motive power, further, as readily results from this, the activity of that power, the *action motrice*, and lastly, what Descartes seems to deny when he attributes to the soul the power of directing the body (§ 267, 7), the sum of the directions in which the power works (*ad Bernoull.*, p. 108; *Théod.*, p. 520). Since all conditions of bodies proceed from the activity of the motive power, it is perfectly justifiable to treat all corporeal processes, even such as are organic, from a mechanical point of view. Only it must not be forgotten that the ultimate ground of those fundamental mechanical laws lies in their being adapted to an end, so that they themselves can only be proved teleologically. The only true point in the polemic against all teleology is, that, in considering individual phenomena, one must not be too ready to pass over the (intermediate) causes that bring about the effect mechanically. On the other hand, to confine oneself absolutely to efficient causes, means to render impossible the understanding, not merely of what these depend upon, but also of many particular phenomena.

4. There may be an aggregate of monads in which one mirrors all the others in various degrees, but much more clearly than each of these represents its own condition and that of its neighbours. If so, there is in this aggregate a repetition to some extent of the relation between the two elements constituting substance. All the rest taken together are called *materia* (*secunda*, to distinguish them from the remaining monad), or body; the monad that perceives more clearly is called the entelechy of the body, which is itself said to be a living thing and, if its entelechy be a soul capable of sensation, an animal (*Monadol.*, p. 710). This connection, however, does not alter the fact that it is impossible for the one monad to exert anything but a purely ideal influence upon the others (*Monadol.*, p. 709). Further, the relation of soul and body can only be a harmony between the two, in which the motions pro-

duced by the automatically working body correspond exactly to the ideas that the spiritual automaton calls forth from within itself (*Monadol.*, p. 711). Nor is it necessary to have recourse to the desperate expedient of a continual miracle, which the Occasionalists adopt (*Théod.*, p. 521). We can, however, speak of a controlling and many controlled monads, of an active and many passive monads, if by the former we understand that one in which the cause of all the changes of the whole may be read more clearly than in any of the others, and by passivity, on the other hand (like Descartes and Spinoza), simply obscure and confused perception. Leibnitz is never tired of contrasting his own view with the common doctrine that the body exercises an *influxus* upon the soul, and conversely, as well as with that of the Occasionalists, which assumes that a continual miracle is being performed. His own theory is, that body and soul stand to one another in the relation of two clocks that keep good time. Their dials always indicate the same thing, although there is no real connection between them and no interference from without. Here, too, he goes on to emphasize the fact that this harmony is determined by God; and thus it happens that where Leibnitz speaks of pre-established harmony, he only means, as a general rule, that between body and soul, not that of the universe. Like every other, the animated body is never at rest. Rather, new monads are continually passing into it, others passing out of it. It presents a constant picture of change, like a river or a waterfall, or the ship of Theseus, that was always kept in repair (*Nouv. Ess.*, p. 278). And this change is mirrored in the soul that controls it. But a real metempsychosis, a sudden separation from one heap of monads and association with another, is a breach of continuity and therefore impossible (*Monadol.*, p. 711). Nor is a complete separation of body from soul any more possible (*Princ. de Vie*, p. 432). Rather, as birth is an unfolding of the already animated germ, so death may be a folding up into a condition analogous to the germ. But Leibnitz will not hear of the soul being connected with any definite part of the body (*Nouv. Ess.*, p. 278). It appears as if, even in their very earliest state, the monads from which human souls are developed, differ from all others, although it cannot be said that it is inconceivable that promotion to this higher rank takes place (*Théod.*, p. 527). The fact of their being under the control of one monad shows

clearly, since the harmony existing between the others has become in it something felt or even known, that the union is more intimate than that between the water-drops of a rainbow. A living body, therefore, evidently approximates more to a *unum per se* than does a dead one, which is a mere *unum per accidens*. Leibnitz cannot help admitting this. It is chiefly in his correspondence with Arnauld and with Père Des Bosses that such expressions occur as, that living things are more than mere phenomena; that there is here an additional element that transforms them into something real, a *realizans*, which, in the letters to Des Bosses, is called a *vinculum substantiale;* that on this account, while every mere body is *substantiæ*, or a *substantiatum*, a living body is also a *substantia* (*composita*). The occurrence of these and many similar expressions in those two sets of letters, in which the question of the Eucharist is always put in the foreground, have led many to the too hasty conclusion that this whole theory is nothing but a concession to the Catholic dogma. It is forgotten, that with Leibnitz the real presence of the body of Christ in the Sacrament was a matter of deep personal interest, and, what is still more important, that, quite apart from this question, he speaks elsewhere of the controlling monad being *centre d'une substance composée* and *principe de son unicité* (*Princ. de la Nat.*, p. 714); and on July 9th, 1711, writes to Wolff: "There are as many substances (*i.e.* composite substances) as there are organic bodies; inorganic bodies, on the other hand, as well as the fragments of an organism, are merely aggregates, merely phenomena." It was probably to a very large extent the firm hold he kept of the law of continuity and analogy, that led him to see in the relation between the two elements that constitute (simple) substance, the differential coefficient, so to say, of the relation between body and soul; in fact, that often makes him treat *materia prima* as the differential of the body, and *entelechia prima* as that of the soul, when he says that the former is the unity of the one, the latter of the other side, of all the elements of the living thing (p. 680). If, however, this analogy between the individual monad and the living thing be maintained, not merely does the latter become something that is really of the nature of substance, but conversely, we shall now be able to look in every individual monad for the germ of what is peculiar to the living thing. This (retrogressive) analogy, which leads to the posi-

tion that monads are corporeal, is all the more readily suggested because *materia prima* and *materia secunda* both depend upon the confusion of perceptions—the former upon that which belongs to the monads themselves, the latter upon that which belongs to him who observes them. If this distinction be forgotten, even Leibnitz himself may speak frequently, *e.g.* against Cudworth, exactly as if not merely *materia prima* but also a corporeal nature belonged to the individual monad. Leibnitz's theory certainly appears more comprehensive and more consistent if we leave out of account all the statements that affirm the substantial nature of a composite body or the possibility of a *substantia corporea, i.e.* of a *substance composée*, if bodies are conceived of as phenomena simply (as he always maintains that those beneath the animal stage are), and if nothing is said of the monads being corporeal, but always only of their being material. But no exposition of any system has a right to make it more consistent than it really is, although those who expound Leibnitz have taken this liberty. Most of them do so in the manner indicated, and omit, or at best pass lightly over, everything that does not accord with the view that bodies are merely phenomenal. To such an extent is this customary, that many regard it as obviously correct, and have not noticed the difference between these partial expositions of Leibnitz's theory and the one given by Kuno Fischer. He starts from a point diametrically opposite, and begins by asserting that every monad is an animated body. Reasoning from this, he says of every animated body, whether plant or animal, that Leibnitz sees in it a monad. In spite of the ability with which this is elaborated, it is only made possible by sacrificing, to an unwarranted extent, the letter of Leibnitz to the spirit. In treating of *substance composée, vinculum substantiale*, and pre-established harmony (2nd ed., p. 389), Fischer expressly states that the question merely relates to the elements in each single monad, not to the mutual relations between the monads. In saying so, he overlooked the fact that Leibnitz *never* introduces those conceptions except when he is dealing with the relation of a controlling monad to an aggregate of lower monads. Fischer's way of looking at the matter is wrong. But his error is like one of Bentley's. There is more to be learned from it than from ten expositions that are more nearly correct.

5. Closely connected with the biological theories we have

been considering, are those on mental philosophy, which nowadays are comprised under the name psychology, but which Leibnitz called *Pneumatics*. This subject is discussed principally in the four posthumous books of *Nouveaux Essais*, etc. (pp. 194–418), which criticize Locke's *Essay* chapter by chapter. (In what follows, exact references will be given only in the case of statements made elsewhere than in this work.) The human soul, too, is a monad, but it is distinguished from the soul of the lower animals by the very fact that the body it controls is a much more delicately organized machine than the bodies of the lower animals. A more important difference, however, is that its perceptions are clear. It can distinguish them from each other and from itself; and in this way it becomes conscious, is for itself what the other monads were for the eye that observed them, or, reflects its own activity (*Princ. de la Nat.*, p. 715). By means of this reflexive activity the mere individual is transformed into a person, the self into an Ego; the creature of nature becomes an integral part of the moral world, in short, the soul becomes a spirit. In this latter stage, perception is changed into thought and knowledge, effort into will. Confining ourselves for the present to the former of these, the speculative aspect of mind, we see that in spite of this advance we are not to assume any breach of continuity or any *vacuum formarum* between animal perception and human perception. For the former, by the help of memory, can rise to a power of association, in virtue of which it appears to us intelligent. Now, the human mind, wherever it is under the guidance of mere experience, that is, during a great part of its existence, is on exactly the same level. Only, the mind contains the groundwork of a knowledge based upon principles, which is not the case with the lower animals. These principles, therefore, are innate in the mind as a groundwork; and Locke's figure of a *tabula rasa* is misleading, besides being inconsistent with the ideas drawn from reflection, which he himself postulates. His Peripatetic aphorism: *Nihil est in intellectu*, etc., must be supplemented by the additional clause: *excipe nisi ipse intellectus*. Nor is Descartes' doctrine of innate ideas correct. According to his view, nothing exists in the mind except that of which it is clearly conscious, while as a matter of fact those principles are contained in the mind *virtualiter*, and do not come into consciousness until they develop themselves automatically from this groundwork. If

we alter Descartes' expression in this sense, we must say that, as nothing can enter into the soul (inasmuch as it is a monad), all ideas are innate in it, that is, drawn from the innate groundwork and activity of the soul. This is true even of sensations; and Locke's theory of secondary qualities is a virtual acknowledgment that sensations are really thoughts. (It is interesting to recall the way in which Condillac subsequently reverses this statement, *vid.* § 283, 4.) The unconscious, infinitely small, or obscure perceptions from which consciousness first proceeds, are, according to Leibnitz, quite as important for "pneumatics" as the small corpuscules are for physics; and even less attention is paid to them than to the latter. This statement he justifies by his claim to have explained through them the harmony between the material and the moral world, the kingdom of nature and of grace. By the monads being conceived of as percipient powers, the elements of the material world were raised into close proximity with things spiritual. Similarly, by means of its obscure, unconscious perceptions, the mind stretches down into the material world, and the continuity of the two worlds is assured. Just as the individual constitution of the bare monads lay in the element of limitation, the *materia prima*, so here too the ultimate ground of individuality is made to consist in these unconscious perceptions, *i.e.* the obscure side of the life of the soul. Genius, disposition, feeling, are the words employed by a later generation to describe what Leibnitz calls the *je ne sais quoi*, through which each one is by nature moulded to some special form. It is only by adopting this view of infinitely small perceptions, that we can understand how we have thoughts at the moment of our wakening; we always continued to have thoughts, but we had none which stamped themselves on our memory and remained in our consciousness. Without them we cannot explain a single idea that occurs to us, nor that condition of partial slumber which we call bewilderment. Any one who possesses this key to psychology, must consider the assertion that there are intervals in which the mind ceases to think, as false as the one that any body is at absolute rest. Midway between these obscure perceptions and the distinct cognition that develops itself out of them, come those which are confused. Even the human mind contains perceptions of this sort. They appear particularly in the act of sensation, and here accordingly the mind

manifests itself in its function as mere soul. Hence the similarity which it exhibits in this case to the lower animals, while, when under the influence of obscure perceptions, as in sleep, it approximates to the vital principle of plants. Just as to see green was to see yellow and blue mixed up indistinguishably, so to hear the roaring of the ocean is a confused perception of an infinite number of noises. If under Leibnitz's guidance we pass through the confused perceptions of sensation away from the obscure perceptions that constitute the utterly dull consciousness of ourselves, that is, if we pass away from the whole of the obscure life of the soul, and enter the bright daylight of distinct perceptions, we reach the domain of real cognition or knowledge, which, as it is based upon certain principles, exactly coincides with what Leibnitz calls reason. Through this, man becomes able to participate in truth, while his confused thought only allows of his perceiving what is phenomenal. But in the human mind there are two principles of reason, corresponding to the two elements of which all that is real is composed. These are the principle of identity or non-contradiction, which determines the limit of conceivability, of logical possibility, and therefore the rational and eternal verities; and secondly, the principle of sufficient reason or of conformity (*pr. rationis sufficientis, pr. de convenance*, etc.), which determines all truths of fact. Logic and mathematics depend upon the former, physics upon the latter. What is inconsistent with the former is absolutely (or logically) impossible; what is inconsistent with the latter is physically impossible. The opposite of the first of these is the possible, of the second the real (*compossible*). The sum of truths goes to form the content of the reason, and accordingly Leibnitz usually defines reason as *enchaînement des vérités* (*e.g. Théod., Discours de la Conf.*, etc., p. 479). The science of method shows us how to advance by the use of these two principles to ever fresh items of knowledge. Evidently inspired by what Descartes had said in regard to philosophic method, Leibnitz throughout his whole life never lost sight of the idea of a universal theory of science, which he often calls, like Descartes, *Mathesis universalis*. Only fragments on this subject were found in his posthumous papers, and some of these have been included in my edition (No. xi.–xxii., lii.–liv.). Like Descartes, and like Locke, he demands that we should start from what is most simple. He does not, how-

ever, like the latter, see this in sensations, for these are confused and therefore complex. Rather, the point of departure ought to be something of which we have an intuitive knowledge. From the point of view of rational knowledge, what is free from contradiction is of this nature. We must, then, begin with the proof that something is free from contradiction, conceivable, and therefore with identical propositions, *i.e.* with definitions (not, however, merely verbal ones). (It was not through Spinoza, as I at one time supposed, but through Lully that Leibnitz was led to call these primitive conceptions, on one occasion, attributes of God.) A reduction of these to as small a number as possible would produce an alphabet of human thoughts. (The definitions that he himself mentions as fundamental definitions of this kind, show that he has in his mind a table of qualities or categories in which agreement, similarity, cause, effect, and so on, would be defined.) In these definitions, which must be reduced to as small a number as possible, we should have the first data from which the development of the truths of reason would have to begin. Next, as regards truths of fact, these also would rest upon certain fundamental facts—what Goethe afterwards called original phenomena—which may always be reduced in number by the comparison of a number of given facts. Leibnitz, therefore, like Bacon, urges that facts should be collected, and thinks there can never be enough of repositories and academies, the use of which he himself compares to that of tables of logarithms. Once these data are procured, we must set to work with them, a process which he is very fond of calling a kind of reckoning, *calculus ratiocinator*, etc. The word, however, must be understood in such a wide sense that ordinary reckoning, as well as the ordinary syllogistic process, forms only a small part of what it includes. Like all reckoning, this higher calculus has two parts,—association and separation, synthesis and analysis. The method of Combinations is an essential part of the synthetic process; by it we can, for example, calculate the possible total of all pieces of music, in fact, can find out these pieces themselves. The synthetic process tells us whether and how problems can be combined. The process of analysis, on the other hand, deals with the individual problem, breaks it up into easier ones, and, if it does not solve it, at least brings us nearer a solution. The theory of Probabilities forms an essential element here,

as the method of Combinations did in the former case. The example of Descartes and his own experience must have shown Leibnitz, what was in any case very obvious, that about the most important point for every system of calculus is the happy choice of symbols. Further, there is no doubt that he was familiar with the labours of Athanasius Kircher and Joh. Joachim Becher, and especially with a remarkable book by George Dalgarno, a man born in Aberdeen, whose works were reprinted in Edinburgh, in 1834. This was : *Ars signorum, vulgo Character universalis et lingua philosophica*, printed in London in 1661, with the motto *Hoc ultra*, which doubtless suggested to Leibnitz the heading *Plus ultra* (*Opp. phil.*, No. xv.). Taking all this into consideration, we need not be surprised that, his whole life through, Leibnitz was thinking of a system of symbols, by the help of which every primary idea could be fixed in a single character, and every combination of these in a single formula. For him, what these men had looked upon as the most important thing was merely a subsidiary advantage ; namely, that in this way a universal system would be created which, as is the case nowadays in mathematics, would enable a German to read in his own language every book written by a Frenchman. The main point with him was, that a system of symbols would be chosen, the effect of which would be that every faulty combination of thoughts would necessarily lead to an impossible or self-contradictory formula, every hiatus in reasoning necessarily show itself in a want of connection between the characters, and so on. These results, however, would only be attained if such signs were selected for the ideas as would be analogous to the nature of the thing signified, like the *lingua Adamica* or *signatura rerum* of which the Mystics dreamed. Neither the symbols for the metals and planets, nor the hieroglyphics of the Chinese seem to offer this advantage ; and accordingly he confines himself to mathematical symbols, experimenting sometimes with lines, sometimes with figures, sometimes with letters. That he did not succeed in achieving the desired results is well known and not at all surprising.— If the principles hitherto explained show us *how*, in Leibnitz's view, the mind rises from the dull consciousness of life to rational knowledge, we have still to see *what* forms the proper object of this knowledge, or wherein consists the truth at which it should aim. When the principle of non-contradiction

is employed, the object is considered merely as it is in itself, in simple relation to itself; on the other hand, when the question as to its reality (*compossibilité*) is raised, it is regarded as an integral part of a whole. Thus, if we employ both principles, we are naturally brought to a plurality in unity, *i.e.* to a harmonious relation; and the harmony of the universe is, therefore, the end towards which rational knowledge strives. The nearer it gets to this, the more does it become true philosophy or knowledge of the *world*, because the mind manifests itself as the conscious mirror of the universe. In other words, perfect truth is harmonious agreement distinctly recognised. But, since there was no gap between distinct and confused perception, there must also be an indistinct perception of harmonious agreement, even if it be within narrower limits. This, Leibnitz as a matter of fact admits in the enjoyment of the beautiful. The pleasure in musical harmony, and in harmonious relations generally, is an unconscious process of counting and comparison (*Princ. d. l. Nat.*, p. 718). Beauty, accordingly, would be the same thing as truth, the only difference being, that in the former case it would be confusedly apprehended, in the latter distinctly recognised. Both are marked by adaptation to an end and therefore by perfection.

6. The unconscious or infinitely small perceptions were the key to Leibnitz's theory of knowledge. They are equally important in his *doctrine of the will*, and the *ethical system* that depends upon it. As all the perceptions of the monads manifest themselves in the form of effort, we must distinguish in the human soul three kinds of effort, corresponding to the three grades of perceptions already distinguished. With the lowest, the impulse to development, man stretches down into the vegetable kingdom; with the second, instinct, into the animal kingdom; with the third, will, he rises above both. Again, therefore, he appears as a link between the realm of physical necessity and that of ends. Since these three grades stand in continuous connection, acts of will are originally formed in the obscure natural impulse, the natural groundwork. This of itself would show that they cannot be otherwise than determined; but there is even stronger proof in the fact that every effort ultimately depends upon a perception. Leibnitz rejects as an absurdity the perfect independence of will that would consist in its being independent of myself, whether I

will at all or not; we do not will to will, but we will something, *i.e.* the object of the act of volition. But even in regard to our willing this particular object, and not something else, we are not independent. We are always determined in our choice. The fiction of Buridan's ass is an impossibility; for the blow that was to sever the world into two absolutely similar halves, would also divide the ass in two, and the organs left on the one side would be different from those left on the other. There is always a preponderance on one side (*Théod.*, p. 517). In spite, however, of his decided determinism, Leibnitz refuses to be ranked with Spinoza. And rightly so. For the former places the process of determination outside of the individual, and compares him to a stone thrown by some one; Leibnitz, on the other hand, represents the will as determined by our own perceptions, and compares the view of the opponents of determinism to the delusion of the magnetic needle, which thinks that it points to the north out of its own good pleasure. The mistake arises because we are very often not conscious of this inward impulse that determines our will. We do not know why we will anything, although the act of will has a definite cause. This is the case, not merely where our perceptions are obscure and confused because they have not yet risen to be distinct, but also where they are so through degeneration. A case in point is habit, where we act through instinct or quite unconsciously, because we are urged by a natural impulse, the second of its kind that has come into play. Accordingly, if we go back to the very first movements of will, we shall find these in the feeling of discomfort and unrest, when we do not know what we wish. This may be called the obscure exercise of will, because it corresponds exactly to obscure perceptions. When several movements combine, there arises the tendency towards a definite perception. When this leads to complete satisfaction, it is pleasure or pain; when it falls short of this, it is longing or fear. If there be further added memory and play of the imagination, the result is a preference which decides what we are to will, and which can only be met by calling forth other determinations. In this second stage of will, which may be called the sensual exercise of will, and which corresponds to sensations in the more purely intellectual part of our nature, anything that produces pleasure or delight is a good that is willed, anything that results in pain is an evil. In this, as well as in

the rational exercise of will to be discussed immediately, the object is perfection, for pleasure is a heightening of activity; but since pleasure is only a feeling (*sentiment*) of this, it may be called a confused inclination towards it. Above these two stages there rises the rational exercise of will, determined by distinct perceptions. Here the axioms of our intellectual nature have their counterpart in those maxims which are innate in the mind in exactly the same sense, and which are gradually revealed to our mental consciousness. Where the will is determined by reason, it is free; the more rational it is, the greater freedom it has (*De libert.*, p. 669). The pleasure that follows the sensual exercise of will, is only a momentary heightening of activity, and therefore a transitory good; reason teaches us to seek the condition of abiding pleasure or blessedness. Nothing is better calculated to bring this about than the illumination of the understanding, and the constant exercise of the will in such actions as the understanding prescribes (*On Blessedness*, 672). In fact, it consists simply in the advance of wisdom and virtue, and is therefore permanent increase of strength, *i.e.* perfection. Parallel with this extension (one might say, in length) there runs another (which might be said to be, in breadth). Reason teaches us to find joy, not merely in our own satisfaction, but in the happiness of others. That is, it teaches us to love them, for love is simply pleasure in the blessedness of others. From this, however, the whole of natural law may be deduced; its requirements in its three stages,—*jus strictum*, *æquitas*, *pietas*,—are contained in the well-known formulæ *Neminem læde*, *suum cuique tribue*, *honeste vive* (*De notion. jur.*, pp. 118, 119). Since the greatest increase of activity, and therefore the greatest happiness and the perfection of men, consists in their attaining to ever clearer knowledge, what the rational will prescribes is, not merely to make ourselves always more happy and more perfect by adding to our own enlightenment, but to exercise the highest of all virtues, philanthropy, in such a way as to contribute to the happiness and the enlightenment of all men. In fulfilling this purpose, we attain not merely to *a* good, but to the highest good, *i.e.* *the* good, which therefore forms the content of the will, as the true does of cognition. The resultant harmony that appears in all parts of Leibnitz's philosophy, is seen also in his ethics. It is interesting to note how, in spite of the verbal agreement between them on so many points, the diametrical opposition

between him and Spinoza comes out in the contrast between the self-abnegating *amor intellectualis Dei*, which is a private virtue, and the self-asserting, enlightening virtue of philanthropy. The sensuous perception of harmony, the artistic feeling, stood midway between sensation, the perception of the phenomenal, and scientific knowledge, which embraced truth, *i.e.* consciously mirrored the harmony of all things. Similarly, to correspond to this, there must stand midway between the sensual pursuit of pleasure and the rational will for the good, a kind of will that does not directly lay hold of the highest end (philanthropy), but rather points towards it, as we saw that the beautiful does towards the good. As a matter of fact, this position, with Leibnitz, is occupied by human art—that form of activity in which we are like God, inasmuch as we create, and like nature, inasmuch as we produce machines (*Princ. d. l Nat*, p. 127; *Monadol.*, p. 712). This very statement, however, shows that what is meant here by art, is not the daughter of heaven, who is an end unto herself. In speaking of *échantillons architectoniques*, Leibnitz is clearly thinking of machines that are of practical utility; and therefore, where he uses the word *art*, we should prefer to say inventive rather than artistic and creative power. This explains why the whole of the subsequent view of the world, formed under the influence of Leibnitz, never got beyond the point of assigning to a work of art a moral end, lying above and outside of art itself.

7. Leibnitz's metaphysical theories conflict particularly with Cartesianism and with Spinozism. In his physics, by his idealistic view of extended substance, he proves himself an antagonist of More, who represents even spirits as extended, and of Cudworth, who holds that extended substance has a living force. In his psychology and moral philosophy he appears as the opponent of Locke and the English moralists, for he makes the mind the sole source of its own promptings and instructions. Similarly, in his *theology*, he comes out as the opponent of those who had played into the hands of realism by representing that faith and reason were opposed to each other (*vid.* §§ 276–278). His *Théodicée* (pp. 468–665) is a reply to Bayle. From this work all the following statements are taken, except in cases where a special reference is given. His opposition to Bayle makes Leibnitz begin with a discussion upon the agreement between faith and reason (pp. 479–503). He first puts faith and experience side by side, and then

goes on to show that neither is inconsistent with reason. For reason admits not merely those truths that are logically necessary because their contrary implies a contradiction, but also truths of fact, which depend upon the principle of conformity, and which have to do merely with what is physically necessary, or natural law. Even although a variation from this, *e.g.* a miracle, is incomprehensible to us who cannot survey the sum-total of all ends, it is not on that account irrational. If it were so, it would be absolutely impossible. On the other hand, there can certainly be things that transcend reason. (This distinction, very common among the Schoolmen since the time of Hugo of St. Victor, Leibnitz is able to adopt all the more readily because man is not the only rational being; in fact, he often says in so many words that this or that may transcend our present reason.) But this is not all. For even in what does not admit of an *a priori* proof, and therefore belongs to the mysteries of faith, there is much which, once it has become part of our belief, may be explained, *i.e.* defended against objections, so that we attain to a moral certainty in regard to it. Even the very dogmas that rouse most opposition, such as the Trinity, eternal punishment, the presence of the body of Christ in the Sacrament, and so on, are anything but irrational. That term should rather be applied to the views held by their opponents. (*Lessing's Werke*, ed. by Lachmann, vol. ix., pp. 269 and 154.) Such certainty is attainable to a much greater extent with regard to the essential content of religion, that which all religions must contain. As it lies in all men at least in germ, it may be called the natural element in religion, or natural religion. Christianity does not deny it. Christ is rather to be regarded as the true restorer of natural religion, since He preached its doctrines as positive ordinances. This natural religion, like science, lies in man *virtualiter* as an obscure impulse. By the process of development and enlightenment it is transformed into a natural theology which is rational faith, since its main tenets, the God who is without and above the world, and the immortality of the soul, are doctrines that reason preaches in its own name. Accordingly, the first points to be taken up are the proofs in reason of the existence of God. Leibnitz's distinction between the proof *a posteriori* and that *a priori*, corresponds exactly to the distinction between the two kinds of knowledge and truth. The latter

proof, which reasons from the idea of a Being who is necessary, to His existence, requires, according to Leibnitz, who on this point is in literal agreement with Cudworth, to be supplemented by the demonstration that that idea is possible, *i.e.* that it is not self-contradictory, like the idea of an absolutely swiftest motion, for example. Thus amplified, it is convincing, and may be expressed as follows: If God is possible, He exists, for His existence is a necessary consequence of His possibility. If He did not exist, He would not be possible, nor would anything outside of Him be possible (e.g. *De la démonstr. Cartés.*, p. 177). Nowadays this proof is called the ontological one. With Leibnitz it deserves this name in a special degree because it is closely connected with his ontology, which distinguished in the monad the two elements of possibility and reality. This distinction will be most apparent in the lowest form of monad, and will cease to exist in the highest form. The so-called *a posteriori* proof, which is connected with the *principium rationis sufficientis*, stands in the same relation to Leibnitz's cosmology, and may be called the cosmological proof, as that name is applied to it universally nowadays. Since everything that happens must have a cause, the existence of the monads, the harmony that subsists without their exercising any influence,—a harmony which must therefore have its reason outside of them,—and finally the connection between everything contingent, lead us to conclude that, outside of this connection, there is a necessary Being who is the source and origin of these things (*Monadol.*, p. 708; *Princ. de Vie*, p. 430; *De rer. orig.*, p. 147). But this principle involved the idea of an end as well as the idea of cause. If the latter was the basis of the cosmological argument, the former produces the teleological one, in virtue of which the idea of God appears as the culmination of moral philosophy, just as in the two former cases it was the crowning point of metaphysics and of physics: All orderly connection, and similarly all human action, is ultimately directed to an absolute end, and this is God, since everything in the measure of its perfection furthers His honour and His blessedness (*Defin. eth.*, p. 670). Especially is this the case with our philanthropy, since that is also the main element in the Divine nature. Leibnitz's metaphysics and physics (ontology and cosmology), as well as the second part of his "pneumatics," had each yielded a proof of the existence of God; and it almost looks as if he were

unwilling that the first part, the theory of knowledge, should appear at a disadvantage as compared with the others. In short, he adds a fourth proof to those already given : Since these are eternal truths, there must necessarily be an abode for them, an eternal understanding or a Divine wisdom that embraces them all (e.g. *Monadol.*, p. 708). Thus the first main element of natural religion, the existence of one God, which the Jewish was the first among positive religions to teach, is a postulate of reason; and the same is the case with the second, the immortality of the human soul, which Christ preached. Imperishableness is characteristic of it as a monad, corporeal eternity as a soul, and finally personality, moral responsibility, as a mind.

8. There are thus convincing proofs of the existence of God. It is a matter not of certainty merely, but of knowledge. With regard, however, to the Divine nature, it is impossible for us to know this adequately, because complete knowledge is possible only to a superior being as containing the inferior within itself. We have to content ourselves with a knowledge based upon analogy and rising from us, as the mirror and image of God, *via eminentiæ* to Him as the original. Just as the limited power that forms the essence of every monad, manifested itself in perception and effort that were no less limited, so the power that is free from all limitations, will be omnipotence, and will manifest itself in infinite knowledge and will, *i.e.* in wisdom and goodness. Just as, in each monad, effort was conditioned by perception, so too the absolute will of God, or His goodness, is conditioned by His wisdom, a state of things which we call His justice. In virtue of this, God can will only what His wisdom has recognised as the best; and He does not act arbitrarily, but through necessity. This necessity is a moral one, because the opposite of what is chosen involves no contradiction and is therefore conceivable, possible, although not in accordance with the end, *i.e.* not real (*compossible*). This moral necessity compels him to select from among the possible worlds, brought before Him by His reason, that which is the most perfect, as containing the greatest possible amount of reality, and therefore also the most blessed. This blessedness, not of man alone, but of the whole, coincides with the honour and the blessedness of God; and the world is therefore not merely a cunningly constructed machine, but a happy State; God is not merely its

architect, but its king. The two realms, that of nature and that of grace, between which man forms a link, are in perfect harmony, because they form a graduated line of perfection. One of Bayle's chief objections, the opposition between reason and faith, was repelled by the distinction between what transcends reason and what is contrary to reason, and by the proofs for the existence of God. Optimism supplies the weapons to dispose of the other, the reasonableness of Manichæism (*vid.* § 277, 5). The question how evil and wickedness are consistent with the best possible world, is such an important feature in Leibnitz's rational faith, that it has supplied the title for his work on this subject. A main point in this, is the reduction of moral and physical to metaphysical evil, *i.e.* the limitation in virtue of which even wickedness does not rest upon a positive cause (as Manichæism would make out), but upon a want, a *causa deficiens.* That the individual elements in the world are limited and finite, *i.e.* that they are not everything or are not gods, depends upon their nature; and, as their nature has its ultimate ground in themselves, and not in God's good pleasure, God is not responsible for this. It is true that the existence of anything at all is a result of the Divine will; and the question next arises: How is it conceivable that God did not leave the evil or even the bad in the region of mere possibility? God has only permitted it to exist as a means of advancing the perfection and blessedness of the whole. He is not like the foolish general, who sacrifices a province to save a couple of human lives, but like the artist, who employs discoloured shades or discordant sounds to heighten the colouring or the harmony of the work of art, so that it gains in beauty through what is itself hideous. God therefore does not really will the bad, He permits it; not for its own sake, not even as a means, but He endures it merely as a *conditio sine quâ non* in a world which, without it, would not possess magnanimity and a number of other virtues. If, therefore, we regard, not the individual, but the world as a whole, its aspect fills us not, as it did Spinoza, with resignation, but with serene calmness, with joyful confidence; and the ever-increasing joy in God goes hand in hand with a constant advance of blessedness and perfection, which the supreme architect and monarch maintains in the fairest harmony (*Monadol.*, §§ 87–89, p. 712).

Cf. A. Pichler: *Die Theologie des Leibnitz*, etc. 1st part, Munich, 1869. 2nd, *ibid.*, 1869.

B.—THE FORERUNNERS OF WOLFF.

§ 289.

1. Leibnitz's idealistic philosophy of harmony requires, in the first instance, to be *supplemented* in regard to those points where he has been satisfied with suggestions and aspirations. Some of those who supply this want, stand in no real relation to the system of Leibnitz; not a few of them, for example, are unacquainted with it. In that case it is only from our point of view that they can be regarded as following in his footsteps. On the other hand, such as explicitly profess themselves his adherents, may be looked upon as deliberately carrying on his work, consciously developing his doctrines. A position midway between these two is occupied by a man whose personal connection with Leibnitz led the latter to say, that much in his work was his (Leibnitz's) property, although this agreement is explained by the fact that they had both received similar inspiration and had drawn from the same sources. This man made an actual attempt to state what Leibnitz throughout his whole life had been looking for in vain, namely, principles of a philosophic method by the help of which we should be able, not merely to arrange what we already know, but also to make fresh discoveries. So long as there is no exact method, there can be no separation between the individual branches of study. This explains why, in Leibnitz's metaphysics, there were anticipations of physical theories; and why, on the other hand, in his physics,—which, taken strictly, could only be a science of phenomena,—we found him trying to reach back to what was real and of the nature of substance, and thus doing away with the distinction between ontology and phenomenology (§ 288, 4). Before it could appear in an adequate form, philosophy required something more than articles in journals and casual essays; detailed expositions of the various branches of study in their connection were necessary. To have shown the way in which this can be accomplished, is the great merit, though it is only a merit of form, of the first among those countrymen of Leibnitz who are to be discussed here.

2. Walther Ehrenfried, Graf von Tschirnhausen, Herr von Kisslingswalde and Stolzenberg, was born on April 10th, 1651, at his father's castle of Kisslingswalde in the Oberlausitz. He studied at Leyden, where he devoted his attention chiefly to mathematics. Subsequently, he served as a

volunteer in Holland. During this time he formed a close friendship with Huygens, and became familiar with the Cartesian philosophy. Afterwards he joined the circle of Spinoza's admirers, mentioned in § 271, and thus made the acquaintance of Spinoza himself. The most acute objections (*Epp.* 63, 67, 69, 71) in that philosopher's correspondence, though formerly ascribed to L. Meyer, are really by Tschirnhausen. When he subsequently came to know Leibnitz in Paris, he asked permission for him to be allowed to read the manuscript of the *Ethics*. Spinoza hesitated at first; and this hesitation looks almost like a presentiment of the dangerous adversary, who afterwards takes credit to himself for being instrumental in making Tschirnhausen less of a Cartesian than he had been before. Journeys to England, to Italy, to Vienna, and for the second time to France, where he became a member of the Academy, prevented Tschirnhausen from publishing so soon as he had intended, the work of which his letters speak as a *Tractatus de ratione excolenda*, or *de emendatione intellectus* (*to Huygens*, 11th September, 1682), and which appeared in 1687 as *Medicina mentis, s. artis inveniendi præcepta generalia*, under which title it was reprinted at Leipsic in 1695. The *Medicina corporis*, which forms a sequel to this work, is of no importance. Henceforward Tschirnhausen lived at his castle, occupied in grinding lenses and making chemical experiments which gave him almost as strong a claim as the notorious Boettger to the discovery of Meissen porcelain. In 1708 he died, regretted as a faithful friend by Leibnitz. The *Medicina mentis* frequently agrees almost word for word with Spinoza's *Tract. de emend. int.*, and yet never expressly refers to it; in fact, Spinoza is often tacitly censured. It would be an injustice to see in this nothing more than a fear of being put into the same category as the man who was in such evil repute. The decided conviction that pantheism was a mistake —a conviction which Leibnitz possibly strengthened—may explain this, and may also help us to understand why Tschirnhausen, on many points, approximates to the position taken up by Descartes before he had become a pantheist. For example, in laying down the first foundation of all philosophy, he makes this consist in the unalterable and indubitable conviction of one's own conscious existence, or existence as a thinking being. Starting from this fundamental fact of consciousness in general, a fact of which our inward experience makes us

certain, he goes on to deduce some others, which every fair-minded man must admit as readily as the one first mentioned, and which furnish the elementary axioms on which the particular parts of philosophy rest. On the fact that we are conscious of agreeable and disagreeable affections, depend the conceptions of good and evil, and therefore moral philosophy; the fact that there are some things which we can apprehend, others which we cannot, is the basis of the distinction between the true and the false, and therefore of logic in the proper sense, or *philosophia prima;* finally, the consciousness that we stand in a passive relation to certain ideas, or in other words receive impressions, is the foundation of all empirical knowledge (*Præfat.*). The *Medicina mentis* professes to treat only of the true logic, or *philosophia prima*, which Tschirnhausen, like Descartes and Leibnitz, often calls *ars inveniendi;* and it begins by laying down what is to be understood by conceiving (*concipere*). In Spinoza's language, he warns us against calling the mere image of a thing within ourselves a conception. In other words, we must not confuse mere perception, which is a work of the imagination, with conception, the work of the understanding, which contains an affirmation or a denial, *i.e.* with the judgment which expresses the nature of the thing conceived (pp. 41, 42, 37, ed. 1695). Now everything that can be conceived of in this way, is possible; everything that cannot, is impossible or false. Accordingly, we carry the criterion of truth and falsehood within ourselves; and the *philosophia prima* has only to test our conceptions so far as to see whether they are consistent. Their relation to the things outside of ourselves is a question that belongs to quite another part of philosophy (p. 52). If philosophy is to proceed methodically, it must begin by determining the simplest combinations (conceptions) of all. This is done in the definitions (p. 69). Since a definition is a judgment, *i.e.* a combination produced by the activity of the mind, it must state the originating cause. This was the idea present to those who wished to include the *causa efficiens* in the definition. Any one therefore who had the correct definition of laughter would be able to produce laughter (pp. 71, 67, 68). Further, it can easily be shown from the nature of definition, that of the two elements combined in it, one must have the character of something fixed, the other of something movable (p. 86). A circle, for example, is seen from the definition to be produced

by the motion of a straight line round a fixed point (p. 90). The analysis of the definition results in axioms (p. 61), its synthesis in theorems (p. 124). If we always begin with what is most simple, and proceed without a break to what is more complex, we need not be afraid of making mistakes. In spite of the similar methods pursued in the various parts of philosophy, there is still a great difference in respect of their subjects. What is apprehended by the senses is not so much conceived as merely perceived; it is therefore merely something that can be imagined, a phenomenon, a phantasm (p. 75). The most simple elements to which, or to combinations of which, everything of this kind may be reduced, are solid and fluid (p. 89). Within the limits of what is apprehended by the understanding, a distinction must be drawn between those of its products which may arise in various ways, and which may, therefore, be defined,—the *rationalia*, i.e. mathematical conceptions whose simplest elements are the point and the (straight and curved) line,—and those conceptions which can only be formed in one way. The latter are the *realia* or *physica*, the elements of which are extension and motion (in the two forms called rest and motion) (pp. 75, 76). They occupy the highest place, and so, therefore, does physics, the science which deals with them. While this science is not possible without mathematics, it also requires to be confirmed by experiment (p. 280), the nature of which the followers of Bacon have misunderstood. It may be called the science which is truly divine (p. 284), and also that which embraces everything, since the knowledge of our own selves forms a part of it (pp. 284, 84). At the conclusion of his work Tschirnhausen states that medicine, mechanics, and ethics are the practical applications of science, the last-mentioned being the doctrine of the soul's health. As mechanics is undoubtedly applied mathematics, while medicine professes to be based entirely upon perceived phenomena (*Imaginabilia*), it follows that the theoretical groundwork of ethics must lie in physics, as the knowledge of the *realia*.

3. Tschirnhausen is superior to Leibnitz in regard both to the method and to the subdivision of his system; for, instead of aspirations and suggestions, he gives definite directions and statements. And yet in another point he is even more deficient than his master. This is practical philosophy, ethics. He is content with merely assigning a place to it; while

in Leibnitz, the principle of action had been expressed in a definite formula. The work of both of these thinkers is supplemented by yet a third native of Saxony, somewhat older than either of them. The story of SAMUEL PUFENDORF'S life reminds one, in many respects, of that of Leibnitz. Born on Jan. 8th, 1632, he first studied law at Leipsic, and then went to Jena, where he became a pupil of Erhard Weigel, who by his application of the principles of Euclid to logical subjects, and particularly by his lectures, delivered in German, upon ethical relations, convinced him that a strictly demonstrative process was not limited to mathematics, but might be extended, especially to natural law. As tutor to the Swedish ambassador, Pufendorf acquired at Copenhagen, as Leibnitz had done at Mainz, a knowledge of important political affairs. During an imprisonment of eight months, he occupied himself with a thorough study of the writings of Grotius and Hobbes, his exceptional obligations to both of whom he always acknowledged. (Besides these, he afterwards mentions with approval the work of Richard Cumberland [1632–1718]: *De legibus naturæ*, published in 1672. Of Spinoza, on the other hand, he never speaks without bitterness.) In 1660, Pufendorf made his first appearance as an author, when he brought out: *Elementa juris universalis*, The Hague (often reprinted afterwards in other places). The twenty-one divisions that go to form the first book, he calls *Definitiones;* and rightly so, for as a matter of fact they simply contain, expressed in a very definite form, determinations of the most important elementary legal conceptions. The second book, which is much shorter, contains the *Principia*, seven propositions that sum up the whole of natural law. Of these the first two, which attribute to man responsibility and the capacity for coming under obligations, are called *axiomata*, because they are drawn exclusively from the reason; the remaining five are called *observationes*, because in them account is taken of experience as well. In the latter, power of judgment and free-will, and also self-love and the social instinct, are attributed to man; and from the combination of the two, the formula is deduced that every one must strive to preserve himself, but must do so in such a way that society is not thereby endangered. After stating all the precepts which are contained *implicite* in this formula, he concludes by saying that in every State natural law requires to be supplemented by positive

legislation. There is hardly a statement made in this treatise which would not be found in Grotius or Hobbes. For, even Pufendorf's denial of the existence of international law distinct from the natural right of the individual,—which is usually referred to as original,—is not an idea of his own. What he says here, had been already said by Hobbes (§ 256, 6). And yet the work merits the applause with which it was greeted. The novel feature of it was that he combined the doctrines of his two predecessors, giving free play not only to the selfishness of Hobbes, but also to the social instinct of Grotius. In consequence of this treatise, a chair (the first) of natural and international law was created at Heidelberg, and offered to Pufendorf. To the seven years of this professorship belongs his connection with Boineburg, whom he considers one of the greatest of statesmen. Nor does he assign a much lower position to his sovereign, the Elector Karl Ludwig of the Palatinate, who is believed to have furnished many data for the work which Pufendorf published in 1667, under an assumed Italian name: *Severini de Monzambano Veronensis de statu imperii germanici epistola* (published in the first instance at The Hague, very often republished, *e.g.* 1695, at Halle, by Thomasius, who delivered lectures upon it). This anticipation of Montesquieu's *Lettres Persanes* (§ 280, 7) contains a sharp criticism of the condition of Germany. It was at first ascribed to Boineburg, to Pufendorf's elder brother, and to many others. After giving an account of the present state of affairs, and of how it arose, it goes on to argue against the misconception that the German Empire was a continuation of the Roman, and that it had conferred great benefits upon the German nation. It then proceeds to combat the views of those who regard the German Imperial constitution as one of the Aristotelian pure or mixed forms of government. Rather it is an irregular form of government, and, looked at from the Aristotelian standpoint, a monstrosity. Finally, it passes on to a statement of the means that might remedy the evils which unquestionably existed. Although not blind to the injuries that Germany had experienced at the hands of Austria, he rejects the view of Hippolytus a Lapide (B. P. Chemnitz), who held that Germany would never be a united State till Austria had been excluded. He would prefer to see a confederation of German States with a standing authority at its head, a proposal in regard to which he apprehends great

opposition from the side of Austria. After the publication of this work, his position in Heidelberg became less pleasant, and, accordingly, in 1670, he accepted a professorship at Lund, in Sweden, during his tenure of which he published his elaborate work : *De jure naturæ et gentium libri octo*, 1672. (Some of the many subsequent editions include a Latin translation of the notes that Barbeyrac had inserted in his translation of the work into French. This is the case, for example, with the Frankfort edition, 1744, 2 vols. 4to.) Contemporaneously there appeared his treatise : *De habitu religionis ad vitam civilem.* Here the Church is treated as a union resting upon voluntary agreement, towards which the State stands in the same relation as it does towards all corporations, although it lies under certain obligations with regard to its maintenance and security. In 1671, he had published an abstract from his principal work under the title of : *De officio hominis et civis*, which has been often printed since (*e.g.*, Utrecht, 1723, 7th ed.). Even before this he had been very violently attacked by two envious colleagues, who, however, had to pay a heavy penalty for their enmity to a man held in such very high esteem at Stockholm. But they were joined by many in Germany, particularly theologians, including among others Alberti of Leipsic. Pufendorf was moved to compose several controversial pamphlets, which were afterwards collected in the *Eris Scandica.* From Lund he went to Stockholm, where, in the capacity of historiographer for Sweden, he wrote, in 1676, *De rebus Suecicis* [Utrecht, 1686.—Ed.], and *De rebus a Carolo Gustavo gestis* (Norimb., 1696, 2 vols.). In 1686 he received an appointment in Berlin, similar to that which he had held at Stockholm ; some time previously he had been made a baron [not till 1694.—Ed.]. There he wrote *De rebus gestis Friderici Wilhelmi Magni* (Berlin, 1695), and *De rebus gestis Friderici tertii* (Berlin, 1695). He did not live to see them published, for death carried him off on Oct. 26th, 1694.

4. The point of view that Pufendorf adopts in his later writings became the object of attacks from entirely opposite quarters. This was due to the fact that, in spite of his differences from both, he continued an adherent at once of Grotius and of Hobbes. He held that natural law and the natural rules of morality originate solely in the good pleasure of God, rejecting the Thomist view, that the good has an independent and absolute existence, and adopting the Scotist formula : A

thing is good because God has commanded it, and not conversely. This led him to censure Grotius, who declares that the moral law would be valid even if there were no God. Nor was he staggered by the objection that God might at any moment declare murder, adultery, and so on, to be a duty. If God of His good pleasure has once appointed to man a social and peaceful life, everything that runs counter to this must necessarily be forbidden; but it is a necessity which is conditioned by that exercise of His good pleasure, and which is therefore not absolute, but hypothetical. This assertion he expressed in classical language, by saying that the *entia moralia* ultimately depended upon the Divine *impositio*. It appeared to be a declaration of war against the Thomists, who maintained the "*perseitas*" of these *entia*, as well as against Leibnitz, who was a Thomist on this point; and it seemed further to allow more to the Godhead than science had any right to do. On the other hand, very different objections were called forth by Pufendorf's teaching as to the *principium cognoscendi* of natural law. The source, not of law, but of our knowledge of law, is simply the reason; the means to this end is just the study of human nature. Natural law, which is to be as binding upon Jews and Turks as upon Christians, cannot, therefore, allow itself either to be connected with the Decalogue—as Seckendorf, for example, in his *Christian State* would have it—or to fall back upon the paradisiacal point of view. It can only fulfil its end if it employs strictly demonstrative methods, and draws all its conclusions, if not directly, at least mediately, from axiomatic first principles which we must begin by establishing. First principles of this sort are, according to Pufendorf, that man, like all other beings, has selfish instincts; but that insufficiency, capacity for doing harm and for doing good, individual differences, and so on, all of which are present in him in a much greater degree than in the lower animals, impel him much more strongly than them towards society. The conditions of social life are determined by the laws of nature, which may be summed up in the formula that man must above all things advance the interests of society, and must therefore regard as forbidden whatever runs counter to them,—as obligatory whatever furthers them. From this formula may be deduced all human duties. These are to be classified according to their objects, and are thus naturally divided into duties to-

wards oneself, and duties towards one's neighbour. The abridged version puts duties towards God before both of these; but in the larger work they are so combined with the two others that the latter appear as the (only ?) ways of fulfilling the former. In the deduction of these various sorts of duties, the main point of view is, that unless we performed them (even those towards ourselves), society would go to pieces. Just as in what he says of the duties of the individual, or our general duties, or duties as men (*Jus nat. et gent.*, i.–v.; *De off. hom. et civ., Lib.* i.), Pufendorf constantly reminds us of Grotius, so again his inquiries into man as a member of society, *i.e.*, our special duties, or duties as citizens (*Jus nat.*, vi.–viii.; *De off., Lib.* ii.), naturally suggest a comparison with Hobbes. This is the case at the very outset with what he says of the state of nature. By this he understands the state of affairs in which there is absolutely no subordination, and therefore no law. Accordingly, as in his view our earliest ancestors lived in wedlock, and dwelt together as a family, he cannot assume the existence of a *status naturalis*, until the human race has grown so much and has become so scattered that the tradition of those associations has been lost, so that men live in perfect liberty. He refuses to postulate at this stage a state of universal war; he holds that peace is produced by our social nature. But as soon as he begins to describe this peace in detail, he runs the risk of conceiving of it as the end of a war that has hitherto prevailed, *i.e.*, of doing exactly as Hobbes did, except that, in spite of this tendency, something more than mere egoism is the motive that leads to the conclusion of peace. While the social instinct furnishes an adequate explanation in the case of small communities, regard for security is always put in the foreground in accounting for the origin of the State. This is supposed to move the individual families to give up a part of their liberty, and found the State, which rests upon two contracts and a resolution :— the contract which the individuals make with each other, the resolution that establishes the constitution, and finally, the contract between the sovereign and his subjects. Although the State originates in a contract, it may be called an order (indirectly) instituted by God; it is so because it is the means towards peace, an end willed by God. In the conclusions he draws from this theory, Pufendorf differs from Hobbes, inasmuch as he holds that the sovereign may be guilty of injustice

towards his subjects, by violating their rights as citizens or as men. Otherwise, his political philosophy contains almost nothing that Grotius and Hobbes had not said already. His agreement with the former is specially marked in his theory of punishment.

5. CHRISTIAN THOMAS, who, like his father Jacob, is much better known under the Latinized name of THOMASIUS, was born on Jan. 1st, 1655, not merely in the same district as the three thinkers we have last discussed, but in the same town as Leibnitz. He received from his father a sound education, and was also exercised by him in discussion, not, however, without being warned against any tendency to advanced speculation. As a student at Leipsic, he devoted himself chiefly to philosophy and the history of philosophy, with such success that he became a *Magister* as early as 1671. He then threw himself into the study of law, just as the quarrel broke out between Pufendorf and the theologians, some of whom belonged to Leipsic. At Frankfort, to which he had been attracted by Samuel Stryck, this youth of twenty defended in his lectures as *Privat docent* the theological basis of law. He was converted from this view by the pamphlets that Pufendorf published in his own defence; and consequently when, after a short period of travel and of practice as an advocate in his native town, he came forward there with lectures on Grotius, he brought a nest of inquisitors about his ears. To justify his position, he published his lectures as *Institutiones jurisprudentiæ divinæ*, where he appeared as a most determined opponent of Scholasticism, and as an independent adherent of Pufendorf, who, in contrast to the *perseitas* of good and evil, made the *jus positivum universale* the basis of positive law. The outcry produced by this work, as well as by the publication, in 1685, of the treatise *De crimine bigamiæ*, in which he represents polygamy as prohibited merely by positive and not by natural law, was small compared with the sensation caused by the step he took in 1687. It marks an epoch in history. For in that year he announced a lecture in German upon (the Spaniard) "*Gratian; or, The Basis of a Reasonable, Prudent, and Polite Life*," and issued a prospectus in German, in which the French were held up as models for imitation, because they had got rid of all pedantry, including the use of the Latin language. He followed this up, in 1688, by giving notice of his lectures in German upon Christian morality and

on the *Jus publicum*, in a similar prospectus directed against the Aristotelian ethics. What Leibnitz had only dared to hope for, Thomasius had accomplished; he had ventured to employ the language which Leibnitz had declared best suited for philosophical inquiries, and that not merely in a strictly private discourse, as Erhard Weigel had done, but in public lectures. The *Introductio ad philosophiam aulicam, s. lineæ primæ libri de prudentia cogitandi et ratiocinandi*, published at Leipsic in 1688, received its title partly on account of the Abbé Gérard's *Philosophie des gens de cour*, but partly also because Thomasius regarded courts as the highest class in the school of life; and thus the name really promised a philosophy of life. The German prospectus announcing lectures on this book extols German at the expense of Roman law. The defects of the latter are pointed out; and the neglect of natural law at the Universities is particularly censured. In 1688 Thomasius also began the issue of his (the first) learned periodical in the German language,—the "*Teutsche Monate*," as he generally calls it afterwards, instead of using its prolix title, which was often changed. It was to be modelled upon the French periodicals of Basnage, Bayle, and Le Clerc. In this monthly he reviewed, soon after it appeared, Tschirnhausen's *Medicina mentis*. The tone of the article gave great offence to the author, although Thomasius believed that he had paid him a high compliment by saying that he had prepared the way for his own advance, and that without him he himself would not have reached his present position. This periodical involved him in more and more quarrels; and when he came forward to protest against the oppression of the Pietists by the University of Leipsic, and finally was bold enough to defend a mixed marriage in the princely house, the combined efforts of the theologians of Leipsic and Wittenberg were successful in procuring, in 1690, a decree putting a check upon his academic and literary activity. Thereupon he took refuge in Berlin, where, as early as April, 1690, he was nominated a privy councillor of the Elector, and received permission to deliver lectures at Halle, a salary being granted him at the same time. The commencement of these lectures was the real beginning of the University of Halle; for the result of his success was, that other teachers were invited thither, and ultimately the formal foundation took place. To wage war against all prejudices, to assent only to what he

himself understood, to battle against all pedantic learning which has no practical use,—such became his watchword, and continued to be so throughout his whole life. It was quite characteristic of him; for, though not a man of new and original ideas, he was well able to adopt these from others, to put them in popular form, and to enhance their value for the end in view. If we were to allow that the German Enlightenment had only one father, Thomasius' claim to the title would certainly be a just one. In addition to his many-sided academic activity, he busied himself with literary work. In 1691 appeared the *Introduction to Rational Philosophy*, written before he left Leipsic. This was followed in the same year by the *Application of Rational Philosophy*. Similarly, the *Introduction to Moral Philosophy* (1692) found a sequel in *Medicine against Irrational Love*, or *Application of Moral Philosophy*, begun in 1693, but not finished until 1696. In all these works he appears as the man who puts the highest value upon *philosophia eclectica*, who "as a free *philosophus* attaches himself to no sect," and whose only aim is to drive out prejudices, to "clear" the understanding and "set it in order." When the University of Halle was formally opened, Thomasius was appointed second professor in the faculty of law. Among the contributors to two quarterly publications which he issued in succession under the same title, the *History of Wisdom and Folly* and the *Historia sapientiæ et stultitiæ*, appears the name of Leibnitz. These show that at this time his connection with the Pietists was very intimate. The same thing is proved by his edition of Poiret's work, *De erud. solid.* (§ 278, 4), and by his *Essay on the Nature of Mind*, published in 1699, where his theory of a universal mind betrays a decided tendency to mysticism. The stress he lays upon the teaching of the Bible, as contrasted with mere creeds, and his detestation of priestcraft made the orthodox always rank him with Spener. The latter, however, became suspicious much sooner than the theologians of Halle. As early as 1695, when Thomasius printed the dissertation of Brenneysen, *De jure principum circa adiaphora*, along with a defence against Carpzow, and still more after his work, *De jure principum contra hæreticos*, Spener took offence, especially at its light and often frivolous tone, and warned his friends at Halle against Thomasius. Talebearing,—which could hardly have been avoided, since Francke was in the habit of getting information in regard to the lectures

of other professors from their hearers,—hastened the breach, which was complete by 1702, and which Thomasius proclaimed to the world along with his views on hypocrisy, in the prefaces to some works published by him in 1704 and 1707. In 1700 he again began, in conjunction with Buddeus and others, a periodical, the *Observationes selectæ Halenses*, to which however he contributed but few articles. From this period date his attacks upon the prosecution of witches, in regard to which he had himself formerly held very narrow views, until he was converted by his teacher and colleague, Stryck. In 1701 there appeared for the first time the *Minor German Writings* often reprinted afterwards. The chief feature in these is his earliest prospectuses. In 1705 he published the *Fundamenta juris naturæ et gentium ex sensu communi deducta*, in which he subjects to criticism the theories of Grotius and Pufendorf, as well as his own early views. In 1709 he enjoyed the triumph of being invited to return to Leipsic. He declined the invitation, and was rewarded by the title of privy councillor, and in the following year, on the death of Stryck, by the first professorship of law and the office of Director of the University. While holding this post, he published the *Cautelæ circa præcognita jurisprudentiæ* (1710), and *Cautelæ circa præc. jurispr. ecclesiasticæ* (1712). Henceforth he only produced strictly legal treatises, or arranged collections of articles he had formerly written. The "*Serious but lively and rational Meditations and Reminiscences of Thomasius on Diverse Matters*" appeared in 1720–21, in four quarto volumes, and were continued (1723–25) in a work of three octavo volumes, bearing a similar title. On Sept. 23rd, 1728, Thomasius died in the midst of his relatives. H. Luden's monograph (*Christian Thomasius*, Berlin, 1805) ends with these appropriate words: "He looked cheerfully into the future; his relatives wept, his friends mourned, and Germany felt his loss." Some time after his death a collection was made of all the prospectuses he had written. An excellent estimate is given of him by Tholuck in Herzog's *Theolog. Real-Encyclopädie.*

6. The merit and the enduring influence of Thomasius do not lie in any particular theories with which he enriched philosophy, but in the purpose which he sets before it, and the method which he requires it to pursue. With regard to the latter point, his hatred of all pedantry leads him to despise the syllogistic method; his ignorance of mathematics makes him

indifferent towards the constructive method. There remains, therefore, nothing but the form of reasoning, of searching for points of view, in short, of superficial clever play with subjects, such as the conversation of cultured men of the world usually presents. This explains his contempt for all real learning, a contempt which makes him hint that unprejudiced soldiers and women run much less risk of mistaking what is right than bookworms do. It explains his insistence on the point that philosophical discussions should proceed in a cheerful and lively way, after the manner of Erasmus. And it explains his censure of Grotius and Pufendorf for disfiguring their inquiries by references, as well as his constant demand that philosophy should speak in the mother tongue and employ no pedantic terminology, since absolute intelligibility for every one is the only test of truth, which is really simple and easy to find. In short, he wishes to substitute culture for learning, plausibility for strict proof, the healthy human understanding for speculation, views which Leibnitz was constrained to call philosophy run wild. Again, as regards the function of the philosopher, he emphasizes in anti-scholastic fashion the absolute separation between philosophy and theology, and limits the former entirely to the things of this world. From his time we find in vogue the name *Weltweisheit* (wisdom of the world), as opposed to *Gottesgelahrtheit* (knowledge of God). He is, however, too ignorant of the laws that govern the world of sense, and takes too little interest in them, for us to expect from him a system of physics. All the more does he devote his attention to the moral world and its prime element, man. A characteristic of his individualistic tendencies that strikes us at once, is that he lays so much stress on individual differences that he comes very near to making each particular thing a species by itself. Hence the great significance he attaches to strict introspection and to knowledge of human character. He boasts to the Elector Frederick III., that he has found infallible principles on which to base the latter art. Neither of these, however, is an ultimate end. Just as in his view it is not understanding that determines will, but rather the reverse, so all knowledge, and therefore knowledge of oneself and of human nature, is to serve practical ends. The highest practical end is happiness, and therefore he defines *Philosophia practica* as "the science that teaches man how he is to live happily." But he makes a point of

assigning to philosophy only our happiness in this life; happiness after death belongs to theology. As the highest and most enduring happiness consists in quietness of mind as well as in inward and outward peace, the question arises: How are these attained? In the speculative sphere, by uprooting prejudices, by admitting only what we ourselves understand,—a process the result of which is to produce a perfect knowledge of the world, equally removed from atheism and from the much worse evil of superstition. In the practical sphere, the enemy of quietness of mind and of peace lies in the fact that our will or, what is the same thing, our love is irrational. To substitute rational love for irrational love, or the affections, is the highest teaching of his *Moral Philosophy*. He reduces all affections to three fundamental forms, and shows how the want of control over these begets the three cardinal sins of sensuality, ambition, and avarice, which sway irrational men, though in proportions varying according to temperament, age, condition, and so on. The contrast between the fools or irrational men and the wise or rational men is exhibited in tabular form. Thomasius follows up these general inquiries into the content of practical philosophy by others that deal with its subdivision. The *Fundamenta jur. nat. et gent.* reproaches Grotius and Pufendorf with not having made a sufficient distinction between the *Justum*, or the *obligatio externa*, to be treated of in natural law; the *Honestum*, or the *obligatio interna*, to be treated of in the *doctrina ethica;* and finally the *Decorum*, or what is ordained by respect for others (*pudor*), to be treated of in the *Politica*, which is based entirely upon knowledge of human nature. In the *Institutiones* he had himself taught that the principles of all three ultimately depend, as *leges positivæ universales*, upon the Divine good pleasure. He now gives up this view, and maintains that they are to be deduced from the fundamental truth, given in reason and experience, that every man aims at happiness, *i.e.*, at a long life accompanied by pleasure. Such a life is not possible without inward and outward peace; and therefore when men are thrown together in society, certain obligations appear which form the principles of those three parts of practical philosophy. The principle of justice is contained in the precept: Do not do to others what you would not like done to yourself, *i.e.*, *Neminem læde*, a precept which sums up all compulsory or perfect obligations; the principle

of decorum is given in: Do to others as you would that others should do to you; finally, the principle of morality runs as follows: Do to yourself as you would that others should do to themselves. The obligations that result from the two latter, are inward or imperfect. With regard to the content of these three parts, it should be noted that the *Moral Philosophy* follows Pufendorf in distinguishing between duties towards God, towards oneself, and towards others; but that it is much more decided than he was in assigning to philosophy only those duties towards God which manifest themselves in the fulfilment of the other two kinds. All the rest belong to theology as the science of the supernatural. Thus outward religious observances are not prescribed by the natural law of morality; nor are they forbidden by it. On this depends the duty of toleration. There were some who looked upon the rule of the Church as merely a subordinate part of the worldly system of government. In opposition to these, Thomasius develops his territorial system, according to which the State exercises the *jus circa sacra* only in order to preserve outward peace between the various religious communities. Nowhere did Thomasius gain more respect and renown than in his theory of the *Justum*, or natural law. Although he borrows a great deal here from his predecessors, so often referred to, yet he differs from them markedly owing to his much more decidedly non-theological position. Another distinguishing feature is, that he pays much less attention to the historical element, of which he is, to tell the truth, much more ignorant than they. Wherever the positive laws of a country are insufficient, there he brings in natural law to supplement them; and thus, more than any one else, he prepared the way for the tendency to *a priori* codification, that appeared soon after his day. Almost all who subsequently gave way to it were men who had been educated at Halle, which, through the influence of Thomasius, became the school of a rational and, in many instances, rationalistic philosophy of law. In his own case, the want of reverence for the past, that showed itself in his dislike of Roman law, was so far counterbalanced by a preference for German and provincial law that he shrank from over hastily throwing aside what had become historical. He goes so far as to utter a warning against the too speedy abolition of the torture, which he had himself stigmatized as immoral. Even his separation of law from

morality does not carry him nearly so far as it carried his successors, towards seeing in law nothing but a negative regulation applicable to external relations and capable of being enforced by compulsion, so that ultimately the whole legal and civil order becomes simply a gigantic system of compulsion.

C.—WOLFF. HIS SCHOOL. HIS OPPONENTS.

§ 290.

1. The grounds which justified us in ranking along with Leibnitz the three thinkers just named, were, in the first place, their individualistic tendency and the antagonism they manifested to Spinoza; and, in the second place, the fact that, unlike the empiricists, who share with them that tendency and that antagonism, they tried to deduce the laws of the physical and the moral world, not from experience, but from reason. In other respects, their teaching stands in no direct relation to that of their great countryman. For Tschirnhausen is an adherent of Descartes and Spinoza, Pufendorf of Grotius and Hobbes, Thomasius of both, but none of the three of Leibnitz. Now, however, we have to deal with a man who, although he himself admits that he has learned something from all three, yet adopts Leibnitz's doctrines so completely that many have come to regard him as merely a commentator upon them. He is more than this. He has so transformed the philosophy of Leibnitz, that in point of method it comes up to the standards established by Tschirnhausen,—that natural law as developed by Pufendorf becomes an essential part of it, and, lastly, that it exhibits a more intelligible form and a more German dress than Thomasius was able to give to his reasoning. Under these circumstances we can hardly wonder that he protests against being called a mere follower of Leibnitz. It is difficult to strike a mean between the statement that he is an eclectic, a statement which would do him an injustice since his philosophy is really all cast in one mould, and the assertion that he stands in much the same relation to Leibnitz and the three thinkers just named, as Empedocles did to his predecessors (*vid.* § 44). The latter view flatters him too highly, for his merit is limited rather to what is merely matter of form.

2. CHRISTIAN WOLFF was born at Breslau on Jan. 24th, 1679. While still at school, his discussions with Catholics made him familiar with their scholastic doctrines, as well as with those

of the orthodox Protestants. At the University of Jena he hardly devoted so much attention to theology, to which faculty he nominally belonged, as to mathematics, physics, and philosophy. The latter he studied simultaneously under Hebenstreit, a follower of the Schoolmen, and Treuner, whose tendencies were anti-scholastic and Cartesian. A more important influence than either of these was his acquaintance with the work of Tschirnhausen and afterwards with the author himself, as well as the diligent study of Grotius and Pufendorf. In 1703 he took his degree in Leipsic, after presenting his dissertation: *De philosophia practica universali*, which first drew the attention of Leibnitz to him. There he delivered mathematical and philosophical lectures and wrought diligently at the *Acta eruditorum* until 1706, when he accepted the professorship of mathematics at Halle. After some years he began to lecture on physics as well as on mathematics, and in 1711 he took up philosophy also. These duties he continued to discharge with great success, until in 1723 the notorious clique drove him out of Halle. Only in one point does he appear as a disciple of Thomasius, whose method of philosophy had no other interest for him,—he delivered his lectures in German, and in much purer German than that thinker had done. From 1723 to 1741 he was a professor at Marburg, and, as such, a subject of the King of Sweden. In 1735 he had been invited to return to Halle, but declined. In 1741 he was again urged to do so, and this time he complied with the request. He lived there, finding more satisfaction in his literary than in his academic success, until 9th April, 1754, when he died as Chancellor of the University and Privy Councillor of Prussia, Vice-president of the Academy of St. Petersburg, and Baron of the Holy Roman Empire. The following may be named, in chronological order, as the most important of his writings:—To the period of his life in Halle belong: *Aërometriæ elementa* (1709); *Foundations of the entire Mathematical Sciences* (1710); and in a Latin dress: *Elementa mathes. universæ* (2 vols., 1713–15); *Reasonable Thoughts on the Powers of the Human Understanding*, etc. (Logic), (Halle, 1712, 8th ed., 1736); *Ratio prælectionum Wolfianarum*, etc. (an encyclopædic review of his system), (Halle, 1718); *Reasonable Thoughts upon God, the World, and the Soul* (Metaphysics), (Halle, 1719, 5th ed., 1732); *Reasonable Thoughts on the Conduct of Man* (Moral Philosophy), (Halle, 1720); *Reason-*

able Thoughts on the Social Life of Man (Political Philosophy), (Halle, 1721); *Various Essays towards the Knowledge of Nature and Art* (Experimental Physics), (3 vols., Halle, 1721–23); *Reasonable Thoughts on the Workings of Nature* (Theoretical Physics), (Halle, 1723).—To the period of his life in Marburg belong: *Notes to the Reasonable Thoughts upon God, the World, and the Soul* (Frankf., 1724); *Reasonable Thoughts on the Purposes of Natural Things* (Teleology), (Frankf., 1724); *Reasonable Thoughts on the Parts of Man, Animals, and Plants* (Physiology), (Frankf., 1725); *Full Accounts of his German Writings* (Frankf., 1726); *Philosophia rationalis, s. Logica* (Frankf., 1728, 4to); *Horæ subsecivæ Marburgenses* (12 parts, 1729); *Philosophia prima, s. Ontologia* (Frankf., 1729, 4to); *Cosmologia generalis* (Frankf., 1731, 4to); *Psychologia empirica* (Frankf., 1732, 4to); *Psychologia rationalis* (Frankf., 1734, 4to); *Theologia naturalis* (Frankf., 1736–37, 2 vols., 4to); *Philosophia practica universalis* (Frankf., 1738–39). Lastly, after his return to Halle, there appeared the remaining seven volumes of the *Jus naturæ methodo scientifica pertractatum*, the first volume of which had been printed in 1740, at Frankfort-on-the-Oder. Together they form eight vols. 4to; and the *Jus gentium* (Halle, 1749, 4to) is really a ninth in the same series. Last of all came *Philosophia moralis* (1750–53, 4 vols., 4to). Besides these there are extant six volumes containing collections of his minor works (1736–40, 8vo).

Cf. C. G. Ludovici: *Entwurf einer vollständigen Historie der Wolff'schen Philosophie*, Leipz., 1738. (Gottsched): *Historische Lobschrift auf den weiland*, etc. Halle, 1755, 4to.

3. The fact that there is in our soul both a *facultas cognoscitiva* and a *facultas appetitiva* makes Wolff distinguish *Philosophia practica* from what he calls *Metaphysica* instead of *Philosophia theoretica*, as we should have expected. He takes up *Logic* before either of these, rather upon pedagogic than upon more solid grounds. The detailed Latin exposition of this discusses historical, mathematical, and philosophical knowledge in the *Discursus præliminaris*, and then goes on to repeat the definition of philosophy, which had been already given in the *Elementa aërometriæ* in 1709. It is the science of the possible, so far as it can be realized. Although in his German writings Wolff always employs the word *Weltweisheit*

(*sapientia secularis*), yet this definition excludes the limitation to the finite, which Thomasius had imposed. He brings everything within the sphere of the science, and expressly mentions natural theology, philosophy of law, of art, of medicine, and so on, as parts of the system. Further, as Wolff always regards possibility as freedom from contradiction, this definition makes the law of identity the highest formal principle, and thus proclaims reasonableness as the chief characteristic of philosophy, and intelligibility as its chief merit. We can almost imagine it is Thomasius who is speaking, when, in the Preface to his *Logic*, he says that the principal defects of the philosophy of the time are the want of evidence resting upon definite conceptions, and the little regard paid to practical utility. Again, in altering the formula of Tschirnhausen (§ 289, 2) so as to assert that only those sentences are true, the subject of which requires or determines the predicate, he at least comes very near to limiting philosophy entirely to analytical judgments, *i.e.*, to applications of nothing but the law of identity. This also explains why with Wolff the philosophical and the (elementary) mathematical method coincide. Next, as regards logic itself, in his anxiety to get rid of all the rubbish of the Schoolmen, he accepts the views expressed by Ramus in his efforts at reform (§ 239, 3), and by the *Port-Royal Logic* (§ 268, 3); but it is chiefly the lead of Leibnitz and Tschirnhausen that he follows. He develops the opinions of the former where, in his theory of the concept, he adopts and completes the distinction between obscure and clear, confused and distinct conceptions; what he says in the same place as to its being characteristic of definitions to explain the origin of the thing defined, is directly borrowed from Tschirnhausen. On the other hand, it was Leibnitz who rescued him from the contempt for the syllogism with which Tschirnhausen had inspired him. Up to the last, however, he regards only the conclusions of the First Figure as perfect; and accordingly, in his short German outline of logic, he discusses them alone, although in his more elaborate Latin work he shows how the two other Figures can be reduced to the First. The first, or theoretical, part of logic is not nearly so elaborately treated of as the second, or practical, part, which gives a detailed account of the criterion of truth, the degrees of certainty, opinion, belief, and knowledge, the distinction between *a posteriori* and *a priori* knowledge—words which,

as for the first time in Leibnitz and Tschirnhausen, mean much the same as what is discovered by observation and what is discovered by reason,—and finally the usefulness of logic for all possible circumstances in life.

4. The speculative part of philosophy, *Metaphysics*, is divided, upon the basis of the three chief objects of human knowledge, into cosmology, psychology, and theology, the two latter of which he also classes together and designates by Leibnitz's name of "pneumatics." Clearly, however, the theories of physical and intellectual existences must be preceded by a theory of existence in general. For this *metaphysica de ente* there was current in Wolff's day not merely the name of Ontosophy applied to it by Clauberg, but also that of *Ontology*, which was favoured by others. He selected the latter of these two, and he assigned to it the position of *philosophia prima*, or "fundamental science," because what it discovers of the *ens* as such, naturally holds good of all *entia*. That these inquiries must exhibit a great number of points of resemblance to what the Schoolmen, following on the track of Aristotle, had said in regard to predicables and categories, is for Wolff a matter neither for surprise nor for reproach. He begins by setting up as formal principles the Law of Identity and the Law of Sufficient Reason, making the latter appear simply as a deduction from the former. After insisting upon the rule of method, that we ought to begin by stating the thought upon which any consequence depends, he commences the inquiry with the most indefinite and most general categories, *Nihilum* and *Aliquid*, between which there is nothing intermediate; so that he denies all Becoming, and maintains as an irrefragable principle the maxim *ex nihilo nihil fit*. By the help of the conceptions of the impossible and the possible, of the indefinite and the definite, he reaches the anti-Spinozistic proposition, which must be regarded as the most important in his whole ontology—that only what is completely determined (*omnimode determinatum*) is real, but that what is of this nature is an individual thing. Perfect determination is therefore the famous *principium individuitatis*, and is at the same time the *complementum possibilitatis*, by the aid of which the possible becomes the actual. If the *determinans*, and therefore the *ratio sufficiens*, of a thing lies within itself, that thing is *a se* and therefore (absolutely) necessary; if it lies in something else, the thing is *ab alio* or *contingens*, or necessary

hypothetice. In his detailed investigations into quantity and measure, he gives the outlines of a philosophy of mathematics (especially arithmetic), and he then proceeds to take up quality. Finally, he explains the conceptions of order, truth, and perfection, keeping in view the Scholastic maxims—*omne ens est unum verum et bonum;* and perfection is made to consist in the unity of the manifold, agreement in difference. The second part deals with the various kinds of existences. These are either simple or complex. To the latter, with the consideration of which Wolff begins, must be attributed extension, time, space, motion, form, origin from something else, transition into something else, and so on. But none of these can be applied to simple existences, which are really all that is of the nature of substance, since the whole of those predicates properly denote only what is accidental. Wolff is quite at one with Leibnitz in holding that these simple existences are really unities or monads, that they are metaphysical points, since they are not divisible even in thought, that they neither come into existence nor perish, that there are not two of them exactly alike, and so on. He further agrees with Leibnitz in maintaining that their essential nature is power and limited power. There is, however, one important difference. At first he left the matter doubtful, but subsequently he denied emphatically that this power is a power of perception. Accordingly, while Leibnitz is so fond of calling his monads souls, or at least beings of the nature of souls, Wolff prefers to apply to them the expression *atomi naturæ.*

5. Ontology, according to Wolff, should be followed by general (or transcendental) *Cosmology*, the basis of physics. This ought to begin by examining the origin and the qualities of all the elements of the world. By a world is to be understood a connection or association of finite things, and by this (or the visible) world the association of finite things actually in existence. Since in this all changes in the things are effected by means of motion, the world is a machine, and may aptly be compared to the works of a clock in which, granted its present construction, everything is (hypothetically) necessary. Thus the slightest alteration in the established connection would substitute a new world in place of the old one. (Hence too every miracle requires a second miracle, the *miraculum restitutionis*, by which the hand of the clock, which has been moved forward, is put back again to its place.) The

order of nature, or the laws of the physical world, accordingly coincide exactly with the laws of motion, which no one has formulated better than Huygens did. The component parts of the visible world, which are already associated together, are called bodies. Only the elements of these, the absolutely simple sorts of existence, are substances; the aggregates present to us the appearance of substances, only because we cannot distinguish between the large number of substances that go to compose them. The latter are therefore *phænomena substantiata*, to which our confused perception attributes the character of substance. Of course among these aggregates of substances also it is impossible to find two exactly alike. As their extension is a phenomenon, and therefore the work of the imagination, so also their *vis motrix*, *i.e.*, the sum of the primitive (elementary) forces, as it appears in our confused way of looking at them, is likewise a phenomenon, not entirely but about half the work of the imagination. If we analyse bodies in thought, we ultimately reach, long after passing the limits of perception, certain primitive *corpuscula*, which are composed of the incorporeal *atomi naturæ*, and which in turn form the elements of the derived *corpuscula*. The atomic philosophy, which explains everything from the association of small bodies, is therefore fully justified. Only it must not imagine that it is the true cosmology, for this must go further back. On the other hand, the purpose of *Physics*, or the special theory of bodies, really coincides with that which the atomic philosophers have set before themselves. In order to establish a physical philosophy of this kind, it is, according to Wolff, necessary in the first place to make a careful collection of what we have learned from the experience presented to us, and from the experiments we have deliberately made. His *Useful Essays* are meant to be contributions towards such a "History of Nature"; only after this has appeared, is the "Science of Nature" to follow, and the latter is to treat from a "dogmatic" point of view what in the former was the subject of "experimental" investigation. When fully elaborated, (dogmatic) physics would deduce everything from the connection and motion of the primitive corpuscules, which form the ultimate ground of explanation in this science, just as simple substances do in cosmology. Our physics, however, is far from having reached this point of perfection. Even where it approaches it, in so far as it explains everything mechanically

i.e., from connection and motion, it never gets beyond *corpuscula* of a higher order, and never penetrates to the primitive atoms. In general, however, it is still unable to give a mechanical explanation at all, and has to be content with "physical" explanations that take as their starting-point certain masses (like water, air, fire, heat, and so on), our confused apprehension of which is proved by the fact that we think of them as completely homogeneous, whereas they are without doubt composed of a great variety of *corpuscula*. Finally, in the third place, besides mechanical and physical explanations, there are teleological explanations. These are not, as physical explanations were, a mere make-shift. Everything, at least if it is to be completely explained, must be considered, on the one hand, according to the causes that actually produce it; on the other, according to the end it serves. This point of view Leibnitz had already indicated, and it was elaborated by Wolff particularly in his *Reasonable Thoughts on the Purposes*, etc. The two ways of looking at a thing are not really contradictory, for if God has foreseen that this or that follows from the nature of things, and has yet created them, those consequences are just God's purposes. The teleological point of view is specially prominent in his examination of what is organic, in the definition of which ontology had already included the idea of an end. This may account for the fact that *teleology* is often ranked along with cosmology and physics as a third division of natural science. In the treatise, *On the Use of the Parts*, etc., Wolff does not take a single step without inquiring what the purpose of a thing is. The answer generally points to the use it has for man. Even the brilliancy of the stars he believes to be given them that they may serve as a light for mankind in the night time.

6. The name *Psychology*, which Wolff applies to the third part of his metaphysical system, occurs as early as Goclenius and his pupil Cosmann; but to such an extent had it fallen out of use that it almost looks as if he considered himself the inventor of the term. As in natural science, so here too he has put the empirical treatment of the subject before the dogmatic ("rational"); but the parallelism between the titles is not the only thing to show that the two should be taken together in any account given of the system. Wolff did not, like Leibnitz, conceive of all simple substances as perceptive, and therefore he had to combine for himself the

two characteristics of substantiality and perception. Starting from the fact of consciousness, he begins by deducing from this, as Descartes had done, the existence of the soul. He then goes on to reason that we are bound to conclude from the connection between perception and apperception, which makes the soul a thinking being, that it is incorporeal and simple, *i.e.*, that it is likewise a primitive substance. It too must therefore possess the power of continually altering itself. To deduce from the alterations of its *vis repræsentativa* all the capacities of the soul as modifications of this *vis*, is the purpose of the *Psychologia rationalis*, which receives as material from the *Psychologia empirica* the facts that are to be explained. Wolff begins with the *faculties of knowledge*, which, following Leibnitz's classification of perceptions as obscure and confused, clear and distinct, he divides into an inferior and a superior part. To the former of these belong sensation, imagination, fancy (*facultas fingendi*), and memory, while the stages in the latter are attention, understanding, and reason. Under the question of sensation, he discusses the connection between body and soul, and asserts that the only tenable view is the theory of pre-established harmony, an expression which with him denotes simply this relation and never the harmony of the universe. In this connection he remarks that, as the soul begets its sensations entirely from within itself, although in exact correspondence with what goes on outside of itself, an idealistic system of physics—and long before Descartes there were thinkers who "admitted the existence of nothing but souls and spirits"—would assume exactly the same form as his own had done (*German Metaph.* §§ 777, 787). It is in no wise inconsistent with this, rather it is a necessary consequence of it, that he goes so far as to reproduce, word for word, the teachings of materialism, when he is arguing against those who assert that the soul exercises an influence upon the body. His view is, that the processes of soul and of body are independent of each other, that there is a correspondence between them, given in experience, but that there is no perpetual miracle, such as the Occasionalists assume, nothing in fact except a rational and intelligible connection. If this can be reached without pre-established harmony, he has no objections, he is not slavishly bound to the word; as he says, he has been led to use it quite involuntarily. In connection with imagination, it is important that he devotes so much

attention to the association of ideas, and makes an effort to reduce this to a small number of definite laws. With regard to the *practical* relation, the *vis appetitiva*, the most important point is the complete dependence of will upon knowledge, a dependence that possibly required to be emphasized all the more strongly since Thomasius had given currency to the opposite view. He holds as firmly as did Leibnitz, that what is seen to be a good must necessarily be desired; but by a good we are to understand what makes our condition more perfect, by an evil the contrary. The form of will that is determined by the lower faculty of knowledge, *i.e.*, by obscure and confused perceptions, is the lower or sensual will, which, when it rises to a certain pitch, produces passion; that which follows the higher faculty, is will properly so called. Thus, although there is no *æquilibrium arbitrii*, yet man is free, for he chooses what pleases himself. What Wolff says further in his *Psychology* in regard to the immortality of the soul, as distinguished from mere imperishableness, in regard to the previous existence of the individual in the spermatozoa, and so on, is all taken from Leibnitz.

7. In the last part of his Metaphysics, the *Natural Theology*,—so called to distinguish it from positive theology, which rests upon supernatural revelation,—Wolff appears as merely a commentator, and often a slavish commentator, on what Leibnitz had said in the *Théodicée*. The proofs of the existence of God, which in both instances are first discussed, are reduced to the *a posteriori*, and the *a priori* argument. The former reasons from the contingent character of our own (and the world's) existence to a really independent being, *i.e.*, one which exists *a se*. As the nerve of the argument lies in the fact that contingency, as *ab alio esse*, points to something beyond itself, Wolff is willing to admit the validity of the teleological argument, only on condition that we reason from the *contingent* order of the world to One who has so ordered it. That to which we are led by reasoning *a contingentia mundi*, must contain *eminenter* everything that what we started with contains in actual reality, but not what is the work of the imagination, or phenomenal. Thus it is free from all limits and from finitude, and is absolutely perfect. This argument, which begins with existence and ends with the Being of perfect nature, is treated of in the first part of his *Natural Theology*. The second part presents us with an argument *a priori*, which pursues a parallel

course in an opposite direction,—it starts from the most perfect Being, and ends by proving (His) existence. By reality must be understood, that which is a real predicate of anything that exists, so that it contrasts in the first place with its negative, absence; and in the second place with what is simply phenomenal and dependent upon our confused perception, what is mere appearance. God is therefore defined as the sum of all realities that are actual (*compossible*). This last clause secures that the conception should be possible, and its possibility was what Leibnitz was anxious to prove. And further, the maintenance of reality, as he shows, breaks the force of all the objections that are drawn from the idea of a greenest island, a swiftest motion, and so on, for green, motion, etc., are merely phenomenal, not real. The most perfect being is the sum of all realities because, if we could imagine a single one added to it, it would have been so far defective. As existence belongs neither to what is negative nor to what is phenomenal, we cannot but attribute it to the most perfect being. This Being therefore exists. The rest of Wolff's *Natural Theology* is taken up with showing that God, as the Supreme Being, has an absolutely distinct knowledge of everything, and therefore of all possible worlds, and chooses the best; that all the arguments which are made against His wisdom and goodness from the existence of wickedness, prove nothing, and so on,—discussions which are all found in Leibnitz. The elaborate refutation of Spinoza is, however, entirely Wolff's work. Next to the existence of God, the point in which Wolff takes most particular interest, is the immortality of the soul, the continuity of which, as opposed to its mere imperishableness, he endeavours to prove. In a letter to Herr von Manteuffel, he says frankly that these two doctrines comprise rational theology, and he censures all attempts, such as Leibnitz had made, to explain the mysteries of faith. He declares himself decidedly opposed to one of the dogmas, the reasonableness of which Leibnitz had tried to show,—eternal punishment. As regards miracles, he does not indeed deny their possibility, but he often comes very near to doing so, to such an extent does he limit the sphere of all that is supernatural, including of course revelation, not merely by the *miraculum restitutionis*, already referred to, which he demands in the case of every miracle, but by laying down a large number of conditions under which alone the miracle is admissible. Compared with

Leibnitz, Wolff approaches much nearer to the consistent rationalism of later times. In regard to mere outward ritual, on the other hand, Leibnitz appears as much the more heterodox.

8. Wolff shows himself much more independent of Leibnitz in that branch of the subject with which he was occupied before he made the latter's acquaintance, namely *Practical Philosophy*. This is developed in outline in his German writings on moral and political philosophy; but he goes into it much more fully in his Latin works on *Philos. pract. universalis*, *Jus naturæ*, *Jus gentium*, *Philos. moralis*. From these we see that just as Leibnitz's views had corresponded on the idealistic side to the materialistic teachings of the Sceptics (§ 277), the Mystics (§ 278), Locke (§ 280), and indeed almost of Condillac (§ 283, 3, 4), so Wolff is the direct antagonist of the English ethical systems (§ 281), of Mandeville, and to a certain extent of Helvetius (§ 284). Wolff, as opposed to these thinkers, makes the reason alone the *principium cognoscendi* in the case of all rules for the direction of our will—rules which he is fond of comparing with the logical ones that regulate our thought. So far does he carry this rationalism, that, in contrast to Pufendorf, he adopts the formula of Grotius, to the effect that these rules would be valid, even if there were no God. The good is good, not through the will of God, but "by and in itself"; and therefore it is binding even upon atheists, as is proved by the example of the Chinese. Again, he does not represent as the end of action a happiness that is more or less tinged with sensuality. He lays down as the supreme law: "Seek ever to advance towards greater perfection"; and he defines the perfection of an action, in a purely logical fashion, as conformity, not merely with the nature of the person who acts, but also in a very special degree with the consequences to which it leads. (Extravagance, which results in impoverishment, drunkenness, whose end is discomfort, and so on, are instances of imperfection.) Where he speaks of happiness, he regards it more as a supplement of perfection, and makes it consist in the approval of conscience, *i.e.*, of reason. Accordingly, he makes the *beatitudo philosophica*, or the chief good, consist in steady progress towards greater perfection. For this very reason he has no objection to others finding the basis of all duties in the happiness to which their fulfilment leads, provided only that they do not forget that this is not the ultimate basis. (This exactly corresponds to his atti-

tude towards the atomic philosophy, already described.) Like the source from which he draws the moral law, like the end which he sets before those who fulfil it, so too the form of this ethical philosophy is essentially different from that of the English thinkers; instead of a theory of the virtues, we have here a theory of the goods, often too echoes of an imperative theory of duties, in which virtue becomes promptitude in the fulfilment of duty. Only in one respect does he agree with them, and it is necessary that he should do so if he is to be called their antagonist—individualism is the characteristic feature of the practical philosophy of both. Although he follows Aristotle in dividing practical philosophy into ethics, economics, and politics, he does not go so far as to join him in making the whole more important that the parts (§ 89, 2). Rather, he continues to look upon all moral associations as contracts which men made in order to develop their powers to the full by combination. In this respect he hardly makes an exception even of the parental relation. We must begin by pointing out as one merit of Wolff, that in his practical as in his theoretical philosophy, he has given us an encyclopædic review of its individual parts, and of their mutual connection. His *Philosophia practica universalis* stands in the same relation to the three parts we have mentioned as his ontology does to his cosmology, psychology, and theology. It is the common basis of all three; and the two volumes that are devoted to its discussion aim at establishing the principles upon which a distinction is made between good and bad actions, and which render obligations and rights possible; and further, at deducing all moral action from human nature, a process in the course of which the general ideas of freedom, imputation, moral value of an action, conscience, conflict of duties, are treated of in detail. While there can be no doubt as to the fact of this part's being put in the forefront, or as to the explanation of that fact, it is very difficult to decide what position really belongs to the *Jus naturæ*, the elaborate discussion of which in eight volumes shows the importance that Wolff attached to it. In the first of these volumes, which professes to examine innate obligations and rights, Wolff follows the classification he found already in existence, and treats of the various duties as duties towards oneself, towards one's fellow-men, and towards God. The volume thus contains partly repetitions of what had been taught in the *Philos. pract. univers.*, partly anti-

cipations of what is discussed in the *Philosophia moralis*. Nor does Wolff assign a more decided position to the *Jus naturæ* in the casual remarks he makes as to its relation to other parts of his doctrine. For example, he says that the *Philos. pract. universalis* contains the principles of the *Jus naturæ*; and again, that the *Philosophia moralis* presupposes the *Jus naturæ*, exactly as the latter presupposes the *Philos. pract. univers.* From this we should conclude that the *Jus naturæ* contains the general principles of the *Philosophia moralis*. But it is quite at variance with any such relation between them, that in the second part of the *Jus naturæ*, which treats of property and its acquisition; in the third, which treats of the transference of property; in the fourth and fifth, which treat of contracts; in short, in his whole theory of acquired rights, a large number of entirely distinct inquiries occur, of which no use at all is made in the subsequent treatise on moral philosophy. The explanation of this inconsistency lies in the fact that Wolff, while he lays great stress on the distinction between *obligatio externa* and *interna*, hand in hand with which goes the classification of *obligationes et jura* as either *perfecta* or *imperfecta*, *i.e.*, as capable or not capable of being enforced, does not keep the two even so far apart as Thomasius did, not to speak of his drawing such a line between morality and legality as was drawn at a later period by Kant. Exactly as the *justum* and *honestum* are confused, so the *decorum*, which Thomasius distinguished from them, is often confused with both. This accounts for purely moral motives, and even æsthetical considerations, being mixed up with strictly legal inquiries, a form of confusion which, with its converse, is very frequent in Wolff, and which naturally renders unavoidable the many repetitions that add so much to the bulk of his writings on practical philosophy. Where elaborate inquiries are set on foot to discover whether it is contrary to the *jus naturæ* to make a loud smacking noise while eating, we must be prepared for thick quarto volumes. And again, as duties towards oneself include the right use of the reason, and therefore correct definition, judgment, and reasoning, the whole of logic is included in moral philosophy, a proceeding which of course vastly enlarges the compass of the latter. His treatment of the subject would have been shorter, and at the same time clearer, if he had confined himself to the rules for the guidance of the will, maintaining strictly, as he is always endeavouring to do, the

distinction between those which are perfect and those which are imperfect,—legal duties and duties of affection. This is true, at least, of the part where he treats of man as an individual. For moral associations, as was seen afterwards in the case of Kant, are by such a separation subjected to an abstract and lifeless examination; and it is just the confusion between the legal and the moral which saves Wolff, when he is dealing with the question of the succession of children to the property of those who have died intestate, from taking refuge, with Grotius and so many others, in the fiction of a quasi-testament, and which puts him in a position to maintain the only correct view. Here, too, however, there are signs of uncertainty manifested.—As regards the duties of the individual, man is justified and bound to care for his own perfection. It is only by appealing to experience that Wolff succeeds in showing that this is inseparably bound up with the perfection of others. Perhaps it is just the consciousness of the weakness of his argument at this point that makes him hurry so much in this part of his system; he even runs the risk of omitting some of the necessary intermediate steps in passing from one stage to another. By thus bringing the two together, he makes in ethics the transition from duties towards oneself to duties towards others, and in natural law that from the examination of the individual to the examination of communities. The latter are either simple forms of society, the elements of which are individuals, or complex forms, which themselves consist of smaller communities. To the former class belong the associations between husband and wife, between parent and child, between master and servant. These three combine to make up the first complex form of society, the household, the rights and duties of which are the subject-matter of *Economics*. In this portion of his work his homely morality, free alike from excess and from laxity, comes cheerfully to the surface. If we compare Wolff's discussion on monogamy with the expressions of Thomasius, or even of Leibnitz, in regard to polygamy, or if we put Wolff's treatment of marriage side by side with the uncivilized fashion in which it is afterwards treated by Kant, no one can help being filled with respect for the stern, honest father of the household, in spite of the pedantic formality which mars his detailed discussion of the subject. Individual households, just like the individual man, cannot subsist without the community. Through the contract which they make

for mutual support and security, there arises the "commonwealth," or the State, the well-being, peace, and security of which are the highest end which those who live in it can pursue. *Political philosophy* teaches us how these are to be maintained. By the well-being of the whole is to be understood the sum-total of the perfection of the individual citizens; as this was seen to be identical with happiness, the perfection of a community increases with the happiness of its members. Wolff thus stands in an antagonism to Pufendorf, of which he himself is fully conscious. For Pufendorf deduces even duties towards oneself from the social principle, while here a diametrically opposite course is pursued. The ultimate ground of the social contract is, that without it the individual cannot attain to the highest perfection (*cf. Jus nat.* vii., p. 143). As by this contract, which concedes to the whole the right of exercising compulsion upon individuals, the aggregate of individuals (the people) makes itself into a State, the supreme power originally rests with the people; according as it retains this in its own hands, or surrenders it to definite instruments, there arise the three pure, as well as the mixed Aristotelian forms of government; and these varieties are further increased owing to the fact that the sovereign power may be limited or unlimited, and that it may be surrendered temporarily or in perpetuity. Everywhere the well-being of the State continues to be the supreme law. On the one side, it forms the sole check upon the power of the sovereign; upon the other, it rises above all the fundamental laws of a State. (That is, where there are such laws.) Before the well-being of the whole, individual rights too must retire into the background; and where Wolff goes into detail, the bureaucratic character of his system of government becomes at once very apparent. The sovereign power has to see that the various callings in life stand in a fitting numerical relation to each other; and it has the superintendence of schools, churches, and places of public amusement, which are classed together as means of attaining moral perfection. It controls penal jurisdiction, a point in regard to which Wolff has the credit of having drawn attention to the difference between chastisement, which tends to improvement, and punishment, which is merely deterrent. (In regard to the torture, which he never quite rejected, his later writings propose many more limitations than his earlier ones. Capital punishment he looks upon as

necessary for the self-defence of the State, and therefore he regards it as permissible only in cases where the individual is entitled to draw the sword. The indisputable right of the State to treat with ignominy the corpse of the suicide, ought not to be extended to atheists. Where they propagate their doctrines, he considers it quite justifiable to send them into exile.) Detailed inquiries into the relation between natural and civil law, into sovereign rights, and into the duties of rulers and subjects, occupy the rest of his treatise on political philosophy, to which his *Law of Nations* forms a sequel. Like Pufendorf, Wolff sees in international law simply an extended form of natural law, an extension which is rendered possible by the fact that the community too is a person, and that therefore States can enter into the same relations as private individuals. Here Wolff, like Grotius, distinguishes a necessary or natural law of nations, to which all peoples are subject as members of the one great republic of States, from the positive law of nations, which rests upon the presumption of contracts, actual or tacit, between individual States. It will be readily understood that in the first chapter, where the duties of nations towards themselves are discussed, a good deal is said which really belongs to internal constitutional law. On the other hand, the inquiries of the second chapter, which have to do with the duties of nations to one another, deal with international law, properly so called. The third chapter, which treats of the property of nations, discusses questions of a miscellaneous character, inasmuch as the property of the individual citizens, its protection, prescriptive rights, and so on, come under consideration, almost as much as does the property of the State. The fourth chapter deals with contracts, the fifth with the settlement of disputes, the sixth with the right to make war, the seventh with the laws of war. Here a strict distinction is made between just and unjust war, as well as between natural and positive law. According to the former, for example, poisoned arrows, assassins, and so on, are allowable in war; according to the latter they are forbidden. The eighth chapter discusses peace and the conclusion of peace, the last the rights of ambassadors.

9. A system that commended itself by completeness, a fixed terminology, and an easily-handled method, was bound to attract a large number of adherents. In the WOLFFIAN SCHOOL, mention must be made of one of Wolff's oldest scholars, and his

companion in suffering when he was driven from Halle, LUDWIG PHILIPP THÜMMIG (1697–1728), whose chief work, *Institutiones Philosophiæ Wolfianæ* (Frankf. and Leips., 1725–26, 2 vols.), has been frequently reprinted. By the conciseness of its form it contributed at least as much as did the writings of the master to the spread of Wolff's philosophy in Germany, all the more so that the latter used to appeal to it as a perfectly accurate account of his theories, while its effect abroad was increased by the excellence of its Latinity. In addition to this, Thümmig wrote a great number of small treatises, one of which, *Demonstratio immortalitatis animæ ex intima ejus natura deducta* (Halle, 1721), made a sort of sensation, although it failed to accomplish Thümmig's immediate purpose of establishing the distinction between immortality and mere imperishableness, as well as of representing the soul as incorporeal,—an idea at variance with the views of Leibnitz. This, with many other similar essays, is included in *Meletemata varii et rarioris argumenti* (Brunsw. and Leips., 1727), which Thümmig published shortly before his death.—GEORG BERNHARD BILFINGER (Jan. 23rd, 1693, to Feb. 18th, 1750) was another man of whom Wolff declared that he had thoroughly comprehended the meaning of his system, although the name of "Leibnitzo-Wolffian" philosophy, which he introduced, was not satisfactory. Among the very miscellaneous writings which he published in Latin, partly at Tübingen, partly at St. Petersburg, and partly again at Tübingen, must be mentioned: *De harmonia animæ et corporis humani maxime præstabilita ex mente illustris Leibnitii commentatio hypothetica* (Frankf., 1723); *De origine et permissione mali* (1724); but especially, *Dilucidationes philosophicæ de Deo, anima humana, mundo et generalibus rerum affectionibus* (Tübing., 1725, 4to) (very often reprinted afterwards). The last-mentioned was regarded for a long time in Germany and abroad as the best text-book of Wolffian metaphysics. The friendly reception it met with was due in some measure to the circumstance that the author was honestly pious, and was familiar with scholastic theology, so that he was able skilfully to face the misgivings suggested by theology, and to set them at rest. Where he differs from Wolff, it is to come into closer agreement with Leibnitz. A case in point is the name "monad." Here, however, he does not go so far as to make all monads percipient beings, a position he had taken up in his first work. On the other hand, he proposes to

attribute to all of them power of motion, an idea that brings him nearer than Wolff to the atomic theory. The object which Thümmig and Bilfinger had had in view was to represent in small compass and for wider circles of readers, in the one case the whole Wolffian system, in the other only the speculative part of it. Others attempted to work out the separate portions of the system in greater detail. As Wolff had really excluded nothing from the sphere of philosophy, this meant much the same thing as to treat philosophical and all other scientific subjects according to the principles of his philosophy. Of course the vast number of such treatises included a great many that were hasty and superficial; and we can readily understand that Wolff's opponents brought against him the same charge made before his time against Lully, and after him against Kant and Hegel. It was said that his teaching led men to construct everything *a priori*, and to decide everything before they have even got so far as to know it. Logic was developed by Jacob Friedrich Müller, Hansch, Baumeister, Schilling, and others, who adhered more or less closely to Wolff; in the same field must be mentioned Reusch, Hollmann, Engelhard, Gottsched, and Büttner, who, however, combined logic more with the introduction to philosophy, and partly also with metaphysics. Köhler, Rübel, and Walcher took up practical philosophy, particularly natural law. In theology the following came forward as more or less decided Wolffians: Reinbeck, Ribov, Ringier, Canz, Carpov, Carpzov, etc.; while among jurists there were Erath, Cramer, Ickstadt, Heineccius, Jariges, Nettelbladt. Even medicine supplies the names of Burggrav, Schreiber, Grosse, Thebesius.

10. The importance of ALEXANDER GOTTLIEB BAUMGARTEN compels us to accord to him a separate treatment. He was born at Berlin, on July 17th, 1714, and died on May 27th, 1762, at Frankfort, where, after lecturing at Halle from 1735 to 1740, he had been appointed to the chair of philosophy. While still a schoolboy at Berlin, he occupied himself with attempts to write poetry; afterwards he went to the Orphanage at Halle, where A. H. Francke took him to his table. This, combined with his intercourse with Breithaupt and Lange, naturally prejudiced him strongly against Wolff. But he studied him for himself, and gradually became a devoted adherent of the much-abused system. He appears as its decided advocate in his dissertation: *Meditationes philosophicæ de non-*

nullis ad poëma pertinentibus (Halle, 1735, 4to). He lectured on all parts of philosophy, at first following Wolff and Bilfinger and afterwards his own notes, which were the groundwork of his *Metaphysica* (Halle, 1739). His other writings, too, were notes for his academic lectures. Amongst these are *Ethica philosophica* (Halle, 1740); *Æsthetica* (*Frankf.-on-the-Oder*, 1750 and 1758, 2 vols.); *Acroâsis logica in Christianum Wolf. dictabat A. G. B.* (Halle, 1761); *Initia philosophiæ practicæ primæ* (1760). Of the same character are the following, published after his death, *Sciagraphia encyclopædiæ philosophicæ* (Halle, 1769); *Philosophia generalis* (Halle, 1769); *Dictata juris naturæ*, etc. Baumgarten completed the work that Wolff had done so much to accomplish, for his encyclopædic review of the sciences goes into much greater detail than Wolff's did. He actually makes ceremony and expression the subject-matter of two sciences,—*Prepologia* and *Emphaseologia*,—and includes practically everything within the sphere of his observations. Further, he follows up the track which Wolff had begun to lay down, by adhering even more firmly than the latter did to an exact terminology. As in doing so he often modifies the phraseology of the Schoolmen, and as Kant, who for a long time lectured from his *compendia*, adopted these improvements and transmitted them to us, it has come to pass that many changes in the earlier terminology (for example, the current signification of "subjective" and "objective," which is exactly the opposite of the meaning they had in the Middle Ages) are attributed to Kant, although Baumgarten either first adopted them or first made them stereotyped. (An instance is the usage which Leibnitz and Wolff attempted to introduce,—the latter with success,—according to which, "to have *a priori* knowledge of," means, not as it used to do, "to derive from its cause," but "to derive from the reason.") For the introduction and naturalization of German terms, too, Baumgarten is chiefly responsible, in spite of the fact that his *compendia* are in Latin. For as his notes, some of them on their very first appearance, others when they were republished, gave under the separate paragraphs a German rendering of the technical expressions employed in the text, he perpetuated such of Wolff's translations as he adopted; in points where they differed, Baumgarten succeeded in supplanting Wolff's expression, even when it was as good as his own, and therefore much more so when he had finer linguistic acumen and

taste upon his side. (As an example of the former case, take the fact that, in Baumgarten, Wolff's "*Vor und an sich*" is first changed to "*An und vor sich*," and ultimately to "*An und für sich.*") But Baumgarten's supplementary work is not confined to adding fresh demands to those Wolff had already made; he also carried out some things that Wolff had only demanded. In this he is helped by following suggestions and indications given by Leibnitz, which seem almost to have escaped Wolff's notice. The most important of these amplifications is this. He agrees with Wolff in distinguishing philosophy from theology; but at the same time he contrasts it strongly with mathematics, which deals with the quantitative, and in this way he reaches the definition he always maintained, that philosophy is *scientia qualitatum in rebus sine fide cognoscendarum.* Like Wolff, he makes the theory of knowledge precede both speculative and practical philosophy, the former of which embraces metaphysics, although, just as Wolff did, he often hesitates whether this theory ought not to be combined with psychology. He applies to it the name "*gnoseology.*" According to Leibnitz and Wolff, knowledge is partly of a lower (sensible), and partly of a higher (intellectual) kind; but Wolff, in his *Logic*, has dealt only with the latter. Baumgarten, therefore, begins with *Æsthetics*, or the theory of the lower form of knowledge, as the first part of "gnoseology," and then goes on to treat of *Logic* as the second part, applying to it the same name as his master had done. Now Leibnitz had shown that sense-perception, or confused perception of what is perfect, gives rise to the enjoyment of the beautiful (§ 288, 5); and further, that the corresponding instinctive production of what is perfect makes a man an artist (*ibid.*, 6); accordingly, it is not so strange as many nowadays suppose that in Baumgarten—exactly as in Kant—æsthetics means the theory of the lower form of knowledge, and at the same time the theory of the beautiful. The *scientia cognitionis sensitivæ* is identical with the *ars pulchre cogitandi*, for sensible perfection is beauty; the theory of the beautiful, therefore, deals with the *perfectio cognitionis sensitivæ qua talis.* This theory, which he also calls *philosophia poetica*, was now made the subject of detailed investigation for the first time since Aristotle and the Neoplatonists. It was intended to include in its general or *theoretical part* the science of discovery, the science of method, and the science of interpretation. The first of these was to

show how beautiful thoughts were to be discovered, the second how they were to be arranged, and the third how they were to be communicated to others. This division agrees exactly with that given in the *Meditationes*. Baumgarten has only discussed the first of these three. The other two, as well as the whole of the special or *practical part*, remained untouched. Even in his dissertation, which contains the outlines of his æsthetics, just as in his other writings, he shows that our critical faculty (*facultas dijudicandi*) puts us in a position to perceive perfection, *i.e.*, agreement in difference. If we do so with perfect distinctness, our judgment is intellectual; but if it rests upon a perception that is (though clear) confused, it is a judgment of taste. The former decides whether a thing is good or true, the latter whether a thing is *beautiful*. Thus, what appears perfect is beautiful, beauty is *perfectio phænomenon* (*Met.*, § 662). As the purpose of the science of discovery is to give an account of the origin of the beautiful, it naturally begins with an enumeration of the subjective conditions under which a beautiful work of art comes into existence. Accordingly, he here explains the conceptions of innate genius, practice, inspiration, etc., and attempts to give what he himself conceives of as a logic of the creative power of imagination. In divisions and subdivisions, which are made for the most part on the principle of dichotomy, and in the course of which six different alphabets are exhausted, the conceptions of æsthetical philosophy are discussed in a fashion which, as he is always either quoting the precepts of older teachers, Cicero, Horace, Quintilian, Longinus, etc., or citing passages from the ancient poets, early brought upon him the reproach of having allowed his interest in poetry to make him forget all the other arts. (This is not so much the case in his dissertation. Many of those marks of the poetical, which he speaks of there, are expressly said to apply also to works of formative art.) Of the three points which he mentions as indispensable to the beautiful—completeness, grandeur, truth —the second gives him an occasion for going very fully into a discussion of the sublime. At the same time, he takes up the dignified in representation, which, as personal or subjective grandeur, contrasts with and corresponds to material or objective grandeur. These are followed by his inquiries into internal (poetic) truth, and then comes (in the second volume) his examination of lucidity. Here a good deal is introduced that

really belongs to the science of interpretation. As regards the second part of the theory of knowledge—*Logic*, which deals not merely, as æsthetics does, with the *rationis analogon* but with the *ratio* itself, his *Acroasis logica* had its origin in notes to Wolff's philosophy of the reason: more independence is shown in the account of logic given in the *Philosophia generalis*, published by Förster after Baumgarten's death. The latter resembles the former in being minutely subdivided; but, except the reappearance of the Fourth Figure of the syllogism, it contains no noteworthy variations either from Wolff or from the *Acroasis logica*.—In *Metaphysics* he follows Wolff closely, but in doing so he includes again many statements which Leibnitz had made, and which Wolff had refused to accept; and further, he supplements the work of both where symmetry requires it. An illustration of the former is, that he once more applies the name monads to simple substances, and attributes to them percipient power, although he does not deduce universal harmony from this, but conversely deduces this from universal harmony. The most important instance of the latter is that he amplifies Leibnitz's law of thought, that everything has a reason, by the *principium rationati* that everything has a consequence, and then combines the two into the *principium utrinque connexorum*. Similarly he supplements Leibnitz's assertion that there are no two monads, or even things exactly alike, by the further statement that no more are there two entirely different, a result which might have been deduced from Leibnitz's *lex continui*. Just like Wolff, Baumgarten makes his psychology follow his ontology and cosmology. He begins with the empirical part of it. Here his treatment differs from Wolff's in being much shorter, and also in introducing a large number of laws, drawn from experience, in regard to the origin, lapse, and association of ideas. In his rational psychology, he defines the soul as *vis repræsentativa universi pro positu corporis humani in eodem*, and concludes from this, that it is not, like the body, a *phænomenon substantiatum*, but that for that reason it is imperishable. He then goes on to criticise the various views as to the origin of the soul, and its connection with the body. Naturally he declares in favour of pre-established harmony, and against the theory that after death the soul is absolutely incorporeal. Like Leibnitz, he accepts transformation in contrast to transmutation and metempsychosis. Finally, as regards natural

theology, from the conception of the all-perfect being he concludes that it can contain no negation, and that therefore its realities never form a contradiction, so that the most real being of all is possible; it follows that it excludes non-existence, as a negation, and therefore is God actually. After pointing out that no predicate belongs *univoce* to God and to finite things, he proceeds to speak of the essential attributes of God, and to examine His understanding, His will, creation, providence, and, lastly, revelation. In all this he does not differ in any essential points from Leibnitz and Wolff. Baumgarten holds that *Physics* should come after metaphysics, and after all the parts of this, not as with Wolff—at least, in fact—after cosmology, since teleology, which forms an essential part of physics, presupposes natural theology. He has not given us any works dealing with physical subjects. On the other hand, the attention he devoted to *Practical Philosophy* is shown by his treatise on *General Practical Philosophy*, already referred to, and by that upon *Ethics*, which forms the sequel to it. Between the two he inserted in his lectures a discussion of natural law. In the *Ethics*, he treats of our duties towards God, towards ourselves, and towards everything else. The last vague phrase is chosen because we have duties also towards beings above us and beneath us. He insists upon the necessity for philanthropy, and its expression, the spread of knowledge, that through this illumination (*illuminatio*) the state of darkness may give place to that of light.

11. One of Baumgarten's oldest pupils was his subsequent biographer, GEORG FRIEDRICH MEIER (29th March, 1718, to 21st June, 1777), who was a professor at Halle and a very prolific writer. Of his more elaborate works we shall here mention only: *Proof of Pre-established Harmony*, 1743; *Thoughts on the State of the Soul after Death*, 1746; *Defence of the same*, 1748; *Proof that the Human Soul lives for ever*, 1751; *Defence of this Proof*, 1753; *Second defence of the same*, 1753; *First Principles of all the Fine Arts and Sciences*, 3 pts., 1748 (reproduces the teaching of Baumgarten in his lectures at Halle); *Philosophical Ethics*, 5 pts., 1753–61; *Doctrine of Reason*, 1752; *Extract from the same*, 1752; *Metaphysics*, 4 vols., 1755–59; *Theoretical Doctrine of the Emotions*, 1759; *Philosophical Considerations on the Christian Religion*, 5 pts., 1761–67; *Investigation of various Matters in Philosophy*, 4 pts., 1768–71; *Doctrine of the Natural Social Rights and Duties of Man*,

2 pts., 1770–73. Besides these, we must mention his polemics against Gottsched. The latter show him as an adherent of the Swiss school, the first who publicly praised Klopstock's *Messias*, etc. Although Meier has written handbooks dealing with almost all parts of philosophy, and distinguished by accuracy and clearness, still these, and even his elaborate works on practical philosophy and natural theology, have done less to make him famous than his labours in the field of æsthetics. It was he who induced Baumgarten to publish his *Æsthetics*; and by often-repeated lectures, as well as by printed works, he became the most zealous apostle of the new science. Although he was not nearly so well read in the classics as Baumgarten, and was besides, as he himself confesses, quite without experience in music and painting, yet he made Halle the place specially frequented by those who wished to study the "fine arts." A determined opponent of the principle of imitation as applied by Batteux,—a principle which generally had the conception of the beautiful surreptitiously introduced to support it,—Meier agrees with Baumgarten in holding that by beauty we must understand indistinctly (*i.e.*, sensuously) perceived perfection (*i.e.*, correspondence with an end), and accordingly lays down as the supreme law of æsthetics, applicable to all the fine arts alike, that we should strive after the greatest beauty in sensuous knowledge. He always insists, however, that we are not to suppose that the clear knowledge of perfection is necessary to artistic creation, or that æsthetics will endow a man with the spirit of beauty. Baumgarten had distinguished the two as *æstheticologus* and *æstheticus*. This is the point in which Meier and the Halle school of poetry,—largely composed of his admirers,—specially opposed the tendency of Gottsched and approximated to the views of the Swiss school. It accords quite well with the fact that, convinced as he was of the harmony between philosophy and theology,—the former of which develops in a scientific manner the natural, the latter the supernatural revelation of God,—convinced, indeed, that the latter depended upon the former, he still protested so energetically against the philosophical homilies of his time, in which Christ was addressed as "adorable monad." In general, his writings,—his treatise upon prejudices, for example,—exhibit a clear and intelligent apprehension, that frowns upon all exaggeration. A sensation was created by his views in regard to the souls of animals, among which he assumes very various

stages, the highest, and even the lowest, showing degrees of reason, and being perhaps the germs of future human souls. Still more opposition was roused by his openly admitting that, while it was perhaps possible to prove from the principles of philosophy the imperishableness of the human soul, no such proof was possible with regard to personal immortality. He pointed out indeed that it was still more impossible to prove the negative of this; but that concession did not satisfy his readers, and a host of attacks compelled him to modify the view he had expressed. There are two things which Meier especially aims at in all his inquiries—that his teachings should be intelligible, and that they should be practically useful. In his *Ontology*, which otherwise contains but little that is remarkable, he even attempts to avoid as unpractical the question whether the elements of all things are monads. (Perhaps he was himself permanently influenced by the lectures which, at the request of Frederick the Great, he delivered upon Locke's *Essay*.) This explains too his attitude in his *Cosmology*. There, after defining the world as the sum of all finite things,—which is itself finite and therefore limited by space and time, and in which strict connection and therefore hypothetical necessity, but not fatalism, is supreme,—he refuses positively to decide between the materialist who makes everything consist of things of complex nature, and the follower of Leibnitz. "Neither natural, nor practical, nor economical, nor political philosophy suffers by one's being a materialist in cosmology." Without coming to any decision on this point, it is always possible to distinguish dormant substances from those which can perceive sensations, and these again from conscious spirits. In the world, spirits form the kingdom of grace, or the moral world, in which *one* must be assumed as supreme. Whether that one is to be found among men, we do not know. Theologians perhaps see it in Christ, as others have seen it in an ἀρχαῖος of the earth or soul of the world. Just as, to confute the materialists, it must be proved that there are simple substances, so, in order to combat the idealist, it must be shown that besides spirits there are also dormant substances. Leibnitz attempts to do this; and for that very reason he cannot be called an idealist. For the rest, it is not necessary to come to any decision at all in regard to the idealists; for, as they themselves admit that there are phenomena which are called bodies, physical philosophy is no way affected by

this disputed question. The idealist is at a disadvantage only in one respect. His world, consisting merely of spirits, shows much less variety (*i.e.*, perfection) than that of the dualist. In matters of detail, Meier's physical philosophy is just like Wolff's, a mechanical atomic theory; the conception of the current of nature, *i.e.*, of the laws of motion, of the supernatural, of *miracula restaurationis*, etc., assume exactly the same form as in Wolff and Baumgarten. His *Psychology* has exerted a permanent influence, particularly upon the terminology of the subject, owing to the fact that Kant during his early period followed him almost as closely as he did Baumgarten. The first point that strikes one as characteristic, is the much greater importance attached to empirical than to rational ("*vernünftige*") psychology. When he is speaking of those who have deserted the path of experience and devised a psychical theory which is simply a philosophical romance, or when he is praising the modern philosophers who have recognised that the surest road to a knowledge of finite spirits is the path of experience, we can almost fancy that it is the language of a follower of Locke. With Leibnitz and Wolff, he draws a distinction between the faculty of knowledge and the faculty of desire, and then in both contrasts the higher or rational faculty of knowledge and desire with that which is lower or sensuous (*i.e.*, rests upon indistinct perceptions). The lower faculty of knowledge, or the faculty of having obscure and confused perceptions, is called sensuous, not because it has to do with what is corporeal, but because the nature and kind of knowledge is peculiar and conditioned by the connection with the body. The primary elements of this knowledge are sensations, *i.e.*, perceptions of our present state. These are also called phenomena or appearances, because things appear to us to be what sensation tells us they are. Sensations, as well as the faculty of sensation, sense, have reference to the state either of the soul or of the body, and accordingly we must distinguish inward sense and inward sensations from outward sense and outward sensations. To the former class belongs the sensation "sad," to the latter the sensation "blue." (The theory of the right use of the senses may be called empirical æsthetics.) From sensations as the most primitive sort of perceptions others are deduced by the aid of attention and abstraction. The first of these are the ideas or perceptions of past states, which, when they are recognised again, form the content of

the memory. He then discusses the faculty of composition, foresight, and foreknowledge, and finally the faculty of judgment, the latter of which enables us to decide what is perfect, whether it be unaccompanied by distinct knowledge (judgment of taste), or accompanied by it (judgment of reason). Passing now to the higher faculties of knowledge, he says that through the union of several clear perceptions there arises a distinct perception, which is the object of the understanding, so that the activity of the latter is to be regarded as conceiving. If its concepts are absolutely free from indistinctness, it is pure understanding, *i.e.*, understanding cleared of all that is sensuous. Understanding, however, is inferior to reason, the faculty of recognising the connection of perceptions and things perceived. This naturally employs the form of the syllogism, as the understanding does that of the concept. The particular proportion of the various faculties of knowledge gives the particular cast of a man's mind, or what we are accustomed to call his head, just as the proportion of the various forms of the faculty of desire produce a man's disposition or his heart. To proceed, the faculty of desire is determined by perceptions, although we are not always conscious of these. If the determining perceptions are indistinct, we have the lower or sensuous form of willing; if they are distinct, we have the rational form, or will properly so called. This would be pure, if the desire and the repugnance were absolutely free from sensuous motives. It is not caprice alone that makes the will free, but the fact that through caprice it allows itself to be determined by rational motives. The rational form of willing makes for perfection, and the end of all action is therefore bliss or the pleasure in perfection attained. The end of sensuous desire is well-being. If the two are united, the result is the highest good, happiness (*Glückseligkeit*), in which well-being (*Glück*) and bliss (*Seligkeit*) are combined. In psychology, too, Meier declines to come to any decision as to whether the soul has a complex nature, whether it exercises an influence on the body or is merely in harmony with it, and so on. This is said to be of no practical interest, because it has no bearing upon human happiness. The immortality of a complex nature is not inconceivable, that of a simple one is not necessary. *Natural theology*, as the last part of metaphysics, begins by examining the idea of God, and then takes up His dealings with men. Both the

proofs of the existence of God are given exactly as in Baumgarten, except that here *realitas* reappears by the side of perfection, and from the fact that non-existence is an imperfection, it is reasoned that the absolutely perfect being exists. These are followed up by studies of the Divine qualities, in which the perfections that belong to God as a being, are first dealt with, and then those which belong to Him as a spirit. Creation and Providence, Divine Government, and the Best-world are the subjects which are last discussed. The greater part of Meier's teaching on these points is a repetition of what his predecessors had said. But there is also much that is peculiar to him; for example, the distinction between the inner (essential) perfections of God, which are absolutely unchangeable, and the outer,—his relations to the world,—which are not so. In his twenty-two *Philosophical Considerations*, which deal with the most important dogmas of Christianity in a fashion that reminds us of Leibnitz, and to a still greater extent anticipates the teaching of Lessing in his *Education of the Human Race*, he repeatedly makes use of this distinction.—In his practical philosophy, too, Meier closely follows Baumgarten, as he himself declares in the preface to his five volumes on *Moral Philosophy*. He distinguishes moral philosophy, first, from Christian morality, which rests upon a supernatural revelation; secondly, from the part of practical philosophy which treats of social duties; and thirdly and lastly, from natural law, which deals with outward or obligatory duties, while moral philosophy has to do merely with the inward (or conscientious) duties of man as man (not as a member of society). In his system of duties towards God, towards oneself, and towards other things, the principle of perfection is taken up and applied, first generally (vols. i.–iv.) and then particularly (vol. v.). No attention, however, is devoted to moral associations; only the distinctions between learned and unlearned, rich and poor, old and young, etc., are discussed.

12. Although the great majority of those who were entitled to give an opinion declared themselves in favour of the philosophy of Wolff, still it did not remain unassailed. Its *opponents* in Germany ranged themselves under the banner of *eclecticism*, a banner which Thomasius had already raised; but they combined with his doctrines those of the Schoolmen, to which he had been more bitterly opposed than were Wolff and his school. The famous theologian, JOH. FRANZ. BUDDEUS (25th June, 1667, to 19th Nov., 1729), before he went to Jena, laboured

as a colleague of Thomasius, and while in this position he published his *Elementa philosophiæ practicæ* (Halle, 1697), and his *Institutiones philosophiæ eclecticæ* (Halle, 1705). Subsequently he drifted more completely over to the camp of Wolff's opponents than he himself wished to do. He exercised an important influence on the history of philosophy, inasmuch as J. Jac. Brucker received from him the first impulse towards the composition of his learned work (*vid.* § 13, Note 3).— Much more important than Buddeus from a philosophical point of view was ANDREAS RÜDIGER, who was born in 1673 at Rochlitz, and who, at Halle, came specially under the influence of Thomasius. After studying theology, jurisprudence, and medicine, he worked alternately at Halle and at Leipsic, as a physician and a professor of philosophy, till his death in 1731. His *Disputatio de eo quod omnes ideæ oriantur a sensione* (Lips., 1704) was followed by his *Philosophica synthetica*, etc. (Lips., 1707), (afterwards published as: *Institutiones eruditionis*, Lips., 1711), then by his *Physica divina*, etc. (Frankfort-on-the-Main, 1716, 4to), and lastly by *Philosophia pragmatica* (Lips., 1723). It is only in the last-mentioned work and in his treatise: *Chr. Wolff's Views*, etc., which appeared in 1727, that his polemic is directed against Wolff himself; in his earlier writings it is rather the elements out of which Wolff formed his system, his predecessors, that Rüdiger attacks. Thus he denounces the mathematical method, which had become supreme in philosophy since Descartes and Tschirnhausen. As mathematics has to do with the possible, philosophy with the actual, we should leave the analytical method to the former; philosophy should proceed synthetically and be grounded upon experience. For this reason we must always begin with the teachings of sense, both the outward sense by which we perceive bodily affections and the inward sense by which we perceive psychical activities. From thence we must proceed to definitions, axioms, and proofs. Philosophy is not something supernatural, nor something spontaneous; it must be pursued by a regular path. It is a knowledge of truth in matters of fact; and as nature is a fact of this kind, and further, as the Author of nature has, as a matter of fact, given us certain inviolable laws as well as certain pieces of advice, philosophy falls into three parts, which treat respectively of *Sapientia*, of *Justitia*, and of *Prudentia*. By *Sapientia* must be understood a knowledge

of nature,—(the nature of God can only be known by supernatural revelation),—and this forms the first part of the system. It is divided into logic and physics, according as nature is considered as a microcosm or as a macrocosm. In both of these there is great room for improvement. In the former the theory of probability in particular requires to be subjected to revision, as well as that of the syllogism, because in this case a large number of traditional rules, *e.g.*, that there cannot be four terms, that from particulars no conclusion can be drawn, etc., are not true. In physics there is much more to be done. The extreme of a purely mechanical atomic theory, as put forward by Descartes and Gassendi, and the extreme of an exaggerated "vitalism," such as was advocated by the English thinkers More and Fludd, are pointed out as rocks to be avoided; and a promise is given of a *Physica mechanico-vitalis*, which does not, like them, lead to atheism, and which may therefore be called *Physica divina*. The outlines of what is contained in his later and larger work, are to be found in his *Philosophia synthetica*. According to this, all beings created by God,—even spirits,—are created out of and with *materia prima* or extension. In addition to this, corporeal beings are also elastic, *i.e.*, there is in them equilibrium between the two principles of ether and air, which manifest their activity in expanding and contracting motion, and which contrast with one another both in the respective shape of their atoms, as star-like and round, and in the respective effects of heat and cold. In living beings there is combined with a body which is similarly elastic, but at the same time organic, a spirit which, as ἀρχαῖος or soul, forms the body, and, as understanding, guides and illumines it. (From the three principles of ether, air, and spirit all essential natural phenomena are deduced, and in the detailed descriptions use is often made of graphic diagrams.) As regards the second part of his system, *Justitia*, the principle of all practical philosophy is the will of God. This is discussed first of all as the source of inviolable laws or unconditioned obligations and duties. As we owe these either to God or to our neighbour, this part of the system falls into two portions. The former may be called metaphysics, for in assigning to this portion all that concerns God, the ancients adopted a course far preferable to that of the Schoolmen and of modern thinkers, who have substi-

tuted for metaphysics its least important subdivision, ontology. Metaphysics teaches us why we have to fear God, to love and to obey Him. Next comes natural law, the principle of which is likewise obedience to God, that is, in regard to the regulations He has laid down for our conduct towards others. By the gift of language He shows us that we are intended for life as members of society, from which we can deduce not merely, as Pufendorf did, the *officia necessitatis* (duties of obligation) but also the *officia commoditatis* (duties of affection). The third part deals with *Prudentia*, that is, the conduct which aims at the highest good or the highest practical advantage. We are compelled to seek this, not so much by the law of God as by an innate tendency of our nature. As among the three blessings of health, truth, and virtue, the highest place belongs to the last-mentioned; medicine and logic, which would require to be included in any elaborate treatment of the subject, may be passed over, and discussion confined to ethics as the most important part of the whole. Here a very great affinity with Thomasius is apparent. It shows itself not merely in the theory of the affections and the reduction of these to three, the combinations of which produce the chief vices, in his exhortation to peace of mind, etc., but also in the fact that he lays so much stress upon the laws of ceremony, and that the treatise of the Spaniard Gratian, which had become known through Amelot de la Houssaye's translation, serves to a great extent as a guide, as being the best compendium of practical wisdom.

13. Christian Adolf Crusius, born, in 1712, at Leuna, in Merseburg, and who died in 1776 as Senior of the theological faculty and professor of philosophy at Leipsic, was partly won over to the views we have been describing, not directly, but through the influence of one of Rüdiger's pupils, Adolf Friedrich Hoffmann, the author of a *Doctrine of Reason*, which enjoyed a high reputation in its day. Crusius exercised a great though transient influence; for in theology his followers, as the advocates of a mystic and apocalyptic system of exegesis, were opposed to the adherents of Ernesti, and in philosophy to the adherents of Wolff. Amongst them was his enthusiastic disciple, Justin Elias Wüstemann, who in his *Introduction to the System of Dr. Crusius*, Wittenberg, 1757, has given an abridged review of his master's philosophical system. Of Crusius' own writings, the first that call for mention are his

three dissertations, *De corruptelis intellectus a voluntate pendentibus*, Lips., 1740; *De appetitibus insitis voluntatis humanæ*, Lips., 1742; *De usu et limitibus principii rationis determinantis, vulgo sufficientis*, Lips., 1743, the last of which contains his declaration of war against the philosophy of Wolff. To these must be added the larger works in the German language: *Directions how to Live a Rational Life* (Ethics), Lips., 1744 (and frequently); *Sketch of the Necessary Truths of Reason*, etc. (Metaphysics), Lips., 1745 (and frequently); *Way to the Certainty and Trustworthiness of Human Knowledge* ("Noology" and Logic), Lips., 1747; *Directions how to Reflect on Natural Events with System and Foresight* (Physics), 2 pts., 1749 (enlarged, 1772). Besides these, there are minor treatises in Latin, which in 1750 were published at Leipsic as *Opuscula*.—He agrees with Rüdiger in claiming for philosophy only those truths that can be discovered through reason; but at the same time he contrasts it with historical knowledge, inasmuch as its object endures permanently. Finally, however, just like Rüdiger, he contrasts philosophy and mathematics as knowledge of the possible and knowledge of the actual, and rejects the mathematical method. As regards the subdivision of his system, the twofold contrast between speculative and practical, and between necessary and contingent, was bound to lead properly to four different sciences. For convenience sake, however, he places on one side *Metaphysics*, as the sum of those speculative truths that are necessary, and on the other,—not as three, but as a single science, which he calls *Disciplinary Philosophy*,—those branches of knowledge that have to do with such speculative truths as are contingent, and with (necessary and contingent) practical truths. Of the three subdivisions of this science, *Logic*, which shows how our intellect must of necessity act, is treated of before Metaphysics on pædagogic grounds, while the first (Physics) and third (Ethics) are not taken up until afterwards. With it there is incorporated, under the name of "noology," practically the whole of empirical psychology, so far as it deals with the speculative part of the mind. This natural history of thought is followed by rules for the regulation of thought. The supreme law is said to be: What cannot be imagined, is false; and what cannot be imagined to be false, is true. From this principle of conceivability, three subordinate laws of thought are deduced. Among these the most important is

the *principium contradictionis;* then come the *principium inseparabilium* and the *principium inconjungibilium.* From these may be deduced further laws, amongst others the law of sufficient reason, according to which everything which is now, and before was not, has a cause, (which possibly contains more, and has further capacities). Instead of this very limited principle, Leibnitz and Wolff are said to have set up their *principium rationis sufficientis*, which should properly be called *principium rationis determinantis*, and in this way to have reached the fatalism that mars so seriously Leibnitz's theory of the best possible world. Lastly, from these principles there results a fifth, the law of contingency, according to which everything that can be conceived of as non-existent, must at one time have had no existence. Crusius divides *Metaphysics* into the same four parts that Wolff did, except that empirical psychology no longer finds a place in it. It is important to note, that in his *Ontology* existence is defined as being anywhere and at any time, and that from this he concludes that there is nothing which is not limited in its existence by time and space. Even God is no exception to this rule; time and space accordingly are abstractions which the intellect must distinguish in existence. After ontology, Crusius states his views on *Natural Theology*, the most important point of which is the refutation of the ontological argument, on the ground that it commits a fallacy owing to a confusion between "to exist" and "to be conceived of as existing." Besides, the law of sufficient reason and the law of contingency are said to furnish sufficient data for proving the existence of God, not to mention the proofs that rest upon grounds of probability. The qualities of God are then discussed in great detail, as well as His actions, both those that are "immanent," or necessary, and those that are "transient," or free; the distinction between creation and preservation, the idea of government, and miracles, are the most important of the other points dealt with here. After natural theology, Crusius takes up *Cosmology* as the "theory of the necessary nature of a world, and what can be apprehended from this *a priori*," while physics has only to do with the present world and its contingent nature. By "world" we must understand such a system of finite and really connected things as is not itself in turn contained in some other system of which it is a part. From this it follows that the world is unique. Further, as it is

only possible to exercise an influence on things by means of motion, there must be substances whose nature consists in their capacity for motion, that is, material things. Besides these, there are spirits, which are capable not merely of motion but also of thought. The two can exercise influence upon each other; and the advocates of pre-established harmony really assume the existence of material things to no purpose at all. The further discussion of cosmology contains protests against the idea that the world is a machine, that the sum of motions, or even of motive forces, is always the same, that everything has a reason which determines it, that the world is the best possible (which is really self-contradictory), that every miracle requires a *miraculum restitutionis*, etc., in short, against all the main points of Wolff's cosmology. Crusius' treatment of metaphysics closes with "*pneumatology*," or the theory of the necessary nature of spirits. The main points in this are the onslaught upon materialism and determinism. Against the former, appeal is always made to consciousness, which supplies a refutation; against the latter, he holds up the fact that the will, and not the understanding, is really the controlling power, and lays stress upon the faculty that the will has of initiating motions by means of an inward activity. By a spirit is to be understood a simple substance that can think and will, which, when associated with a body, is called the soul of this body. The supreme purpose of the world is, that the free actions of spirits should be brought into accord with the perfection of all things. In this too lies the assurance of immortality, which cannot be deduced from the nature of spirit alone.—In spite of the care with which he has brought together, in his two volumes on natural philosophy, all that was known at that time, the *Physics* of Crusius are of little interest at the present day. More important is his *Practical Philosophy*, which he expounds in his *Directions how to Live a Rational Life*. Here the groundwork is formed by "*thelematology*," or the theory of the powers and qualities of the human will, which, if Crusius had written his treatise on metaphysics before that on practical philosophy, would probably have been completely incorporated with the former. Just like the understanding or faculty of knowledge, the will, which is entirely distinct from it, consists of a number of fundamental powers, amongst which he examines in detail, as the principal fundamental impulses, that which makes for one's own perfec-

tion, that which demands union with what is perfect, and that which is supplied by conscience. Next follows an investigation into animal impulses. As regards the *Moral System* proper, of which "thelematology" is the groundwork, it is divided according to Crusius into ethics, moral theology, natural law, and practical wisdom. In the three first parts unconditioned obligations are treated of, in the last those that are conditioned. The supreme law is said to be: "Out of obedience to the command of thy Creator, as thy natural and necessary superior, do all which is in accordance with perfection." Obedience, therefore, is always defined as the formal aspect, and perfection as the material aspect of virtue. In dealing with the supreme purpose of the world, Crusius comes again upon the question of immortality. In addition to other moral proofs, he introduces the one already employed by Plato (*vid.* § 79, 7) and Cicero, and afterwards adopted by Kant, to the effect that the contradiction between merit and happiness in this world is a guarantee of immortality. Here, too, he repeats, that from the nature of the soul we can draw no conclusions as to its immortality, inasmuch as at one time it had no existence and its life therefore is contingent. Incorruptibility is not immortality. As a matter of fact, the contents of the three first parts of practical philosophy coincide with duties towards oneself, towards God, and towards one's neighbour. For, although, properly speaking, all duties are, according to the fundamental principle already laid down, duties towards God, still there are some duties toward God which are so directly and in a special degree. These include amongst others rational faith. In his discussion on practical wisdom he treats not only of all that concerns ceremony, but also of the proper way to govern a State (political philosophy), while obligation towards authority is treated of under the head of natural law.

14. Joachim Georg Darjes was first an adherent and then an opponent of Wolff's. He was led to take up the former position through the influence of Carpov at Jena; but when he gave up the study of theology, he also gave up the philosophy of Wolff, or at least the strict form of it. His lectures at Jena, which in a very special degree looked at things from a practical point of view, and dealt with practical philosphy, natural law, and political philosophy, were frequented by fabulous numbers of people. Accordingly, when, after Baumgarten's death, the University of Frankfort looked about for

a professor who would attract audiences as large as he had done, they could find no one to suit them better than Darjes. Besides his work as a lecturer, he was also very active as an author. The *Introductio in artem inveniendi, s. logicam*, appeared in 1742; *Elementa Metaphysices*, 2 vols. 4to, 1743–44; *Institutiones jurisprudentiæ universalis*, 1745; *Remarks on several Propositions of the Wolffian Metaphysics*, 1748; *Philosophical Leisure Hours*, 1749–52; *First Principles of Moral Philosophy*, 1755; *Via ad veritatem*, 1755. The last-mentioned treatise, which contains an applied logic, as well as a criticism of what others had accomplished, (Zeno, Euclid, Plato, Aristotle, the Stoics, Epicurus, Lully, Ramus, Bacon, and Descartes are discussed), may be regarded as his principal work in so far as it gives, in the preface, a review of what, according to his idea, philosophy should contain. It begins by contrasting philosophical with non-philosophical knowledge, pointing out that the former deduces the connection between truths from the concepts of things, the latter from the perception of them; and then it proceeds to divide the subject-matter of philosophy into the possible as such, dealt with in *philosophia prima*, and the possible more closely determined. As this latter is either substance or non-substance, one of the parts of philosophy has to do with what follows from the idea of substance as such. So far, then, as it discusses substance as such, it is *Metaphysica*, in fact *Ontologia;* so far as it discusses simple substance, it is *Monadologia;* so far as it discusses the soul, it is *Psychologia;* so far as it discusses the spirit, it is *Pneumatica;* so far as it discusses God, it is *Theologia naturalis;* so far as it discusses the body, it is *Somatica*. What is possible, and yet not substance, is either *accidens* or activity. Of the former, Darjes takes no further account in this review; but he proceeds to divide activities (*operationes*) into moral and non-moral. The former are dealt with in practical philosophy, which is in turn subdivided into natural law, ethics, and political philosophy; the latter are the activities of bodies, which form the subject-matter of physics. The fact that Darjes' writings have so soon been forgotten, is a proof that his fame was chiefly due to his brilliant gifts as a teacher.

§ 291.

D.—EMPIRICAL IDEALISM.

1. The advance that philosophy makes beyond Leibnitz,

is not to be measured by the work done in the way of completing his system (§ 289, 1). It takes a more important step where it does not merely fill up the gaps which he had left, but also improves and fundamentally *transforms* what he and his disciples had accomplished, by avoiding the want of thoroughness that characterizes their views. If the philosopher beyond whom an advance of this kind is made were, like Descartes, one who disregarded all that had been done before his day, and built up his system as if his were the first attempt of the kind, the only way in which philosophy could progress, would be by starting from what he had said; and the necessary condition of such progress would be an accurate acquaintance with his views. It is otherwise in the case of a system like that of Leibnitz (*vid.* 288, 1). He deduces results from the teaching of Descartes, and results the opposite of those which Spinoza and Locke deduced; and thus it is possible even for thinkers who take no notice of him at all, to advance beyond him along the lines which he laid down. This they can do by drawing anti-pantheistic and anti-realistic conclusions from the common premisses, just as he did, but with greater energy. It must, however, be admitted, that it is the greater one-sidedness of such philosophies, as compared with the comprehensive magnitude of Leibnitz's system, which entitles them to the more advanced position. Just as, under certain circumstances, the half is more than the whole, so there are times which require one-sidedness. The point on which Leibnitz and his school were undecided,—and decision is always one-sided,—was his theory of corporeal things. Since he conceives of these as *entia semimentalia*, or as *phænomena bene fundata*, the word *semi* and the notion of a real foundation for phenomena make his system only semi-idealism. When Wolff and, in a greater degree, Baumgarten and Meier declare it to be one of Leibnitz's merits, that he avoids the one-sidedness alike of materialism and of idealism, they attribute to him a higher point of view than he is entitled to. For he knew nothing of the idealism to be discussed in this Section, while they were familiar with it. Just as the realism towards which Leibnitz took up a position of hostility, had not yet advanced to the extreme of materialism, just as Locke had conceived of spirits only as *perhaps* material, so Leibnitz ventures to maintain only that *quasi*-souls, or things *like* spirits, are the real elements even of what is corporeal. If an attempt, like that

of Wolff, is made to get rid of this ambiguous character of simple substances by foregoing their psychical nature, harmony ceases to be a necessary element of the system; if, however, this is retained, there result quite a number of contradictions in addition to the doubtful *quasi* and *semi*. Leibnitz admits that, properly speaking, we cannot say that one body communicates its motion to another, but only that our idea of a body in motion is followed by one of a body set in motion, and so on. It is only, he says, for brevity's sake that he employs any other language. This language, however, since language is thought, soon leads him to attribute to bodies a power of resistance, and indeed to animated bodies an actual substantial nature. And yet he came very near to avoiding this incompleteness. For in regard to a large number of those qualities of bodies which Locke called secondary, indeed in regard to all which we perceive through the senses, he constantly asserts that they are merely our (confused) perceptions. He only required to look a little more closely, and he would have found that even impenetrability is only perceived by sense, and that therefore all qualities, even those which Locke called primary, are simply relations to ourselves, that is, *entia mentalia*, phenomena, behind which there is no necessity to assume a real substratum. This advance was made by an Englishman and an Irishman contemporaneously, but quite independently of each other. The former was driven to his conclusion by Descartes and Malebranche, the latter by these thinkers and by Locke. Quite justifiably, the world took almost no notice of the first as compared with the second, and soon forgot him; and therefore an equally detailed account of both is not to be expected here.

2. In 1713, an English clergyman, ARTHUR COLLIER (12th Oct., 1680, to Sept., 1732), published *Clavis universalis, or A New Inquiry after Truth, being a Demonstration of the Non-existence or Impossibility of an External World.* The first edition of this work has become so rare that his biographer affirmed there were only seven copies of it in existence. It was reprinted in Edinburgh in 1836, but only forty copies were struck off. For these reasons it was chiefly known in Germany through the German translation by Eschenbach: *Allgemeiner Schlüssel*, etc., Rostock, 1756, until Samuel Parr again made it more accessible by including it in his *Metaphysical Tracts by English Philosophers of the Eighteenth Century*,

London, 1837. When it appeared, the author's opinions, according to his own assurance, which is confirmed by Robt. Benson: *Memoirs of the Life and Writings of the Rev. Arthur Collier*, Lond., 1832, had undergone no change for ten years. This makes it impossible that Berkeley's writings, which appeared some years earlier, could have suggested his theory. All the more probable is it that he owes a good deal to Norris, who has been called the forerunner of Malebranche (§ 270, 8). That thinker lived quite near Collier, who was acquainted with his: *Essay towards the Theory of the Ideal or Intelligible World.* 2 vols., 1701, 4to; and we have seen how near Malebranche came to denying the existence of the corporeal world. The extent to which Collier, during the first period of his literary activity, was in accord with Malebranche, is shown by an essay, preserved for us by Benson, in which he expressly declares that God cannot properly be called a Being, he must be called *the* Being. Collier's theological views, which he looks upon as quite in keeping with his philosophical opinions, are not regarded as very orthodox; he had to submit to being accused of Arianism and Apollinarism. In Church politics he was a Tory, and a defender of unconditional obedience; as, however, he laid stress upon the point that obedience is to be rendered to that authority that has power over us, he refused to associate himself with those who were intriguing on behalf of the Stuarts.

3. The *Clavis* consists of two parts. The *first* of these deals with the visible world, *i.e.*, everything which we perceive by the eye. After pointing out,—as Hume did, though with an entirely different purpose in view,—that the difference between impressions and ideas is one of degree, Collier reaches the result that what we see, or the visible world, can certainly not be "external." The "extra-existence of the visible world" is therefore a contradiction in terms; and for this reason Descartes, Malebranche, and Norris had felt compelled to distinguish from the visible world an invisible one, *i.e.*, to distinguish an unknowable substance from phenomena, which lie within ourselves alone. This hypothesis is argued against in the *second* and much more elaborate part, which endeavours to prove that a world external to the spirit that perceives it, is an impossibility. If once we conceive of it as knowable, all the difficulties apply to it that apply to a visible world; if we conceive of it as unknowable and in-

visible, we charge God with having created something that is utterly useless. Further, the hypothesis of a universe existing external to the mind, leads to contradictions,—one philosopher proves that it is infinite in time and space, and that each part of it is infinitely divisible, another proves the exact opposite of this. Accordingly, for the philosopher there is no real external world ; but, just as the Copernican speaks of sunrise, the philosopher may speak of real objects, or even of objects external to us. For the ideas of bodies do not exist in us alone, but in other spirits as well ; and further, they do not exist in us of our own good pleasure, but because God produces them in us. It was against the latter misapprehension that Malebranche's theory of seeing in God was directed. We are therefore justified in saying that the ideas of bodies exist outside of ourselves, that is, in other spirits.

4. Some years earlier than Collier, GEORGE BERKELEY, an Irishman (born March 12th, 1684 ; Bishop of Cloyne from 1734 ; died Jan. 14th, 1753), had published his *Essay towards a New Theory of Vision*, 1709, which formed the basis of his two principal works, *A Treatise concerning the Principles of Human Knowledge*, 1710 (and often afterwards), and his popular exposition of the same views in *Three Dialogues between Hylas and Philonous*, 1713 (and often afterwards). As compared with these, little importance attaches to *Alciphron or the Minute Philosopher*, 1732, a work which aims at showing the superficial character of the line of reasoning adopted by the so-called freethinkers. His *Siris*, the immediate purpose of which is to commend the healing virtues of tar-water, is interesting, as showing how well Berkeley was read in the whole literature of natural philosophy. All these works, as well as some minor ones, of which that upon *Passive Obedience* may be mentioned, are to be found in Berkeley's collected writings, *The Works of George Berkeley, D.D., late Bishop of Cloyne in Ireland*, etc. London, 1784, 2 vols., 4to. They have often been republished since, *e.g.*, in 1834, and in the one volume edition brought out by Thomas Tegg and Son, London, 1837. The latest is that of Professor Fraser, of Edinburgh.

5. Collier is very far from being ready to admit his substantial agreement with Berkeley. Nor can we wonder at this. For the premisses upon which his theories rest, are found in those philosophers whom we have already described as showing a tendency towards pantheism, while Berkeley bases his chiefly

upon the individualism of Locke. In the Introduction to his *Principles*, which is the most important passage bearing upon this, Berkeley extends the nominalist principle, that only individual things exist, even to the content of our perceptions. The latter only represent individual things, although, when we make a statement in regard to any (particular) triangle that in no way depends upon its being right-angled, we imagine that we have spoken of a triangle that is neither right-angled nor acute-angled, in other words, of a triangle in general. Just as there are no such triangles, so there is nowhere any such thing as a universal; and the mistaken idea that there are abstract or universal ideas is, in Berkeley's view, one of the two obstacles to true philosophy. If we stand by the rule that what cannot exist without something else, is also inconceivable without this other thing, we shall admit that there is no idea to correspond to those words which denote a universal idea, that is, really, to correspond to any words at all. This does not imply any censure upon language, for its purpose is not so much to communicate ideas as to call forth passions, and to move men to action. That process, as well as the process of thought, is assisted by words, even when there is no definite idea associated with them, and they are used like algebraical symbols. Everything that Berkeley has said so far, a consistent follower of Locke would be bound to subscribe to, and it has therefore been approved of in so many words by those who have consistently developed Locke's philosophy (*vid.* § 282, 3). At this point, however, differences arise between them, which,—just because both theories are individualistic,—develop into diametrical opposition. At one with Locke in holding that we must begin by examining the elements of all knowledge, Berkeley investigates the origin of ideas, and in doing so he simplifies Locke's theory, as Brown and Condillac (§ 283) did after him, though with a very different result. All ideas, without distinction, even those which Locke assigned to sensation, simply express states of our spirit; they are actions of this spirit. To make ideas into effects produced by bodies, means, to transform the spirit into a passive, and therefore a material being, and the body into an active being, and therefore one which exercises will, or is spiritual. It is admitted even by the advocates of a corporeal world,—the "materialists" or "corporealists," who are represented in the *Dialogues* by Hylas, while Philonous gives

expression to Berkeley's own view,—that the ideas "blue," "sweet," and so on, do not express the nature of things, but relations to the percipient subject. Their hypothesis, therefore, is an entirely useless one; for the real nature of the bodies whose existence they assume, always remains unknown; for us such bodies do not exist at all. The distinction between primary and secondary qualities does not carry them any further, for what is true of colour and taste, is true also of extension and impenetrability. Both kinds of qualities exist solely in the mind that perceives them; outside of us they are nothing. To suppose that, behind phenomena, there exist unknown substrata upon which the predicates applied to these rest,—substances which always remain concealed from us,—is neither so simple nor so correct as to admit that a thing is nothing but a constant aggregate of qualities, *i.e.*, sensations or perceptions, and that therefore its existence depends upon the percipient subject, its *esse* is *percipi*. The sun, then, is simply the constant association of brightness, warmth, and so on; and every dream that makes it visible to us, is a proof that the only condition essential to its being perceived is, that there should be a subject to perceive it. There are in existence, therefore, nothing but spirits, *i.e.*, active beings whose nature consists in thought and will, and ideas, *i.e.*, perceived, passive beings, the constant aggregates of which are called things. The difference between a thing and an idea does not, therefore, consist in the former being real and the latter notional, but in the former being complex and the latter simple; both are "notional beings." Instead of the world of Leibnitz, which consisted of quasi-spirits, we have one which consists solely of spirits and of their images or ideas. The principle which Leibnitz applies to some substances—that they have the power of thought and of will—is in this case applied to all alike. Instead of Leibnitz's Semi-idealism, we have here a consistent form of Idealism. Berkeley himself does not employ this name for his system. If he had wished to give it a distinctive title, he would probably have called it "spiritualism," possibly "notionalism," or "phenomenalism." Suffice it to say, that he takes up a position directly antagonistic to what he called, as we do, materialism, and that he is never tired of arguing against the mistaken notion involved in the "supposition of external objects," which really "subsist not by themselves, but exist in minds." This notion he bewails as the second great error of philosophers.

There is such a great difference between the existence of spirits and that of their ideas, that Berkeley laments having to employ one and the same word for both. The "existence of objects without the mind" is, in his view, quite as much of an absurdity as the statement that a perception exists outside of the percipient subject. By consistently maintaining and applying the view of Descartes and Locke, that the object of consciousness is an idea, Berkeley had been brought into the position of denying to the material world any existence outside of the spirits that perceive it; and this helps us to understand why the expressions "ideal system," "idealism," and the like, which up till now had been applied only to (Locke's) theory of ideas, henceforth are used of those who deny the existence of corporeal substance. This is so even in Wolff, *vid.* § 290, 6.

6. So far as the principles hitherto laid down are concerned, it looks as if Berkeley had done away with the distinction between the sun as it is seen at midday, and the sun as we dream of it at midnight, or as we represent it to ourselves by the help of imagination. But he is too fond of proclaiming his respect for sound common sense to allow us to entertain any such notion of his views. He tries to discover wherein the difference consists, and he finds that in the first case the idea of the sun forces itself upon all spirits alike, while in the second case it is present only in a single spirit, and in the third case only when that spirit wills that it should be so. The first case can only be explained by supposing that the aggregate of ideas, which we call the sun, is *given* or suggested to all percipient spirits simultaneously. This suggestion cannot come from a body, a real sun, external to us, for nothing can be given which the giver does not himself possess; and even those who allow that there is a corporeal sun, will not go so far as to assert that it possesses ideas. It can only come, therefore, from a thinking being, a spirit that controls all spirits simultaneously. This is God. His thought is far exalted above our thought, so that in speaking of His ideas it must not be forgotten that these ideas are not like our own. The constant aggregates of ideas, which we call real things, as opposed to the creations of our own fancy, have their origin in the action of the Almighty Being, who associates ideas in spirits with absolute impartiality, and therefore in all alike, and with absolute immutability, and therefore

in the same way at all times. We are quite right to draw a distinction between the two classes; in fact we may call the one class things external to us, for if I close my eyes the sun continues to exist, that is, it exists still in other spirits. The regularity that characterizes those combinations of ideas which are common to us all, a regularity which results from the unchangeableness of God, we call laws of nature. They are a far more cogent proof of the existence of an omniscient God than all imaginable miracles. Only by bringing God down to the level of man, can we come to believe that extraordinary acts further His glory more than the maintenance of an order that has once been established, and according to which the idea of the bright sun is not so much the cause as the announcement of the idea of heat that follows it. The laws of nature, then, are the principles upon which God combines ideas in all human beings. These are discovered solely by means of observation. It is impossible to demonstrate, or to know *a priori*, that one idea will be accompanied by another; this we learn by experience, and we expect the same thing to happen in the future because we have a well-grounded belief that God has not changed His will. Berkeley's idealism, as Kant afterwards truly observed, is pure empiricism; and his example is sufficient to show the mistake made by those who contrast idealism with empiricism, instead of with rationalism. Towards rationalism Berkeley takes up a purely negative attitude. Hence the almost barbarous fashion in which he often speaks of mathematics, although he was no mere tyro in that subject himself. Ultimately, in his view, the chief function of philosophy is to study the Divine wisdom as manifested in the laws of nature, not excluding teleological connection. To say that teleology is absolutely incompatible with empiricism, and that therefore Berkeley cannot be called an empiricist, is to lose sight of the distinction already pointed out (§ 287). Here the individual things that form the truly real, are held to be spiritual, and not material; and accordingly he expressly affirms that will is the sole form of activity. (Materialism did not allow that there was any form except motion.) Just as motion is determined by outward impulse, so will is determined by ends. Motives (*Beweggründe*), which the realists sacrificed to causes of motion (*Gründe der Bewegung*), must therefore be put in the forefront by the individualist who is also an idealist, whether his philosophy

be rationalistic like that of Leibnitz, or empirical like that of Berkeley.

7. A large part of his two chief works is occupied with demonstrating the simplicity of his system and its agreement with the demands of religion, and in particular of sound common sense. The hypotheses put forward on the opposite side have, he says, led many to scepticism, owing to the difficulties which, if these are accepted, result from the idea of space, and so on. The theory that bodies exert an influence upon the soul, has brought even a larger number into the position of asserting that the soul is material. His own theory, on the other hand, according to which every idea is a word which God speaks to us, every regular succession of ideas a rule which God follows, he maintains to be the best safeguard against atheism. Not as though this would give us an idea of God. How would it be possible for God, who is pure activity, to be represented by something non-active, as an idea is? Rather, in this case, what applies to our certainty of the existence of our own spirit and of other spirits, applies also to our certainty of God. For the reason just stated, we have no ideas of these, but only of their manifestations. We have, however, a "notion" of them; and the existence of our own spirit is for us an immediate certainty, while the existence of other spirits, though not directly known, is still a highly probable deduction. Finally, God's existence is, like that of other spirits, deducible from the effects He produces (ideas), and is therefore not directly deducible. But while this is so, it is more certain than anything else, since everything of which we are conscious, every idea, is a proof of His existence, inasmuch as it is a manifestation of Him. Where Berkeley, as often happens, describes this process of being illuminated by God, he comes very near to the position of Malebranche, whose favourite text he is fond of quoting: "In Him we live, and move, and have our being." For the rest, he was in religion a faithful son of his Church, and in politics an adherent of the theory of passive obedience, on behalf of which he also employed his pen,

Cf. J. F. Ferrier: *Berkeley and Idealism*, 1842 (first in *Blackwood's Magazine*, afterwards in the collected edition of his philosophical remains, Edin. and Lond., 1866). F. Collyns Simon: *The Nature and Elements of the External World*, 1847; and *The Present State of Metaphysics in Great Britain*, in *The Contemporary Review* for June, 1868.

§ 292.

E.—PHILOSOPHY AS INTROSPECTION.

1. The counterpart to the realism of the eighteenth century had reached a climax in Berkeley's philosophy, as was afterwards recognised by the *Système de la Nature* (*vid. supra*, § 286, 3). No theory could be more idealistic than this, which transforms bodies into more constant kinds of perception, just as Holbach subsequently represented thoughts as finer kinds of motion. While Berkeley shows himself in this respect more consistent than Locke and his semi-idealistic disciples, still in another point he suffers as much from want of thoroughness as they do. The counterpart to pantheism,—which in this work has always been called individualism, in order to reserve monadism, the expression proposed by others, for the one system that invented it,—led in its realistic form to atheism. It was remarked in passing (*vid.* § 286), that the series of idealistic systems would show a similar result. That this remark was true in the nature of the case, and that we are justified in charging Leibnitz, Wolff, Baumgarten, Meier, and Berkeley with want of thoroughness, inasmuch as they remained theists,—an attitude they all maintained in honesty and uprightness,—is proved by the difficulties and contradictions in which they became involved solely owing to this fact. In the first place, as regards Leibnitz, who may here be taken also as the representative of his three disciples and followers, the Godhead appears in his system, for the most part, by being introduced as the ultimate basis of the general harmony of the world. As, however, it has been shown (*vid.* § 288, 2), that this harmony results spontaneously from the conception of the monads, God is really represented as carrying out something which does not require to be carried out. If we say that, not merely the harmony among the monads, but their existence, is only conceivable upon the hypothesis that they are the work of a Creator, we must remember the metaphysical mechanism (*vid.* § 288, 3) by which they force themselves into existence, and also Leibnitz's express statement that no new monads were created and no existing monads destroyed, as well as the fact that it is in no way harder to assume the eternity of the monads *a parte ante* than their eternity *a parte post.* If we reflect that, because God does not possess that which forms the bond between the monads, He is really banished to

the region where the deities of Epicurus dwelt, and further, that Leibnitz is very unwilling to allow any interference at all in the world on the part of God, we might perhaps trace in the expression he sometimes uses, *Deus* SIVE *harmonia rerum*, a feeling that in his system a God has, in both senses of the word, *nothing to do*, (*vid. Leibnitiana* in Feller, *Otium Hanov.* p. 169. *Cf. Letter to the Duke Joh. Friedrich* in O. Klopp's ed., vol. iii., p. 259). And, besides, at what a sacrifice of consistency does he purchase this God, who has nothing to do! He calls Him the highest of the monads; but as the nature of the monad was expressly made to consist in its being one among many, in its being limited power, in its being burdened with matter in order that it might remain a part of the universe, and so on, we have in God a monad which is not a monad at all. We may compare this with the position in which Wolff gets entangled. That unwearied opponent of the philosopher who made God the only substance, becomes doubtful as to whether God is substance at all, and finally reaches the result that He is so only in a loose sense, *i.e.*, that properly speaking, He does not subsist at all. The idea of God introduces an exactly similar contradiction into each individual monad. This was said to be self-active power; but it remains so, only so long as no account is taken of its relation to the Godhead; if we do take account of this relation, the monads become "emanations" of the Divine nature, *i.e.*, to use Spinoza's phraseology, its *affectiones*. What happens to Leibnitz and Wolff, happens also to Berkeley. He says that God never varies from the established method of combining ideas; and a God of whom this is directly asserted has nothing to do. His place can easily be supplied, if the law of association of ideas be substituted for Him who has once for all laid it down. This is all the more easily accomplished in that the hypothesis of a God and of an activity so directed threatens the fundamental principles of the system. For spirits are said to be purely active beings, to suppose that they are passive is equivalent to making them material; now, towards God they are said to stand in a relation of receptivity, *i.e.* exactly in the position of the rejected *tabula rasa*. And further, bodies, it is said, cannot give us any ideas, because it is impossible to give what one has not got. God, however, is expressly stated *not* to have such ideas as we have; and yet He gives us ideas which are certainly such as we have. These

contradictions are a symptom and a penalty of the want of thoroughness characteristic of this point of view. Neither Leibnitz nor Berkeley ever gets beyond semi-individualism, because, while they had declared that the individual is the only reality, they do not maintain that which makes the individual thing an individual thing—its separation from everything else. It was impossible that Leibnitz should do so. For his monad is a mirror of the universe, and therefore in his psychology he can see in the laws of thought merely the reflected laws of the world, (metaphysical principles, he calls them in a letter to Locke); while in his ethics, he is compelled to make personal perfection consist solely in the furtherance of philanthropy. His own life and character accord well with his theory. He could not think without society (conversation, correspondence, reading); a many-sided activity in the world, in the service of the State and the Court, and so on, was for him a necessity; indeed, even his religious life is not such as requires that zealous attendance at church which promotes sectarian isolation; it rather consists in that great yearning for union with others which produced his schemes of reconciliation. Berkeley, again, who substitutes ideas for reality, though only such ideas as are common to all, can—just on account of this limitation—never get to the position of saying that the subject draws everything from within itself and finds in itself complete satisfaction. This sense of inadequacy,—which in himself appears in the form of his proverbial philanthropy, of zeal for missionary enterprise, of submission to the control of the State, and which even his theory allows to the subject,—excludes everything which in his time or our own could be called egoism. But, just for this reason, it is conceived much more in the spirit of the period that has been called the period of organization than in that of the "disorganizing" eighteenth century. This explains why on certain points Leibnitz and Berkeley alike show an affinity to Malebranche.

2. An important step towards getting rid of this want of thoroughness was taken by those who taught the human spirit to dive into the recesses of its own being, not so much in order to find out what is outside of us or beyond us, as in order to discover what lies in the individual as such. The more practical aspect of this movement is represented by

ROUSSEAU, that hermit in the midst of the busy world, who before the eyes of all men buried himself in the depths of his own being and found satisfaction there, while at the same time he confined this process chiefly to the practical side of his nature. So far as theory is concerned, its chief champions are the solid phalanx of the SCOTTISH SCHOOL. These thinkers made philosophy an observation of the facts of consciousness, including those which form the basis of the speculative, and those which form the basis of the practical aspect of life. We are justified in connecting these two tendencies not merely by the circumstance that the Scotsmen were fond of extolling Rousseau as "their" philosopher, but also by the very similar effect which the two produced without and within the country where they originated. In France these have been the two influences that have opposed the power of sensationalism. That of the Genevan was felt earlier, but its success was less marked; that of the Scotsmen asserted itself later, but its triumph was more enduring. The reverse was the case in Germany. There Rousseau's ideas at once produced an immense effect, especially in extra-academic circles, but in academic circles too, as the example of Kant proves. The doctrines of the Scottish School, which for a while were expounded only from the professorial chairs at home, remained for a long time unknown in Germany. When this condition of things came to an end, the case of F. H. Jacobi shows how important was their influence upon German philosophy also.

3. The story of the life of JEAN JACQUES ROUSSEAU, born at Geneva on June 28th, 1712, and died at Paris on July 3rd, 1778, is universally known through his world-renowned autobiography (*Confessions*). By means of his numerous works, the best collected edition of which is that of Musset-Pathay, Paris, 1818–1820 in 22 volumes, he exercised a great influence, chiefly upon the history of civilization in general, but also to some extent upon the history of philosophy. His first piece of writing was the essay upon the (baneful) influence of the arts and sciences, which was awarded a prize at Dijon in 1750. Of his other works, we may mention as the principal ones, his other prize essay upon the inequality of man (1753), the *Contrat social* (1762), and his two novels, *La nouvelle Héloise* (1761) and the more important *Émile* (1762). All of his books, from first to last, are marked by the one

fundamental idea, that man, when he comes from the hands of nature, is good, and that it is simply society that ruins him. This destructive process, he holds, can only be checked when education produces a better set of human beings, by allowing man to develop naturally and in his own particular way, and by confining its efforts to preventing the entrance of evil into him. It naturally follows from these premisses that this could be best effected in complete isolation from the world, outside of the family circle, by means of a private tutor selected for the purpose, in a solitude which might be called an artificially constructed Crusoe's island. (It is unnecessary to go into the detailed educational precepts given in *Émile*, more especially as most of what is nowadays cited as having been first taught by Rousseau, is found in Locke, from whom Rousseau can be shown to have borrowed it.) The pronounced individualism, expressed in the principles just quoted, accords very well with the fact, that in Rousseau's ideal State, in spite of the stress he himself lays upon the important distinction between *volonté générale* and *volonté de tous*, the will of all—indeed, in default of this, the will of the majority—decides everything; so that, for example, every year the majority determines whether the constitution is to continue or is to be altered. Rousseau's antipathy to all corporations, to all systems of representation, to the subdivision produced by separating the functions of government, and so on, is a necessary consequence of the fact that the citizen never ceases to be "a man," which means here, an individual; and that even in the State the "rights of man," *i.e.*, the rights of the human atom, or individual man, continue to be the chief consideration. His theory is much more revolutionary than he was himself. It leads to anarchy—a result which individualism is bound to reach, exactly as pantheism is bound to insist upon the oppression of individual citizens. Just as his politics are in this respect anti-social, so his religion is anti-ecclesiastical. The famous confession of faith made by the Savoyard vicar in Rousseau's *Émile*, led at one and the same time to two widely different results. His book was burned by the public executioner, and yet it earned him the contempt of the Encyclopædists, who began to look upon him as a bigot. This confession exhibits a point of view in which the subjective side is exalted so far above the objective that, while God really becomes of little import to man, man's

enjoyment of the consciousness that God exists, becomes correspondingly important. The foremost place is given to the certainty that we are immortal, and that we shall one day see merit and happiness brought into accord with each other. As neither of these is conceivable without a Godhead, a belief in the latter is accepted into the bargain. Hence the vehemence with which it is maintained that the nature of the *être des êtres* is unknowable. Hence the wrath against all dogma, which makes Rousseau portray so affectionately the atheist Wolmar in the *New Héloïse*, and which has led many an orthodox critic, wrapped up in dogmatism, to put Rousseau into the same category with Voltaire and Diderot, as if fire and water were the same thing because they both destroy man's handiwork. In Rousseau's religion of the heart we cannot help recognising the first germs of the sentimental theology which afterwards became supreme, especially in Germany, and under the influence of which real theology was driven out by pietism. In maintaining *pectus est quod theologum facit*, as against those who would deify reason, men of this school were in literal agreement with Rousseau, who is never weary of proclaiming to the world that heart and feeling are more than reason. We can hardly imagine a nature better fitted to be the active apostle of such a form of subjectivity. Living in constant self-contemplation, always meditating upon himself, and therefore, even in the passion for nature, which became fashionable after his day, paying much less heed to nature herself than to the emotions which she calls forth, often spoiling his enjoyment by this reflective tendency, he yet is more afraid of losing himself than of anything else. Hence his cry of *j'abhorre Spinoza*. Rejected and ridiculed by those who, like Helvetius, find their all in the sensuous side of human nature, Rousseau enthroned the Ego revelling in its own thoughts. The solitude that closed round this prophet of idealism in the midst of materialistic culture, drove him always further and further into himself; for him whom the world thrusts forth as a "savage" or a "bear," there is nothing left but to find satisfaction in his own self. In Rousseau's case this is pushed to excess. He is as much, or even more, of an egoist than Helvetius; but his egoism shows itself in that admiration for his own excellence, which makes him exclaim,—even when he is recounting acts of meanness of which he had been guilty,—"There has never been a better man than I am." Spinoza could not have

read without repugnance a book like Rousseau's *Confessions;* Rousseau's own age saw in it a new gospel. We, who have fallen heir to the legacies of both, pass, as we read it, from admiration to disgust, and from disgust to admiration. Up till now, owing largely to the charm of his style, the sentiment of admiration has prevailed almost universally in France. The remarkable article on Rousseau in the *Revue de Deux Mondes* by St. Marc Girardin, is a brilliant exception to this, and one which, it seems, is beginning to find imitators.

4. The efforts of the SCOTTISH SCHOOL were not crowned with such striking and immediate success; but their influence has been almost as great, and it has been more permanent. As the merits of James Beattie (5th Nov., 1735, to 8th Aug., 1803) lie rather in the sphere of æsthetics, while James Oswald exhibits no originality, and Adam Ferguson (1724–22nd Feb., 1816) marks no important step in advance, it will be sufficient to mention here only the founder of the School, and the youngest of his own pupils, who not merely dedicated his chief work to his master, but had a like honour paid him in return. While only in his twelfth year, THOMAS REID, born April 26th, 1710, was entered at Marischal College, Aberdeen, of which George Turnbull (1698–1748) had just become head. Turnbull, though almost forgotten nowadays, was an extremely suggestive writer; and in the admirable work by McCosh, referred to in § 281, 7, attention is very properly directed to him, because Reid is so greatly indebted to him, that it is surprising to see that no acknowledgment is made. After finishing his studies, Reid first held the post of librarian at Aberdeen, and then had charge of a country parish until he finally received a university chair. In 1752 he became a professor in Aberdeen, and from there he was transferred to Glasgow in 1764. He died on Oct. 7th, 1796. His views, originally expounded only in his lectures, were first given to the world in his *Inquiry into the Human Mind on the Principles of Common Sense*, Edin., 1764 (often reprinted since). This contains in a compact form all that was afterwards developed in the more elaborate and sometimes prolix works of his old age, viz., *Essays on the Intellectual Powers of Man*, Edin., 1785, and *Essays on the Active Powers of Man*, Edin., 1788. (These two have often been printed together in three volumes at Edinburgh, *e.g.* 1819, as, *Essays on the Powers of the Human Mind.*) In 1847 Sir William Hamilton, of whom

we shall have to speak later, published the collected works of Reid in one volume; and as early as 1858 this edition (Edin., Maclachan and Stewart) had been reprinted five times. Thoroughly acquainted with the teaching of Hume and of Berkeley, Reid admits that both are perfectly justified in the conclusion they draw from Locke's theories, even although one denies the existence of the Ego, and the other the existence of matter. As scepticism of this kind is absurd, the principles upon which these conclusions rest must be given up. Not, however, the point of view of empiricism; for, just as natural science made no progress until it was based upon experience and experiment, so too the second branch of science, pneumatology,—which is still waiting for its Galileo, Torricelli, Kepler, Bacon, and Newton,—can follow no other road but the analytical method of observation, which endeavours to discover the laws that regulate the phenomena (*Inquiry*, ed. vi., pp. 3, 10; *Essays*, Pref.). What must be given up is "the ideal system," according to which we have at first mere ideas, and only afterwards, by combining these, become able to decide about the reality of the object of thought. As a matter of fact, the reverse of this would be much nearer the truth; just as in nature what we have first presented to us, is bodies or combinations of elements that we only discover afterwards by analysis (*Inquiry*, pp. 44, 45). Nothing but the assumption that there is a primitive judgment of this kind,—a certainty that does not rest upon ideas,—can furnish any protection against scepticism. The Peripatetic view avoided this extreme by holding (wrongly) that ideas are actual copies of things themselves; but scepticism became inevitable, after Locke, Hume, and Berkeley had proved, first of some and then of all ideas, that they could not have the remotest resemblance to the nature of the things they represent (*Inquiry*, pp. 187–192). The sum-total of the primitive judgments which are present in the consciousness of all men, and upon which all certainty ultimately rests, is called common sense; anything that runs counter to this is called absurd (*Inquiry*, p. 52). With regard to these, the greatest philosopher is no higher an authority than an ordinary man (*Essays*, vol. ii., p. 316). Pneumatology has not to construct or to explain these principles; it has simply to discover them as facts. Nor must it yield to the desire to reduce them all to a single principle; for this endeavour, which proceeds from the

tendency to analogy, may far too readily lead us to look for greater simplicity than is given in nature, and is therefore often a hindrance to free investigation, just as philosophy usually suffers more from too much than from too little ingenuity (*Essays*, vol. ii., p. 275; *Inquiry*, p. 9). Of undemonstrable principles of this kind, which form the established facts of our consciousness, Reid brings forward twelve as essential for our knowledge of contingent truths. Amongst these is the Cartesian axiom, that the fact of thought is a proof of the existence of the thinking Ego. The only fault he finds with it, is that it is thrown into the form of a reasoned conclusion, although the truth it expresses is an immediate certainty. Another such primitive judgment is, that every feeling "suggests" an object felt, not because it is an effect of the object, for that we do not know, but because we are bound to look upon it as a sign or indication of it; another is, that things are such as we perceive them to be, and so on. It is possible that in all this we are deceiving ourselves, but that does not matter, for, if so, we are so constituted that we are bound to deceive ourselves (*Essays*, vol. ii., pp. 304–328). Just as these twelve principles form the basis of our knowledge of matters of fact, or of the contingent, so too our knowledge of rational or necessary truths rests upon certain principles, the validity of which has hardly been seriously questioned. To these belong not merely the familiar axioms of logic and mathematics, but also certain metaphysical principles, which have indeed been attacked by Hume, but which common sense continues to maintain, *e.g.*, that every event has a cause, and so on (*Ibid.*, pp. 331–352). Just as these intellectual principles are a refutation of Locke's *tabula rasa*, so sound common sense is made up of certain practical principles, to the consideration of which the third volume of the *Essays* is devoted. It begins by reducing all action to three sorts of principles—mechanical, on which instinctive and customary action depends, animal, which form the basis of appetites and desires, and rational, which are the foundation for our affections for individuals. It then goes on to show that a moral sense, or moral consciousness,—our conscience,—enjoins us to esteem the fulfilment of duty more highly than our own well-being; and ends by laying down those (six) principles which no rational being can deny: common sense teaches us that there is a difference between praiseworthy and

blameworthy; further that we are responsible only for what stands within our own power, that we must treat every one as we ourselves should like to be treated, etc. From these principles even an uneducated man can construct a system of ethics.

5. DUGALD STEWART was regarded by Reid himself as the foremost of his disciples; and his own and succeeding generations have confirmed this opinion. He was born on Nov. 22nd, 1753, and after filling first the chair of mathematics and then that of moral philosophy at Edinburgh, he died in retirement in the country on June 11th, 1828. Of his works we may mention, *Elements of the Philosophy of the Human Mind*, 5 vols., 4to, Edin., 1792–1827; *Outlines of Moral Philosophy*, 1793; *Philosophical Essays*, Edin., 1810; and his last book, *Philosophy of the Active and Moral Powers of Man*, 2 vols., 1828. Besides these, he wrote memoirs of Adam Smith, Reid, and Robertson. After a complete edition of his works in seven volumes had appeared in America, Sir William Hamilton, Reid's editor, published *Collected Works*, etc., Edin., 1854–58, in ten octavo volumes. Stewart agrees with Reid in holding that philosophy has only to enumerate the principles upon which our certainty rests, and which he calls at one time fundamental laws of human belief, at another, elements of reason, and at another, principles of common sense. The chief points of difference between him and his master depend upon the fact that he tries to bring himself more into sympathy with views which the latter criticised. Thus he follows Descartes in holding that the Cartesian principle should be put in the form of an enthymeme: we are directly certain only of the fact of our thinking, we must really take a step forward from this, before we reach the certainty of our own existence. Similarly, he does not agree with Reid in holding that Locke's distinction between primary and secondary qualities should be given up; impenetrability does not stand in exactly the same relation as colour and taste. Still less does extension, which he assigns to a third group of qualities, mathematical. Finally, he will not allow that all doubt as to the reality of things is set at rest by Reid's (fifth) principle, that we are bound to supply in thought an object felt, to correspond to every feeling. This would leave it quite undetermined whether the object supplied in thought is something independent, self-subsisting. At the same time, it is not necessary to assume a

new (thirteenth) principle ; the twelfth, according to which we are certain of the unchangeableness of the laws of nature, is sufficient to supply the defect. Last of all, we must mention this other point in which Stewart differs from Reid,—association of ideas occupies a much more prominent place with him than with his master. If Reid deduced association from custom, Stewart attempts to achieve the opposite result—to explain custom by association.

6. The relation of Reid to Stewart finds an analogy in that of Stewart to his pupil, THOMAS BROWN (9th Jan., 1778, to 20th April, 1820), who, both in his lectures and in his writings, carried over into the nineteenth century the attitude which Reid had been the first to adopt. As a physician and a poet, he is not to be compared to his namesake, who lived a century and a half earlier ; but as a philosopher, he is highly esteemed, and shows in this latter respect more independence towards Reid than appears in Stewart. Perhaps this is partly due to the fact that—as his juvenile article in the *Edinburgh Review* shows—he already knew something of Kant, though only from French sources. Subsequently he studied German, and read German works. Of his writings, the first of which was a book against Darwin's *Zoönomia* (1798), the earliest that calls for mention is his criticism of Hume's theory of causality (1804) ; in the later editions it is less of a criticism than of a thesis. In Beneke's *Metaphysik und neue Psychologie*, I find it stated that he wrote, but did not finish, *A Sketch of a System of the Philosophy of the Human Mind*, Edin., 1820, that he died while it was in the press, and that it was completed by his pupil, David Welsh. From other sources I know that this pupil and biographer of Brown published in 1820, in four volumes, his master's *Lectures* on mental philosophy, which were stereotyped, after having gone through eight editions. The most important variation from his predecessors is, that he claims to have substituted sensation, simple suggestion, and relative suggestion for feeling, memory, and judgment,—the expressions they employ,—and that he increases the number of laws for the association of ideas which they laid down, by adding various secondary laws. He is remarkable as being a freethinker in religion. The ideas of this school were elaborated in a much more independent fashion by Brown's severe and even merciless critic, SIR WILLIAM HAMILTON, who died a few years ago. He was a professor

in Edinburgh. To his edition of Reid he appended two *Dissertations* of his own, the most important writings he published in his life-time. Besides these must be mentioned: *Discussions on Philosophy and Literature, Education and University Reform*, London, 1852. Soon after his death there appeared: *Lectures on Metaphysics and Logic, by Sir William Hamilton*, edited by Mansel and Veitch, Edin. and London. Blackwood, 1859, 4 vols. With regard to making empirical psychology the basis of philosophy,—or rather transforming philosophy, except natural philosophy, into psychology,—he holds much the same views as Reid and Stewart did. He accordingly demands that philosophy should begin by enumerating the various phenomena and manifestations of mind (Phænomenology), that it should then go on to search for the laws regulating those phenomena (Nomology), and that finally it should deduce, from the laws thus discovered, conclusions as to the nature of mind (Ontology, or Metaphysics). It is in dealing with the third of these that it becomes most apparent that many things, especially his acquaintance with Kant, helped to make his position more advanced than that of his predecessors. Since Hamilton's day, the use of the phraseology employed by Locke, Hume, etc., has become increasingly common. They held that knowledge is conveyed through the medium of something which only *re*-presents the objects; while, in opposition to the *re*-presentative or ideal system, Reid upheld "presentationism," according to which we have an immediate and intuitive knowledge of things themselves. "Mediate" and "representative" therefore come to mean the same thing, just as "presentative" and "immediate" do. That Hamilton, while adopting the former phraseology, is not quite decided as to which of the two lines he should follow, has been shown in a striking manner by Stirling (*Sir William Hamilton*, London, 1865). Besides the doctrine that knowledge is immediate, the main point in Hamilton's system is considered to be, that there is no knowledge of the unconditional or infinite. This statement, which was afterwards the chief ground of difference between him and Cousin, drew down upon him numerous attacks, including some from the religious point of view. Through Hamilton's influence, the views of the Scottish School, in this modified form, have continued to make way. To what an extent they are regarded in the country where

they originated, as the *ne plus ultra* of true philosophy, was shown some years ago in a manner that certainly seems strange to foreigners, when there was a talk of Ferrier (whose too early death we have to lament) being appointed to a chair in Edinburgh. But the effect produced by this school has not been confined to the land of its birth. Reid became known in France through Royer Collard, while at a later period the translations of Prévost and Théod. Jouffroy made their countrymen familiar with Dugald Stewart, whose reputation there almost surpasses that of his master. Both were summoned to lend their aid in France in the battle against the prevailing sensationalism and materialism. Nor in vain, for Cousin, the real founder of the eclecticism that was the result of this struggle, always maintained that its one leading feature belonged to the Scottish School. For it was they who first made psychology the basis of philosophy. In addition to showing that the chief characteristic of the Scottish School was its "spiritualism," *i.e.* what has been here called idealism, the school of Cousin has the further merit of having at least rendered it difficult to continue making a mistake generally made in Germany and even in France, particularly by theologians,—the mistake of putting Rousseau in the same category as Voltaire and the Encyclopædists. Just as these latter recognised their true relation to Rousseau, when they attacked him as their most dangerous foe, so the Scottish School found one of its bitterest opponents in the materialistically inclined JOSEPH PRIESTLEY (13th March, 1733, to 6th Feb., 1804). Won over by Hartley and Bonnet's theories of the vibrations of the brain fibres, he wished to substitute a physiological account of the nervous system for the analysis of the facts of consciousness, which Reid, Beattie, and Oswald had made their first duty. Against these thinkers he directed a special attack (*An Examination of Reid's Inquiry, Beattie's Essay on the Nature of Truth, and Oswald's Appeal to Common Sense.* Lond., 1774). Besides writing this strictly polemical work, he developed his views in his *Theory of the Human Mind,* Lond., 1775, which he published as a third part to Hartley's *Observations on Man, his Frame, his Duty, and his Expectations.* Further, he brought out, in defence of his doctrines: *Disquisitions Relating to Matter and Spirit,* etc., 1777, and: *Free Discussions of the Doctrines of Materialism,* etc., London, 1778. The latter also contains the objections

put forward by Richard Price (1723–1791) on behalf of "spiritualism." With Priestley's purely scientific works, which have been of special importance in the department of chemistry, we have here nothing to do.

7. The position which we have assigned to Rousseau in France, and to Reid and his school in Great Britain, belongs in Germany to the EMPIRICAL PSYCHOLOGISTS, who were to some extent influenced by these two philosophical forces, although most of them developed their views independently. Berkeley's example proved that empiricism and idealism are not mutually exclusive, and Wolff even made the attempt to graft empirical psychology on to the rational "pneumatics" of Leibnitz; still, the fact that this could only assume the form of a supplement, is an evidence that those who wish to devote their attention solely and entirely to empirical psychology, will in so doing break away from the idealism of Leibnitz, and approximate to the views of English and French thinkers. This helps to explain how the Empirical Psychologists were led to take up a position midway between the movements begun respectively by Leibnitz and by Locke, and that in turn makes intelligible their affinity to those doctrines which will appear below (*vid.* § 294) as a form of syncretism, the elements of which are taken from the systems of these two philosophers. Thus the statement made by FRIEDRICH CASIMIR CARL VON CREUZ (1724–1770) in his *Essay on the Soul* (Frkf. and Leips., 1723, 2 Pts.), to the effect that mind is a mean between a simple and a complex nature, does not seem so strange, if we bear in mind that Leibnitz and Wolff had maintained that it was simple, Hume that it was complex. Similarly, his assertion that while the soul produces all its ideas by itself, these must yet be occasioned by something external to ourselves, shows him as a follower at once of Leibnitz and of Locke. His constantly repeated demand to base psychology solely upon experience, his statement that the soul, besides being prompted to produce ideas itself, prompts the body to produce motions, a fact which we are bound to admit, are features that remind us of Bonnet. And the view that the soul must be immortal, because, if it ceased to exist, an "aspect" of the world would be lost, since each soul views the world in a different way, is borrowed from Leibnitz. Accordingly the physician JOH. GOTTL. KRÜGER was following in the footsteps of Creuz when, in his *New Theory of the*

Emotions (1746), and more decidedly in his *Dreams* (1754), he set aside all inquiry into the question of immortality, on the ground that we can get no light upon it from experience. The same may be said of JOH. JAC. HENTSCH, who, in his *Essay on the Sequence of Changes in the Human Soul* (1758, Leips.), declares that the theory of the soul belongs to physics, and not to metaphysics. The Latin work by JAC. FR. WEISS, : *De natura animi et potissimum cordis humani*, Stuttg., 1761, bears evidence in its title of where the author's chief interest lay. For him, just as for Krüger before him, it lay in sensation, which had been hinted at by Leibnitz in his unconscious perceptions, and had been more closely examined by the Wolffian School, especially by Meier, and which under the name of feeling was soon to play such an important part. The first to give it a permanent place in psychology was the man who beyond doubt occupies the chief place among the empirical psychologists of the pre-Kantian period. This is JOHANN NICOLAUS TETENS (16th Sept., 1736, to 1805), who, before being transferred to Copenhagen and while professor first at Bützow and afterwards at Kiel, had published a number of works, amongst which the *Philosophical Essays on Human Nature and its Development*, Leips., 1776, 2 vols., decidedly occupies the first place. (Of his other works we may name: *Thoughts on some Causes why there are only a Few Established Truths in Metaphysics*, Bützow, 1760; *Discussion of the Chief Proofs for the Existence of God*, 1761; *On the Origin of Language and of Writing*, 1772; *On Universal Speculative Philosophy*, 1775.) In his investigations he combines with his observation of the modifications of the soul a criticism of the views of others. On the most various occasions he pronounces against the hypothesis of brain oscillations as put forward by Hartley, Priestley, and Bonnet, who really explain nothing; against Hume and Berkeley, who arrive at untenable conclusions; against Leibnitz and Wolff, because, in reducing all psychical activities to perception, they overlook other sources of such activities; and finally, against the Scottish School, which makes no attempt at scientific explanation. The *Essays* contains fourteen different essays. The first part consists of eleven, dealing respectively with the nature of perceptions, with feeling, with sensations and sensibilities, with perception and consciousness, with thinking power and thought, with the origin of our knowledge of the

objective existence of things, with the distinction between sensuous and rational knowledge, with the necessity of universal truths of reason, with the relation between the reasoning faculty and common sense, with the fundamental principle of sensation, perception, and thought, with the relation of imagination to the other active capacities of the soul, with the fundamental power of the human soul and the character of humanity. The second part is composed of three essays, which treat of independent activity and freedom, of the nature of the human soul, and of the perfectibility and development of man. To make against Tetens the reproach that this succession of subjects betrays an entire want of system, would be to forget that his purpose is not to lay before his readers a careful epitome of the final result of previous meditations upon his part, but simply to induce them to accompany him in these meditations. We can accordingly see no inconsistency, but must rather see the advance, *i.e.* progress, necessary to every meditation, in the fact that Tetens begins by reducing all acts of knowledge to sensations, perceptions, and thoughts, the sources of which are said to be feeling, imagination, and reason, and yet in the tenth essay gets so far as to state that the fundamental faculties of the soul are feeling, understanding, and will. To this result he is led not merely by a criticism of the distinction which most people, "like the Catechism," make between understanding and will, as well as of that which Sulzer (*vid. infra*, § 294, 4) draws between sensibility and knowing power, but by a comparison of all the phenomena which up till now had been sharply distinguished. For it is found that the sensations of the external senses, as well as the feeling that we are ourselves affected, and the feelings of pleasure and its opposite, are all marked by the characteristic of receptivity. In our ideas and thoughts, on the other hand, there appears activity, from which, as remaining within ourselves (*actio immanens*), there must be distinguished that which passes beyond ourselves (*transiens*), and which we exhibit, for example, when we resolve to make a movement. But receptivity, then immanent, and finally transient activity, are the three fundamental faculties which, since the days of Tetens, it has been customary to distinguish. In addition to the strictness of his analysis, in which no one but Bonnet can be compared to him, what made the investigations of Tetens so valuable to Kant and the epoch that he inaugurated, was

that tendency towards a reconciliation of extremes, which marks him as standing on the threshold of the succeeding period. In his discussions on language he attempts to steer a middle course between Süssmilch, who had maintained the impossibility, and Herder who had maintained the necessity, of man's inventing a language for himself; and he believes that he has found this middle course in the statement that under certain circumstances it would be possible for man to invent a language. In the same way, he says that his point of view lies midway between determinism and indeterminism, while he demands that we should pay some regard to common sense, but should not pay regard to it alone. To disregard it, is sophistry; to neglect everything else, leads to fanaticism; true philosophy is distinct from both, and occupies an intermediate position. Similarly, in discussing the question as to whether memory is a function of the soul alone or of the brain alone, he expresses the opinion that the third view, which assigns a share of it to both, is most probably correct because it lies midway between the other two. Further, as in the case of Bonnet (*vid.* § 283, 7), it may be pointed out how nearly Tetens approaches Kant, when (in the thirteenth essay) he classes as mere "appearances" or "phenomena" not only what we learn of things through sensations, but also what we learn of ourselves through self-consciousness; the real nature alike of things and of the soul remains concealed from us.—For the rest, the extent of the interest shown during this period in observations of individual psychical states is proved by the abundance of psychological literature, in reference to which, among other works, the third volume of Carus' *Geschichte der Psychologie* may be consulted. It even survived the Kantian revolution. The *Magazin für Seelenerfahrungs Kunde*, founded by Karl Philipp Moritz (1757–93) well known for his strange and morbid habit of introspection, was afterwards continued by Maimon, and at a still later period was revived in the *Psychologisches Journal* of C. Chr. Ehr. Schmid.

§ 293.

F.—THE ENLIGHTENMENT IN GERMANY.

F. G. Schlosser: *Geschichte des achtzehnten Jahrhunderts.* Vols. 3 and 4. Bruno Bauer: *Geschichte der Politik, Cultur und Aufklärung des achtzehnten Jahrhunderts.* Charlottenburg, 1843–45. M. v. Geismar: *Bibliothek der deutschen Aufklärer des achtzehnten Jahrhunderts.* 5 Parts.

Leipz., 1846–47. K. Biedermann: *Deutschland im achtzehnten Jahrhundert.* 1st vol., Leipz., 1854. 2nd vol., 1st pt., Leipz., 1858, 2nd pt., 1868 (no more published). H. Hettner: *Literaturgeschichte des achtzehnten Jahrhunderts.* Third part, 1st Book, Brunsw., 1862; 2nd, 1864; 3rd, 1869–70. A. Tholuck: *Vorgeschichte des Rationalismus*, 2 vols., each in two parts, Halle, 1853–4, 1861–2; and the same author's, *Geschichte des Rationalismus*, 1st pt., Berlin, 1865.

1. The step which, in pursuance of the line hitherto followed, idealism has to take in order to bring itself into complete correspondence with the *Système de la Nature* (§ 286, 3), was too small to be made the life-work of a remarkable genius. On the other hand, however, the denial of the evidence of the senses requires not merely a greater power of abstraction than is necessary for plain materialism, but also philosophical gifts of no common order. And thus arises a dilemma, the solution of which is given us by men who, as a matter of fact, occupy the point of view of the most extreme idealistic individualism, but whose consciousness of their own position is not so distinct as to enable them thoroughly to comprehend the consequences it involves. Although this failure to understand themselves excludes them from the number of great philosophers, yet it does not prevent them from exercising an important influence. The energy and the time which would have been necessary for such a descent into the depths of their own thoughts, is devoted by them to securing the supremacy, in all departments of life, of the fundamental idea that inspires them as a feeling and as an instinct. And so the success of their work, because its force is expended entirely on the surface, may appear greater than if they had been philosophers of the highest rank. The Sophists (§ 54 ff.), the syncretism of the Romans (§ 105 ff.), and the philosophy of the Renaissance have proved that there are periods when philosophy requires, not so much that a new and important step should be taken, as that a group of ideas already established should work itself completely out. Such a stage had been reached by the philosophy of the eighteenth century, when it entered the service of the *Enlightenment in Germany*, and became one of its prominent features. Only one of its features; for while the scope of the Enlightenment is unduly narrowed by those who, as is very often the case, only think of certain phenomena in the sphere of *religion*, it would not do to put forward, in opposition to this the equally narrow conception that understands by Enlightenment merely popular *philosophy*. Rather, the En-

lightenment is a crisis and a revolution in the history of the world and of civilization, a movement that penetrates into all departments of life, that began in the eighteenth century and still continues, so far as the mass of the people in our day is in the condition which at that time was characteristic of the few. The first thing to be done here is, to try to sum up the nature of this important phenomenon in a formula that will enable us rightly to estimate the large number of definitions which found utterance, but which are at once stamped as partial and one-sided by the fact that they express, or at least imply, praise or censure. This condition seems to be fulfilled by the formula that in the Enlightenment an effort was made *to raise man, so far as he is a rational individual, into a position of supremacy over everything.* The first striking feature in this, is the prominence given to the human *subject.* Now, as all that we call progress consists in the subject gaining the mastery over things, intellectually by their becoming for him objects of knowledge or of amusement, practically by their being made to serve his ends,—in both cases they serve, the subject controls them or plays with them,—we can understand how Mendelssohn was led to define enlightenment and culture as the forms in which progress manifests itself. It is, further, easy to see why during this period *man* is always praised so emphatically, whether he be exalted at the expense of the Christian, at the expense of the scholar, or at the expense of the German. Even before Herder had given currency to the word humanity, what he called by this name had become the leading motive with all those who had their hearts set upon enlightenment and light. In the second place, the formula laid down gives prominence to the fact that man's importance belongs to him as an *individual.* Man, as he is for himself, not as he is for others, *e.g.* as the member of a larger community, is put in the highest place and required to be responsible for himself. If this is called being of age, or, independence, it is easy to comprehend how Kant was led to make the essence of the Enlightenment consist in emancipation from the nonage which we had to endure, and others, at a later period, to make it consist in independence, as opposed to the fetters of authority. According as, in so doing, stress was laid upon the intellectual or upon the practical aspect of the matter, Bahrdt was able to make the Enlightenment consist in following nothing but one's own intuitions, others to make

it consist in freethinking and love of freedom. Neither of these is reconcilable with the acceptance of a judgment that one has not tested for oneself (*i.e.* a prejudice); and, therefore, war against prejudices is the universal battle-cry of the freethinkers or strong minds. As, however, in the first instance in all cases, and throughout life in most cases, natural dependence and piety do not rest upon a carefully tested judgment, others saw in the war against all prejudices a war against all authority, however just; and the expressions, freethinker, intellectual freedom, strong mind, and so on, acquired a disreputable significance. Further, no man is entirely isolated; at the outset, each finds himself organically connected with historical associations, which must be disregarded if we are to conceive of him as an individual. Thus, there is no difficulty in understanding the position of those who make the essence of the Enlightenment consist in the substitution of the abstract for the historical, or even in an inability to regard things as parts of a organism. If we always keep in view that it is for man as an individual, that the Enlightenment manifests such enthusiasm, it becomes easy to explain the flood of autobiographies that characterized this period. Rousseau, with his isolation of man, had shown the way; and he had also furnished an example of how to lay before the world that element in each individual, which is not universal and human, but particular and personal. His autobiography was followed by hundreds of others; and the interest aroused by the careers of such veritable scoundrels as Laukhardt and others can only be explained by the fact that nothing was held in higher esteem than the individual human being. Nor were the men of greatest piety during this period content with the preaching of sin and forgiveness, *i.e.*, of what is universal and human; they were anxious to hear more individual experiences, detailed histories of conversions, which only differed from one another in incidental circumstances. The interest in the saved themselves was stronger than the interest in salvation and in the communion of the saved. Similarly, where all relationships in which man finds himself involved without his own co-operation, or into which he is bound to enter, are regarded as fetters, it is easy to understand why the social impulse finds satisfaction only in those which are of an incidental or even an artificial character. Hence the praises bestowed upon friendship, which is often