

IV.—THE WORD.¹

It is a common accusation brought against the Doctors of the old Scholastic philosophy, that these writers have made their philosophical subservient to their theological system, and have so confounded the proper limits of each as to generate a common suspicion that the former is not the pure outcome of disinterested thought. At present it does not concern me to determine what, if any, foundation there may be for such an accusation. Those who are sceptical as to the existence of a supernatural revelation in the strict sense of the term protest, consistently enough, against any imagined connexion between the two; but believers in such a revelation conceive that it may be of aid to philosophy in three ways. It may call attention to a philosophical truth which, but for the particular dogma revealed, would have probably escaped the notice of the human mind. It may serve to confirm, with its own high authority, philosophical conclusions already obtained by mere process of reason, while itself receiving elucidation from the philosophy which it confirms. Lastly, it may serve for purposes of illustration. In the present article two dogmas of the Christian Revelation—those of the Blessed Trinity and of the existence and nature of Angels—have been introduced for the last two reasons indicated above, principally for the last. I have judged that light would be thrown on the sense in which these doctrines are accepted by the Catholic Church, and, in particular, that the nature of the intellectual acts of Angels—whose existence is demonstrable by reason (as I hope to prove elsewhere)—would serve to illustrate the main subject of consideration in this paper. I do not then claim for the doctrines in question any demonstrative force. This they could only have for such as accept them on a Divine authority; and it is not to such exclusively or even principally that I address myself. If, therefore, there are those among my present readers, to whom the introduction

¹ The following article is printed as a representative specimen of a mode of thought which, having survived all through the modern period, is now asserting itself as an active factor on the philosophical field. As such, it needs to be understood alike in its principles and results. The author's frankness in his declaration of principles will be recognised. He kindly supplied the introductory paragraph, at my request, after the article was accepted for the Journal.—EDITOR.

of these articles of faith would prove a stumbling-block rather than an aid, let them omit the allusions. The main arguments will remain unimpaired.

The word is a term pregnant with mysteries; though practically nothing more universal, common, constant. In its exhaustiveness as inclusive of concept and language it is proper to man; in its fullest latitude it is common to all spiritual natures. In the Divine Trinity the Word is the Wisdom of the Father in its ultimate expression,—the substantial speech of the Three Divine Persons Each to Other.

In Angels, or pure Intelligences, there is not only the internal word, but there is likewise an external word or sort of speech by which each communicates with other. Of what character is this angelic speech? Who can adequately answer this question? Yet two things may be confidently predicated of it, each of which has important bearings on the burden of the present paper. The words of Angels are not their bare thoughts; otherwise all the thoughts of Angels would be, as it were, common property, and each much-containing thought of an Angel nearest the Throne could be spoken to one of the lowest orders. The other point is this: the words of an Angel are a transcript of his thoughts in some way or other, and run parallel with them. Hence, as in the thoughts of the hierarchies of heaven there are thoughts common and thoughts special; so in the words of Angels there is a speech common and a speech which is an esoteric language communicating either with the Divine Majesty or with such of the Angelic hosts as, by virtue of their essential nearness, are competent to understand it. Once more: an analogy drawn from human conversation justifies us in inferring that the transformation of an Angelic thought into a word is subject to volition; more particularly when we bear in mind that no Angel can act upon another at a distance, and that the personal presence of one Angel with another is the result of an action of the will.

But it behoves us to determine what that something is, by virtue of which the secret thought of an Angel is transformed, as it were, into a communicative word. It must be something real, as is plain; otherwise Angelic contemplation could be but congregational worship, or a sermon delivered before the spirits of Angels and of Saints,—not always understood or at least comprehended by the many. It is as plainly something not substantial or essential; for

in such case it could not be subject to the individual will. Neither can it be a pure accident in the specific sense of the word; because Angelic language is absolutely (*de potentia absoluta*) inseparable from Angelic thought, though Angelic thought is separable from Angelic language. What remains, then, but that it should be an accidental mode, completorial after a manner of the representativeness before others of the concept? To explain: a thought, purely *as* thought, is an impress of the object, but not an express image of the object. It is in the Spirit as a cognition, an intuition (for pure Intelligences do not reason), but voiceless, so to speak, and consequently uncommunicative. It is presentative of the object to the subject of cognition; and in reflex thought is really representative, but such *to the thinker* exclusively. Somehow it must be complemented, in order that it may be able to pass from spirit to spirit in the way of Angelic colloquy.¹

An illustration of the same truth is to be found in the mystery of the B. Trinity, as taught in the Church of Christ. The substantial Wisdom of God is common to the three Divine Persons, being in all things identical with the Divine Essence. The second Person is the Divine speech (so to speak), generated by the Father as the expressive Word of His Wisdom, the Image of His Brightness, the substantial Voice of the Divine Interlocution; so that there are Fathers of the early Church who have not scrupled to affirm that without His Word God would be mute.

Now, if the Divine Word is the infinite Archetype of all created words, we are naturally led to conclude that, between the concept or intuition of a pure Intelligence and the communicative expression of the same, there is a real difference which, forasmuch as an Angel falls inconceivably short of the simple perfection of God, could not be resolved in the embrace of an all-containing oneness. So it is. As the concept of an Angel forms no part of his substantial nature, but is a spiritual accident; so neither is his word, by which he communicates his thought to another pure Intelligence, a substantial reality, but rather a spiritual mode complementary of the concept as medium of communication, and revocable at will. The result is a spiritual composition of some sort, and a purely modal termination.

¹ Gonet after explaining the doctrine of Scotus and Suarez on this point, adds: "D. Thomas vero (in *Summa et Verit.* Q. ix., a. 4, 9m et 11m) dicit locutionem angelorum consistere in sola ordinatione conceptus loquentis ad eum qui loquitur."—*Clyp. Thomist. De Angel, Disp. xv., a. 3, Sect. 11.*

Thus much has been purely introductory and elucidative. I now proceed to the question which I have proposed to myself in the present paper,—the nature and characteristics of the human word. It is plain that the human soul is the lowest in the order of spiritual beings and, consequently, the most composite. Its faculties form no part of its essence, but are properties flowing from the essence; wherefore between the two there is a real metaphysical difference and composition. It is further plain that the human intellect is capable of an inner or spiritual word by means of which it is able to communicate with other spirits; otherwise a disembodied soul would be absolutely dumb. But these forms of spiritual communication it shares in common with pure Intelligences. There is one point, however, that is characteristic of the human soul, and constitutes an essential difference between it and a pure spirit. The human soul of its nature is an incomplete substance. It is created to be the form of the human body. Man is made of soul and body. He is not soul only, or body only, but a rational animal;—that is to say, he is a person having a body that is informed by a rational soul. Hence, two things: as formally *act* of the body, the human soul postulates certain lower faculties that have their seat in, and energise by means of, the bodily organs. For so long as the soul is united to the body, these faculties persist; even though sometimes impeded, and even rendered impotent of act, by some lesion of the organ. But as soon as the soul is disembodied, they only remain potentially in it; that is to say, they no longer exist in themselves, but the soul is competent to reproduce them, whenever it is reunited to the body and consequently to the proper organ which is the partial subject of these faculties respectively. The other point, which is of the gravest importance in relation to my present argument, is this: man receives his primitive impressions of external objects from these lower faculties, which we may henceforth call the senses. Further: For so long as the soul is cabined in the body, the intellect neither has nor can have any object capable of determining its indifference and arousing it to the energy of act, save through these sensible impressions. These are the fontal source from which all human cognition, even the most abstract and universal, primordially proceeds. Hence the saying of Aristotle, which has become a proverb in the School: *There is nothing in the intellect, which has not had a prior existence in the senses.* So far does this intimate and, in the present life, indissoluble union between the intellect and the senses extend, that no

thought is possible without an accompanying phantasma,—that is to say, either some new sensile impression or the resurrection of some old one. In the actual order,—i.e., so long as man lives this mortal life,—every concept of the mind must be accompanied by that which in one way or other is a sensile counterpart of itself. As the human soul, then, cannot think to itself without the aid of the senses; in like manner it is prone to conclude that it cannot inter-communicate with another human soul without the aid of some bodily organ. Not only so; but the communicated thought cannot reach that other soul for which the communication is intended, save through the instrumentality of some other organ in the latter. This conjoined instrument is Language, or Speech, which postulates a tongue at one end and an ear at the other. Writing is not considered as an entity distinct from speech, since it connotes only a diversity of organs;—a hand at one end and eyes, or fingers for the blind, at the other. The virtual identity of the two is plainly seen in their easy mutual transformation. A book read becomes speech; a speech taken down in short-hand becomes writing. Thus our past examination brings us face to face with the outside word of man,—that which is usually called human language.

There is, however, one other preliminary point to be settled, before entering upon the main inquiry. Is it possible for the human mind to form a universal; if so, what is the nature of the operation? The common sense of mankind, experience, and the constant testimony of consciousness afford a certain answer to the first question. One of the primitive ideas of a child is more than a universal. It is a transcendental. When first the curiosity of the young intellect is aroused by attention to the sensile perceptions of the external objects that surround it, the little one conceives every object that it perceives to be *a thing*; and it then strives, by its own infantine observations as well as by questions put to such as for the time being are its infallible authorities, to discover differences, by means of which it descends from the highest genus through subaltern genera till at length it attains to an acquaintance with the specific nature of the thing. Nor does the ordinary pronominal prefix—*this* watch, for instance—interfere with the universality of the concept; it only exhibits the attachment of the awaking mind to the singular concrete,—in other words, to the phantasmata of sense. The intellect supplies that which is represented by the noun; the phantasma suggests the individual repre-

sented by the demonstrative pronoun. The result is, a universal in a singular. The answer to the second question is equally sure, though more recondite. It is clearly shown in psychology, that the proper object of the intellect is a universal, and that the intellect is only bound down (as it were) forcibly to singularity or individuation in its concept by the active presence of the sensile phantasma. But I do not purpose to delay over this primitive, though disputed, fact of ideology; because its full exhibition would postulate a space larger than I could hope to occupy, and would send us off drifting from the main conclusion at which I am aiming. I will therefore pursue an easier path. When several human beings—to supply an illustration—become present to the mind by means of sensile perceptions, the mind discovers by a sort of instinctive reflection that the objects thus represented have, all of them, certain points of similarity in which they accord with one another and differ from other objects that surround them. They have the power of talking with one another,—can read and write when taught,—can laugh at things funny,—can argue, &c. These powers the thinker likewise recognises in himself. All such notes he separates from the individuals which primitively exhibited them, and unites them in the idea of *rational*. But he goes on to compare this class of individuals with other objects of sensile perception, and he finds certain characteristics common to both; locomotion, for instance, senses, a nervous system, sundry organs and members. These too he finds in himself. He includes these under the one common idea of *animal*. Thus by conjunction of the two sets of notes he conceives the first-named objects of his senses under the universal concept of *rational animal* or *man*. I do not say that this is the only or even ordinary method of conceiving an absolute universal; for the absolute universal is object of intuition in the way already stated. Yet we come across instances of the formation of universals by comparison, as in botanical and zoological classification; and this latter process is more easily tested by experience.

From these data thus much may be gathered; that universals, *as such*, have no objective existence. They are partly conceptual, partly real; and their reality is recognised in that similarity of notes as derived from a common model,—the prototypal idea that is the measure of their eduction and development. The same twofold nature is discernible in concrete as well as in abstract universals, but in the latter the conceptual element assumes wider proportions;

and it seems advisable for this reason to add a few words concerning them. They are of two kinds:—*viz.*, such as have been obtained from substances, and such as have been obtained from accidents. To begin with the former: From *animal*, which is a concrete universal, the mind is capable of extracting the idea of supposit—that which completes the substantiality by giving to substance its incommunicability to another *as* substance or nature. After such abstraction there remain the essential notes by which *animal* is distinguishable from another whatsoever group of being; and these notes, embraced in one comprehensive idea, are conceived as a form (metaphysical) informing the supposit and determining it to its specific nature. This idea we express by the term, *animality*; just as from *man* we form the abstract concept of *humanity* or *human nature*. Abstract universals derived from accidents exhibit a more complex process of abstraction. According to the essential condition of an accident, in the order of nature it must inhere in some substance as in its proper subject. Accordingly, it is declared to be *being of being* (*ens entis*) rather than *being* absolutely; although it has a real entity of its own. Now, after abstraction made of the individual notes (which is a prerequisite of every sort of universal), abstraction is, or may be, made of the substantial subject, and the accident remains in its own solitary state as possible accident of an indefinite number of material substances. Thus, for instance, we may begin with a *red rose*; and thence arrive at the simple attribute, *red*. But the process of abstraction may be carried yet further. The mind may direct its attention to the accident, exclusively as to a form capable of informing its subject. It may intend to represent its essence as it is in itself. It reduces the accident to the condition of a *quasi*-substance; and thus conceives the idea of *redness*,—a quality capable of producing in the sense of sight this particular colour. True it is that, as I have already stated, there is more of the ideal entering into the composition of these abstract accidents; yet even in these the fundamental reality on which they are constructed is apparent. This, too, is worthy of close attention, that by how much these abstract universals recede further from the contingent beings which are the source of the genesis of such ideas, by so much do they approach nearer to that prototypal idea which, though in its own being singular, as an *exemplar* is a practical universal; just as a negative in photography is potential of an indefinite number of positives. Accordingly, this is one reason why all science

is of universals. That the human intellect has this abstractive power, is demonstrated in ideology; and one easy proof is derived from the testimony of consciousness.

Let us now return to the main theme of this paper,—human speech, or language, as the *word* by which man conveys his thoughts to his brother man. There is a problem connected with its genesis, which is only indirectly connected with the main drift of the present article, and is perhaps the most difficult that linguistic offers. I shall only refer to it very briefly, and in so far as it affects the conclusion at which I am driving. One theory, connected with the origin of speech, is included in the well-known definition of Aristotle, who declares speech to be “a sound” of the human voice “symbolical according to agreement”.¹ The Philosopher, then, seems to consider that language is the result of a voluntary compact; and this is one of the theories that has been advanced touching the origin of languages. But there appear to me to be insuperable difficulties in the way of such a hypothesis. (1) In order that men should be rendered capable of such a compact, it would be necessary that they should be able to intercommunicate with one another in order to arrive at a common agreement; and bodily signs or gestures would be far too rude an instrument for such an enterprise. (2) This difficulty would be considerably augmented in the instance of what may be called—as it has been called—the formal part of a language, in which the special relationship of cognate languages is discoverable. Now, the said forms mainly consist in the prefixes and suffixes, modes of declension and conjugation. But agreement touching these could never be indicated by telegraphic signs between those who are supposed to compose the convention. (3) The theory in question is incompetent to offer a reasonable explanation of the marked differences between the forms of one language and those of another; more particularly if we take into consideration the common affinity, mediate or immediate, by which the languages of the world attest their derivation from one original source. What sufficient reason can it proffer for the adoption of a new system of grammatical forms after the migration of a race from their home to other distant quarters? Whence comes it that, in order to express the future tense of a verb, some nations have adopted the converse *vau*, others a change of suffix, others again a distinct auxiliary verb? One can hardly understand how

¹ φωνὴ σημαντική κατὰ συνθήκην. *De Interpret.* c. 2.

the busy and hazardous work of migration could leave leisure for so arduous an undertaking. Yet after settlement in their new homes, up to which time they must have used their native tongue, it is unconscionable to suppose that they would set about the formation of a new speech with new modes of declension and conjugation; unless, indeed, it can be made to appear that there is certain historical evidence in favour of the supposition. (4) This difficulty, in presence of the compact-theory, becomes intensified by the opposite method of writing and reading in the Semitic and the Aryan groups of languages,—the former writing from right to left, the latter on the contrary from left to right. One is puzzled to imagine how such a difference or change could have been introduced by authority of a tribal synod.

It is perfectly true that a language, *subsequent to its substantial constitution*, continues thenceforth to be enriched by the coinage of new words or by adaptations from other languages. But three things are noticeable touching these additions. One is, that these words are for the most part technical. Thus, many words have been borrowed by us from the French in the sciences of cookery and of war; and physicists in most modern languages are coining each year a multitude of new words. Another remark is, that these additions never touch the forms of a language; on the contrary they are for the most part submitted to the regulation of such forms. Thus, in French mensuration the term *centimètre* has a Latin head, a Greek body, but a French tail. How far such composites are an ornament to a language, is a question of taste. The last and most important remark is, that in all these cases of new nomenclature the first introduction of the word is never effected by a national compact or anything like it, but invariably begins with the use of the term by some individual. If the word in question is a technical term that has been coined by one who has acquired a great reputation in a special branch of knowledge, and if his reason for adopting the term seems to be a sufficient one, the new coinage is at once stamped in the mint of public opinion. The word, *concept*, introduced by Sir William Hamilton, is a notable instance in point. If, on the other hand, the new term is added to the common language of literature, it has to submit to a more serious ordeal. Should it begin to appear in the leaders of our more prominent newspapers and in periodical literature, its life is ensured,—in many cases, to the detriment of the language. Such is the importation

of new words or of a new sense to a recognised word, as, for instance, *location*, *stores*; and in like manner misspellings, such as *marvelous* for *marvellous*, and *develop* for *develope*. There is another important class of words that are rendered necessary by some new invention; such as *locomotive*, *sleepers*, *shunt*, *breechloader*, *telegraph*, *telegram*, &c. But in no one of these instances of augment in the vocabulary of a language is the introduction of the term due to other than individual use; though it is sanctioned afterwards by a more or less general public sanction. Finally, the words so introduced are commonly concrete not abstract; though in time they may give occasion to a corresponding abstract,—as, for instance, *telegraphy* from *telegraph*.

I have discussed the above theory touching the genesis of language, not only or principally because of the grave authorities, ancient as well as modern, who have adhered to it, but more particularly because it is the one theory that seems to lend a certain air of plausibility to nominalism under its various forms; and it is towards the exposure of Nominalism, by a careful examination of *the word* in its universal acceptation, that the present paper is directed.

Now, the human word, like the Angelic and in a manner the Prototypal or Divine Word, is twofold. There is an internal and an external word. The former is the completed concept as representative of the object to the conceiving soul itself exclusively. It is, therefore, necessary to both Angelic and human thought and is no wise subject to volition, presupposing the normal presence of the object and the requisite conditions. The latter is the same concept as communicable to others. It has been seen that in all probability Angelic speech is the result of a modal termination of the concept itself; in man, on the contrary, speech is the result of bodily organism. In like manner, the Divine Word is justly understood to be both internal and external,—or, as the Greek Fathers expressed it, *ἐνδιάθετος* and *προφορικός*. As internal, He is the expression of the Divine Wisdom within the infinite abyss of the Divine Essence; the External Word may be said to include all the Theophanies in time, but pre-eminently that of the Incarnation. The first is absolutely necessary; the Theophanies are subject to the Divine Volition.

For the avoiding of confusion and error, it is of importance to remark, that the internal human word must not be confounded with those soul-echoes of human speech, which in the order of this life are the necessary accompaniment of

all abstract thought, and of all thought whatsoever that is not formally intuitive of its object. These are simple phantasmata of a special kind, and are the product of the lower or sensible part of the soul. The internal word of the human soul is the complete concept as representative to the conceiving mind, of its object. When a phantasma of the object is not directly present, its place is occupied by a phantasma of the object's name; for the human intellect, so long as it is connected with the body, cannot energise in thought without an accompanying phantasma of some sort. This latter is a condition *sine qua non* of human cognition, presupposes the corresponding concept, but has nothing in common with the intellectual act itself.

Let us now revert to that which is fundamental and incontrovertible in Aristotle's definition of speech. It is a sound of the voice that is symbolical. There are other sounds that are not symbolical in the strict sense of the term, such as coughing, laughing, humming, whistling, &c. Thus *sound of the human voice* is the genus of language, and *symbolical* is its differentia. But of what is it symbolical? Clearly enough of thought; for it is plain from experience and from our own self-consciousness that such is *de facto* its universal use. It is true that there are interjections which are expressive of feeling rather than of thought; but these are very imperfect words, since by a mere change of tone you may make one and the same interjection to represent a multitude of distinct feelings, as, for instance, the interjection *oh*, which can alternately express pain, or indifference, or joy, or surprise, or tenderness, or terror, or admiration, &c. Such symbolical sounds of the human voice approach most nearly to the sounds of brute animals, and it may be said that they are, as it were, accidents of language. Yet even in these sounds (whether human or animal), if and so far as they are symbolical, two things are evident: the one is, that the feeling at least in order of nature precedes the sound; the second is, that the feeling generates the sound, not the sound the feeling. In like manner, whereas language is symbolical of thought, it is the thought which primitively gives birth to speech, not speech which gives birth to thought.

Such a necessary priority is involved in the nature of a symbol, whatsoever the form this latter may assume. A symbol is a symbol of something,—an expression of something. In itself it is either a purely mechanical contrivance or a physical act. There is no reason why the elevation or the depression of a piece of wood should affect the

engine-driver; nor indeed could it do so, unless it were invested with a meaning previously conceived in the mind of the signal-master. But the thought must have been previously connected with the sign in the intellect of the driver likewise; otherwise, he would be as puzzled at the motions as a person who cannot read in presence of a book spread out before him. One is compelled to own that in the mind of the engine-driver the signal is *provocative* of the thought. But this admission in no way impairs the argument. For it is of the nature of a symbol that it should imprint its meaning, or the thing symbolised, in the recipient; because its *raison d'être* is, to be communicative. In like manner, on the principle of sufficient reason, there would be no human voice if there were no human ear. But the question with us concerns the origin of speech,—of words,—not the origin of hearing.

It will not be amiss to pursue this argumentative analysis somewhat further. If any word whatsoever could of *itself* generate a thought in the human intellect, this word must have proceeded either from another person or from the thinker himself. But the former hypothesis is impossible. For, in order that a certain combination of vocal sounds may be able to give birth to a concept in the mind of the hearer, it is necessary that the concept should beforehand exist virtually in the mind of the latter; should this not be the case, the articulate sound would prove only an empty beating of the air, and its product an unintelligible word. If one were to address an importunate beggar in the streets with the words *πολυφλοίσβοιο θαλάσσης*, the phantasma excited in the sense of hearing would awaken in the mind no corresponding concept,—to put it in plain English, the vagrant would have no idea of what the speaker meant. This articulate sound of the human voice would not be symbolical to him, and accordingly would not be speech for him in the true meaning of the term. I cannot help thinking that such is the meaning of the *κατὰ συνθήκην* included in the Aristotelian definition, and that its supposed reference to the genesis of language is a misapplication of the term. It has been already stated that two points are essential to language, as being a communicating symbol,—*viz.*, that there should be a voice and an ear. Now, by ear is not only intended either the bodily organ (the external sense) or the sense of hearing (the internal sense), but a common agreement between speaker and listener touching the symbolism of the communicated word or speech. It is absolutely necessary that the listener, either by dictionary or

other means, should know more or less the meaning of the articulate sound; under no other circumstances could language become an intelligible symbol. But what constitutes the meaning of a word or sentence, if it be not the concept intended to be conveyed by the speaker? It is obvious, then, that a spoken word cannot be accredited with the genesis of thought. There is absolute need of a virtual agreement between him who speaks and him who listens touching the particular symbol and the particular thought or object symbolised. Is not this the genuine meaning of Aristotle's *κατὰ συνθήκην*? This is plainly the opinion of St. Thomas,¹ who, commenting on the definition, remarks: "Some, on the other hand, have maintained that words do not derive their signification from nature (such is the contention of Aristotle in this place); but in this respect they derive their signification from nature, that their signification is in accordance with the nature of things, as Plato has remarked." According to Aristotle, then, the words do not in their own nature exhibit the thought intended to be conveyed, but have been arbitrarily adopted for this purpose. Who, indeed, could imagine otherwise, in presence of so great a multiplicity of languages? Of course, Aristotle had in his eye the languages and existing state of things in his own day. Accordingly, his definition could not have been intended to include the primitive or paradisaal speech about which he in all probability knew nothing; whereas the form of expression in the Pentateuch² seems to suggest that the Adamic vocabulary was a natural symbol of both the concepts and the objects of the concepts.

Thus, then, it is clear that speech could not of itself give birth to new concepts in the mind of the listener, but presupposes the symbolised concept already latent in his memory. The origin of language, however, could not be attributed to him who hears but to him who speaks. Let us now, therefore, betake ourselves to the second alternative.

Is it possible that any man should pronounce a word in the actual order of things, which could convey to his own mind an idea that was not there before? The question

¹ "Quidam vero dixerunt quod nomina non naturaliter significant quantum ad hoc quod eorum significatio non est natura, ut Aristoteles hic intendit; quantum ad hoc vero naturaliter significant, quod eorum significatio congruit naturis rerum, ut Plato dixit."—*De Interpr.* l. i., lect. 4.

² *Genesis* ii., 19, 20.

necessarily includes the supposition that the vocal sound had not been previously conveyed to him by another ; otherwise, it would be included under the former alternative. Further, I suppose an externally spoken word ; since, according to the hypothesis, this latter must precede the internally spoken word, which is a phantasmic echo of the former. The question thus conditioned admits but of one answer ; the thing is naturally impossible. For what after all is a speech-sound ? Certain undulations of the air strike upon the tympanum of the ear, and thereby produce in the sense of hearing the perception of an articulated, complex sound. This is all. What proportion is there between this purely sensible perception and a concept of the intellect ? Sound is not representative of an object in the same way or to the same extent as the perceptions of the other senses ; for the other senses represent either active qualities or the quantity, —sometimes both,—of the object ; whereas the perception of sound does little more than represent the object as cause. Accordingly, the sensation of sound, even when purified by the acting intellect with the purport of rendering it fit for determining the intellect to a perception of the object, offers comparatively few notes or marks characteristic of the object. Yet even in this respect it presupposes the object which it represents according to its nature. But the question I am now mooting is concerned with the symbolic power of articulate sound ; and here the difficulty is all but infinitely greater. A man is supposed to utter some word, of the meaning of which he is wholly ignorant ; and yet it is suggested that such sound is capable of infixing an idea in the mind of him that utters it. What possible proportion can there be between the two ? How can a perception of the senses of itself cause a concept, utterly distinct from the energising voice, in the intellect of the speaker ? The former we share with the beasts and is material ; the latter is a spiritual act which is common to us with the Angels. It may be said that the word is sufficient as a symbol ; for even pieces of wood, lamps, flags, cannon, rockets, &c., are capable of communicating an idea. Most true ; but the reply has been anticipated. It is necessary, in order that any entity may be able to function as a medium communicative of thought between two persons, that the speech of such symbol should have been previously understood and agreed upon by both of the intercommunicators. But in the assumed instance the two persons are one ; and, according to the hypothesis, this one is ignorant of the symbolism of the vocal articulated sound. If, then, this sound generates a concept, it must be *naturally*

in virtue of itself. Yet how is this possible? The symbol has no message to give, none therefore to receive. If *good*, for instance, can naturally impress upon the intellect the idea which the term represents; how is it that *buono*, *bon*, *ἀγαθόν*, the Hebrew *toḇ*, are equally capable, according to the hypothesis, of impressing the same idea?

Again, if the doctrine were true, that language of its very nature is competent to generate thought; then it would cease to be symbolic,—to be a simple instrument for the communication of thought,—and would become a physical efficient cause of thought; for its expression would be sufficient, apart from everything else, to produce a new thought in the intellectual faculty.

Yet again, if a spoken word has the natural faculty of implanting in the intellect a new concept, surely it must acquire the power from the rightful disposition of parts,—that is to say, from the exact selection and collocation of syllables and letters. In a newspaper that fell into my hands some time ago I found it stated, that there is a Viennese word to express ‘the bursting of a water-pipe’: and this word is *Hochquellenwasserlieferungerohrenfatalität*. Now, the question is: How did this word *first* become a conventional symbol of the idea indicated? There must have been some one man who originally introduced it; unless we are driven to maintain that it was the result of a miraculous interference. But how could any man construct this complex compound word without any previous idea of the object symbolised? What principle of selection would guide him? What faculty of the soul is there, which would be competent to direct him towards the precise choice of syllables and letters whose combination, by its natural and singular nature, should impress on his mind an idea of which he had been previously unconscious? Perhaps it may be urged in reply, that the term is a compound of words already received, and that the combination, in accordance with the genius of the language, would be comparatively easy. True, but this only throws the difficulty further back. To take one of the component words: some one must primitively have chosen *Wasser* to express the object which we call *water*; and, according to the hypothesis, of this object he had no previous idea. He has uttered the word as the only means of informing himself in the cognition. Further, there are probably other possible combinations by which the Viennese inventor might have given expression to the same idea; unless we are prepared to maintain, in defiance of the evidence for the existence of synonyms in every language, that there is but one natural

expression in human speech for one concept. Such a contention, however,—to say nothing of other inconsequences that beset it,—is incompatible with the existence of more than one language. For, if one articulate sound is a natural development of the given idea; it does not stand with the ordering of nature which admits nothing superfluous, that another articulate sound should be endowed with the efficacy of impressing precisely the same idea.

Lastly, it tells strongly against the theory in question, that it represents the human word as being in direct antagonism with the Prototypal Word no less than with the Angelic Word,—I mean, with the external or communicative word of this latter. In the Divine Theophanies, pre-eminently in that of the Incarnation, the Word is external in both senses of the term. These Economies are so many temporal manifestations to man of the Wisdom of God. But such Economies, or temporal Manifestations, of the Word are but Revelations of the everlasting Word Whom they represent after a limited manner to this or that person or to a certain body of men. So is it likewise with that greatest of Theophanies,—the Incarnation of the Son of God. The human nature was itself a speech; but the words which Jesus uttered were a formal communication to us of the Divine Wisdom as substantially expressed in the Word, though limited and partial. They were so many echoes of Truths existing eternally and immutably in the one idea which is the Wisdom and Word of God. But all these Economies or Theophanies presuppose the Word or the Divine Wisdom of which they are a communication. The Word does not presuppose them; they presuppose the Word. So is it with the intercommunion of thought between Angel and Angel and of Angels with men. Angelic voices are probably a mode, or accidental termination, of their cognitions, their internal words. They are so many negatives, present at will, by which spirit can photograph (so to speak) his thought on other spirits and even on the human soul,—voiceless yet expressive,—that which poets not inaptly term, “whispers of Angels,”—those unexpected suggestions of good and intuitions of latent evil which are given us by their ministry. But all these voiceless voices are a photographed thought, contemplative or practical; and without the preceding thought there can be no photograph. It is not the photograph that generates the negative, but the negative that produces the photograph.

Are there, then, any sufficient or even plausible reasons for supposing that in this respect the human word is the

exact reverse of its great Archetype or of the language of Angels? Forasmuch as the human soul is not a complete substance but postulates a body as the necessary complement of completed unity of substance, it is true that the soul communicates its inner word by means of a special bodily organism, to which there is a corresponding organism in the person receiving the communicated word; yet this fact in no wise affects either the analogy which is here maintained or the confirmatory argument deduced from it. For in proportion as the medium of communication is more pronouncedly distinct from the cognition which it contains, so does the symbolic nature of the medium become more important and prominent.

In answer it may be urged, that these arguments have a certain amount of cogency in regard of concrete words and propositions which correspond with, and presuppose, perceptions and direct judgments of existing objects cognisable by sense; but that they have no force when applied to universals concrete and abstract. The former terms represent the perception of a real existent object; the latter, an object purely ideal and having no substantive existence outside the mind of the thinker or speaker. It is easy to understand, the objection might proceed, how concrete terms in the most rigorous sense of the phrase could, according to the convention-theory, have been invented and adopted. The way that a child picks up by degrees the simpler elements of its native tongue is a conspicuous example in point: *What's that?* pointing at the same time with its tiny finger. The pointing alone (be it observed) would prove a sufficient substitute for the demonstrative pronoun. The nurse plucks the flower, and says it is a rose. The little one toddles off with the flower to its mother, and cries out, *Ma, rose*. It has learned its early lesson. It smells, touches it (let us suppose it to be a moss-rose), looks at the colour, pulls it to pieces and gets a faint idea of its form. Thus it gradually by perceptions of sense gathers together the characteristic notes of the object; and henceforth the name recalls the object as made known by its differential qualities. It is noticeable that the speech of a child at first represents the singular and concrete, and it expresses for the most part no judgments which are really such, but only propositions which are symbols either of interrogation or of feeling. Then it learns after a time to form judgments and to pronounce them. Finally, after reading for some time in books and listening to conversations, it becomes familiar with universals and abstract

names. Is it not plain, then, that in the last-named instances the word introduces the fictitious idea; not the idea, the word? Add to this, that these so-called ideas are not representative of an objective reality, but are a mere coinage of human industry through the medium of language; and can, therefore, be taught only by the instrumentality of language. Lastly, the extreme section of the philosophers who maintain this view does not hesitate to declare that these abstract universals have no objective equivalent, that they are certain artifices of speech invented by men for convenience of classification and for other cognate uses.

What is to be said in answer to these nominalist theories?

At the outset I am free to confess that there is an undeniable difference between singular and universal names; because there is an essential difference between a singular and a universal concept, of which the former are the vocal expressions. The object of a singular concept, if the object be a reality, is an existent entity formally as such. The object of a universal is conceptual in its form and neither has nor can have any existence outside the mind. There is no *αὐτοσκεῦον* that embraces all individual shoes; as Aristotle smilingly remarks in his *Nicomachean Ethics*. Hence, the same Philosopher declares in his short work on the *Categories*, that first or individual substances are to the human mind the foundation of second or universal substances. *Man*, for instance, does not and cannot exist in nature outside intellect of some sort; though *this* or *that individual* man can and does so exist. Yet, on the other hand, first substances are the real foundation of second substances; wherefore, universals are neither purely logical nor pure forms of speech, but conceptual,—that is to say, they are logical in form, though built up on a real foundation. It must further be admitted, in justice to the more moderate school of nominalism, that there is likewise a conspicuous distinction between a concrete and an abstract universal, in that the latter is the abstraction of an abstraction. A concrete universal represents a universal supposit of some sort, personal or other; while the abstract universal represents the simple essence without representing the substance as ideally terminated by its own incommunicability and in full possession of itself. This will be best explained by an illustration or two. *Water* is a concrete universal, representing the substance as substantially incommunicable to any other substance and in possession of itself; *wateriness* is an abstract universal, representing the essence as a meta-

physical form by virtue of which water is what it is. It represents the form without connoting the subject. In universal accidents, from the very nature of an accident, the distinction is more obvious. Thus, *white*, which is a concrete universal, connotes a subject that is white; *whiteness*, which is an abstract universal, does not connote a subject, but merely denotes the essence of the accident. Similarly, the term *man* is a concrete universal, since it connotes *person*, or intellectual supposit (not an individual person, observe); while *humanity* is an abstract universal, inasmuch as it exclusively denotes the specific form by virtue of which man is man. In all these and similar examples the concrete universal exhibits the essential form as inherent in the subject; while the abstract universal makes abstraction of the subject. It is therefore doubly impossible, so to say, that an abstract universal should formally represent any object capable of existence outside of any whatsoever intellect. Nevertheless, there is a real foundation for both concepts. For the abstract universal represents those specific notes which characterise each and every individual man,—to resume my last instance; while the concrete universal in addition represents universally that substantial mode by which human nature is terminated to its personality,—that is to say, the mode by which each individual nature is terminated to be this or that person, incommunicable as a nature to any other. Spite of the above concessions, it must nevertheless be maintained that universals, whether concrete or abstract, form no exception to the general law of all human speech. They, like all other words, are symbols of concepts; and consequently they presuppose the concept of which they are the sign. In the instance of him who uses them they do not generate thought, but the thought generates them. Besides the reasons already given, which equally apply to universal as to singular nouns, the following additional arguments, as it seems to me, remove the doctrine defended out of the category of doubtful opinions.

(1) In the first place: Unless it is clearly apparent that an invincible obstacle intervenes, no sufficient reason can be adduced why a part of the words that constitute a language should be symbolical or communicative of thought, while the other part is not genetically symbolical or productive of thought. Now, if it admits of being clearly shown that an invincible obstacle intervenes, the argument must be either *à priori*, derived from the nature of the object or subject, or *à posteriori*, from the evidence of experience.

But it is impossible to prove such an obstacle *à priori*,—in other words, it cannot be demonstrated that there is a metaphysical repugnance in regard of the nature of the subject or of the object. For self-consciousness teaches us, that the human mind is endowed with the faculty of abstraction and of generalisation which is a sort of correlative of the former. In the next place, in every object presented to the intellect by sensible perception there are confessedly certain real notes of similarity with other objects, which form a sufficient objective foundation for the concept of a universal. Both these propositions have been already established in an earlier part of this article, and the second point will be further illustrated presently. As assuredly, the theory in question cannot rest on facts of experience. We are all conscious of the existence in the mind of universal concepts which, when compared with the individual intellectual perceptions virtually included under the former, are found to possess a real objective significance distinct from that of the perception of the individual. The absolute universal concept represents the essence,—the notes of similarity common to all actual or possible individuals under a particular class,—does not connote existence, and excludes or ignores every individual note, while connoting a prototypal or exemplar Idea (real and objective) from which the individuals derive a common unity; while the singular perception formally exhibits the individual notes, and connotes the essence together with existence. It is further plain that these universal concepts exist in the intellect prior to the external word that symbolises and communicates them, for reasons already given. To take an instance: Sir William Hamilton could never have introduced the term *concept* unless he had previously had in his mind the idea of the completed act as distinguished from the process of conceiving,—of the psychological fact as distinct from the objective representation.

(2) While the object of sense-perception is an individual; the formal object of the intellect is a universal. So far as the intellect does represent individual differences in its idea, it is forced to do so, as it were, by its contact with the concomitant phantasmata of the senses, by the intervention of which it is rendered capable of becoming present to the object.

The formal object of the intellect is a universal; because the essences of things are the formal object of the intellect, and essences are absolute universals. Accordingly, in the genesis of human thought the primordial universals are

intuitive concepts; and these intuitive concepts become more numerous in proportion as the sphere of objects continues to enlarge. These intuitions of essences are natural, necessary, and in the infancy of thought vague and generic. The reflex universal, on the other hand, is voluntary, philosophic, and represents more or less definitely the specific nature of the object; though this last property it shares with the intuitions of the adult intellect, which are sometimes perfected by their reflex co-ordinates. Thus absolute universals are pouring into the human mind from the time it begins to energise. Now, if there be such universals, it is consonant with the order and analogy of nature, that they should be represented by their appropriate word. Hence it will appear, how singularly infelicitous it is to introduce into the nominalistic plea the instance of a child in its first efforts of thought; for, when carefully examined, this example affords one of the strongest *à posteriori* arguments in favour of the opposite theory. It is true that a child's intuitions are always singularised; but it does not follow from this that they are singular. As the intellect is determined to its intuition of the particular object by the presence of a sense-perception in the soul, and as the infantine mind is very feeble at the outset; it naturally leans on the phantasmata at that date much more than afterwards, since it cannot walk far in its own strength. But the intuition of a universal is there, enveloped (so to say) in the individuality of the object of sensible perception. Three characteristics of a child's talk corroborate these assertions. In the first place, very often when a child begins to lisp its thoughts, it uses its hand or finger instead of the demonstrative pronoun which is the expression of individuation; sometimes it uses both at once. An object of sensible perception, *purely as such*, does not need for symbol more than a bodily gesture, like the postures of a pointer or a setter. But, in the next place, the child's question does not extend to the individuation or individuating notes: oftentimes the child does not even discern these latter. Its demand is: *What is this?* Translate the phrase; it means, *Tell me the name for this species of things*. The child has already in a rough and imperfect way recognised in its mind the essence of the thing, and it seeks to know the name for it. Confirmation of this may be found in the frequent practice of the little one, after it has acquired the name. Let us say that the object of original inquiry is a rose. The child has learned the name; the next time it sees, not the same rose, but another, it cries out: *Mamma, rose,—or, a rose*. It has

gained the word of its universal concept, and at once proceeds to communicate its idea. *Rose*, or *a rose*, is a universal, and only becomes in intention a singular by gesture. Lastly, one of the child's first words,—one that is perpetual in all its questionings is *thing*; but *thing* is a transcendental,—an all-embracing universal.

The proposition I am now defending is further confirmed by an analogical argument derived from the Prototypal Word and from the language of Angels. The Wisdom of God is infinite and infinitely simple; consequently, in one infinite and infinitely simple Word He conceives and expresses all reality—His own essence as well as all those finite realities, created by His Omnipotence, which are distant shadows or finite likenesses of Himself. Thus His substantial Concept and Word—to speak after the manner of men—is infinitely universal at once and infinitely singular; infinitely universal because of His Omniscience, infinitely singular by virtue both of His Omniscience and of His Simplicity. The Thought of God is not only infinite in Its breadth, but infinite likewise in Its height and depth. Again: As the theologians and philosophers of the School commonly teach, the intellect of Angels is always actual; and of their own nature Angels intue their own nature as an intellectual substance in act; and they naturally intue God the Supreme as imperfectly imaged forth in their own purely spiritual being. But how do they intue the natures of other angels, since, according to St. Thomas and the more received opinion, each angel is specifically distinct from all others? How, again, do they intue material things? If they cognise them, how do they cognise them? universally only, or each according to its individual difference? The same authorities give for answer that in their creation these intellectual substances, or separated Forms, were furnished with certain intellectual species—impresses of the Divine Exemplar Ideas in the work of creation—by and in which they are cognisant of all the typal forms of the world visible as well as invisible; that in these universal cognitions they intue the differences of each individual under a common species, so that these same universals are likewise virtually singular, including *the whole* of comprehension as well as *the whole* of extension; and that in proportion to the higher rank of an angel in the heavenly hierarchies, the number of these intellectual forms diminishes, and the unity of angelic science approaches nearer to that of the Divine Omniscience. We may fairly conclude, therefore, that the concepts of the human intellect are likewise universals, though specifically inferior to angelic

cognitions. This is confirmed by the teaching of St. Thomas in regard of the assimilation of subject to object in all cognition, human, angelic, and Divine. "That the intellectual species," he writes, "and the entities which they represent retain a likeness to each other, may come to pass in two ways: (1) either in that the one is cause of the other; . . . and in this way the Divine and human intellect retain a likeness to the entities represented in the intellect, although in an opposite manner. For the Divine Intellect imprints on an entity the form by which such entity is made like to itself; while the human intellect receives from the entity the specific form by means of which it is made like to the entity; (2) or in such wise that both the one and the other are, from one and the same cause, impressing a like form on each. And it is in this manner that the Angelic intellect is made like to the entities that are the objects of its cognition. For the forms which have been impressed by God on entities for the purpose of their subsistence, have been also impressed on an angel for purposes of cognition."¹ According to the Angelic Doctor, then, the Divine Wisdom and Word is the Measure of all truth in the creature, as being its adequate and only cause; human cognition is measured by its object—the world of being. Angelic cognition occupies a middle place between the two. It is not measured by the world of being, but rather becomes a subordinate measure of the truth of finite being, in virtue of those forms or intellectual species—corresponding with the determinating forms of finite being—which have been implanted in these purely intellectual substances. Limiting oneself, therefore, to the universality of the respective cognitions, it may be affirmed that the Divine Word is one, simple, all-embracing cognition. The angelic words, or internal concepts, are all universals, increasing in extension and intention and decreasing in number proportionally to the higher nobility of the angel. It is natural to conclude, then, that the concepts of the human intellect are likewise universals; and that, as the objects in the two former cases are essences which are absolute universals, so in like manner the native objects of the human intellect are also essences or absolute universals. What an absolute universal definitely is, will appear in the next argument.

An additional confirmation of the same proposition is derived from human language. If we set aside (as we undoubtedly have a right to do) proper names, of all the parts

¹ 2 d. iii, q. 3, a. 3, 2m.

of speech the only one that is *directly and formally* capable of representing individuality is the demonstrative pronoun. I say *directly and formally*, because, indirectly and as though by accident, adverbs significative of time and place may indicate the singularity of the subject of the sentence. For time and place connote existence. With these exceptions, all words in a language are universals; and such is the tendency of the human mind to form universals, that it not unfrequently transforms proper names into common. *Cæsarism, Machiavelianism, Darwinism, Mahometans, the names of Scotch clans*, are instances of such conversion.

The above arguments seem to justify the conclusion, that the formal object of the intellect in its own proper act is a universal. Its acts, therefore, are universal concepts; and its primordial acts, naturally necessary in presence of their object, are *direct* universals. They are intuitions of the essences of things. But, as the primordial acts of the intellect, like those of any other faculty, are comparatively feeble, the conceptual representations of the essence are like the first chalking in of the artistic idea on the canvas; and it is not until after the intellect has by reflex acts returned over and over again to the object represented and tested it by analysis, synthesis, and comparison, that the outline is definitely filled in. Then at length more or less of an equation is effected between the objective essence and the subjective cognition. *Thing* is identical with *being*. When a child uses the word, *thing*, how much does it know of being? Compare such infantine cognition with that complete philosophic concept of being, in which the whole of extension approximates towards the whole of comprehension; the difference between the direct and reflex universal will at once be seen.

(3) Classification—if it is not wholly arbitrary, and then it can hardly be called classification according to the strict acceptation of the term—presupposes a real objective foundation on which such classification is based. But a class is of itself a *relative* universal. This, then, is the fitting place to explain the difference between an absolute and a relative universal. An absolute universal is a universal *potentially* only. It neither includes nor formally excludes individuation. Moreover, it stands (as it were) in its own right, and does not connote a correlative. Take *virtue* as an instance. The concept absolutely represents the essential difference of moral action. It is not individuated, as *this moral action* plainly is, though not excluding the individual but ignoring it. Accordingly, it is *capable* of becoming a universal properly so called,—in other words, it is a potential universal.

Thus, in the proposition, *Virtue is its own reward*, the subject is an absolute (or potential) universal. It is assumed by the mind as a whole of comprehension, not as a whole of extension. A relative universal, on the other hand, is formally such. Accordingly, it positively excludes individuation; and connotes its correlative,—the species or individuals included within its periphery. Thus, *All virtue is either natural or supernatural*, is a formally universal proposition; and the subject, *all virtue*, is a relative universal, connoting the two subordinate species by which it can be dichotomically determined. So much will suffice for a right understanding of the present contention. Now, a class is essentially a relative universal, though after its institution it may be used conventionally as an absolute universal by disregarding its relation to its subordinates. For a class denotes a collection of individual entities, intellectually conceived according to some common basis of similarity. By the fact that it is a *collection* it excludes the possibility of any real singularity; and by the fact that it is a collection of *individuals* it is relative, connoting its relation as a conceptual whole to its subordinate parts or constituent members. All classification of whatsoever kind connotes the classified. But, according to the definition just given, though the universal is not physically real but conceptual, nevertheless, there is a real basis for the classification; since the class is conceived according to some common similarity. To take an instance: In the old Linnean system of botany the classification is almost exclusively derived (as it should be) from the reproductive organs of plants. Therein may be found a particular class, called *pentandria*. This class consists of hermaphrodite plants,—that is to say, of plants whose flower contains both stamina and pistil,—having five stamina or sperm-cells, with distinct filaments not connected with the pistil, or germ-cell. Here the common basis of similarity, which gives birth to the conceptual whole, is clear enough; for all the plants contained under it possess the following properties in common, *viz.*, that the sperm and germ cells exist in the same flower, that each flower has its five stamina, and that these stamina are disconnected from the pistil. These three properties, discovered by experimental observation, are realities which justify the mind in conceiving the various plants that exhibit the said properties as a separate collection. Yet *pentandria* is not the concept or name of a singular plant, but of a certain class of plants. It necessarily is not singular. The naturalist who first discovered these properties in a certain number of different plants and conceived them as on this

account specifically one, may have given to them the name of *pentandria* (that is to say, five-stamina) or any other name he pleased, because he had previously formed in his mind the universal or common concept; but how could the name have taught its first inventor the idea? or what concept could it generate in the mind of the listener, unless this latter had previously possessed the idea? The name would be nothing but an articulated sound symbolical of nothing, and no more human language than the cadences of a snorer, in the absence of the universal concept of which it is the symbol. Hence the usefulness and frequent necessity of the meanings of words in dictionaries. It is not, then, the name that generates the universal concept; but the universal concept that finds its expression in the symbolic name. Neither is the concept a mere logical entity, unrepresentative of anything outside the mind; but it is based on an objective reality.¹

(4) There is no science, either properly or improperly so called, that has not a universal for its formal object. Irrespectively of the, morally speaking, universal authority of all philosophers up to this comparatively recent period of philosophic anarchy, the truth of the proposition is patent to common sense. If science could have a singular for its formal object, there might be as many sciences as there have been and are individuals. Indeed, the universality of human thought and of the range of the human intellect seems to postulate the existence of these sciences. But in such case the number of sciences would be practically infinite, certainly incalculable; and what could we learn from them? They would add next to nothing to that which is derived from a purely sensible perception of the object,—an individual possessed of such and such determining accidents,—and each object would remain in its own isolation, the subject of an equally isolated thought. Thus human knowledge would scarcely reach the level of the sheep's estimate of a wolf. Further: Human science from a subjective point of view is a habit cognoscitive of the essence of things whether by intuition or by ratiocination.

Such is science, properly so-called, in its most generic signification as inclusive of Divine, Angelic, and human cognition. But the essences of things are the real meta-

¹ The moderate nominalists of modern England,—*e.g.*, Hobbes, Berkeley, Hume, Adam Smith, admit "that perceived resemblance is the foundation of classification". Sir W. Hamilton: *Metaph. Lect.* xxxv., Vol. II. But such an admission looks very like a surrender of the citadel. Nominalism has shifted into conceptualism.

physical forms which determine the species, and are in their nature absolute universals, represented by universal concepts. Again: assuming it from the same point of view in its strictest sense as the demonstrative habit (ἐξὺς ἀποδεικτική), science postulates universals as its terms; for the three judgments of the demonstrative syllogism must be universal. Yet again: scientific cognitions are necessary, immutable. But a singular object (with but one exception) cannot give birth to a necessary and immutable cognition, because itself is contingent and mutable; consequently, a cognition that should represent it otherwise, would be a false cognition. God is the only apparent exception; but the exception is really no exception. For in Him the two wholes of extension and intension meet. Moreover, He is necessary and immutable Being,—the Source, infinite Continent, exemplar Cause of all being. Once more: Demonstration is the logical form and necessary medium of human science strictly so called. Now, in the parent or most perfect demonstrative syllogism the middle term is the definition of the subject (or minor term) and after a way of the attribute, passion, specific property (or major term). But a definition, properly so-called, must be a universal, because it exhibits a genus as determined by a specific difference to the constitution of the species; and genus, difference, species, are each of them universals. To exhibit the same conclusion under another form: In the perfect demonstrative syllogism with which every demonstration must begin, the subject or minor term is—to speak logically—a species; the middle term or medium of demonstration, the definition of the subject and passion; the major term, the passion or attribute. But all these three terms are of their nature universals. Hence the Philosopher says in his *Posterior Analytics*, that “It is necessary” to the existence of demonstration, “truly to predicate one thing of the many; for there will not be the universal, unless this be so; and if there be not a universal, there will not be a middle term; so that neither will there be a demonstration” (B. i., c. 11). Lastly, all science is essentially unitive from first to last. Even in its preparatory and imperfect stage, while labouring by process of induction to elicit laws and first principles out of the facts of experience and observation, it is reducing individual phenomena under some common law, or evolving therefrom some indemonstrable principle which either lies at the foundation of all certain cognition or serves as the major premiss of the mother-syllogism in some particular science. Thus it commences its work by

gathering up an indefinite number of individual entities into one whole. Now, where induction ends, there deduction, and demonstration in particular, commence. The process of the one is predominantly analytical; that of the other synthetical. Deduction, or rather demonstrative deduction, takes the universal of induction, which scientific intuition now exhibits as an immutable and necessary truth, and fills it in with specific attributes. Induction discovers the whole; demonstration discovers the essential totality of the whole. The former by comparison of like and like as well as by elimination of the unlike exhibits the universal; the latter developes this universal, proving its essential properties by means of the definition as its middle term. Now, throughout this procedure science indirectly lays bare certain off-shoot truths that are as so many hooks linking on one science (*objectively* such) with another,—equal, with equal, inferior with superior. These latter are the subalternant and subalternate sciences; as, for instance, the scientific part of mechanics is subalternated to pure mathematics. Hence we discover that there is a hierarchy of sciences,—such as are inferior yielding to a wider universal and a more comprehensive unity. Is, then, this quest of the human mind after unity of knowledge labour in vain? Is there a hierarchy of sciences without a high priest invested with plenary jurisdiction? Do the mutual bonds of unity suddenly stop short, and leave us in the hands of an oligarchy? Is there no supreme science? The concurrent testimony of Greek philosopher, of mediæval Doctor, of the true philosopher in more modern times, assures us that there is such a science, stretching from end to end of human thought and of the objects of human thought, and that its name is Wisdom. Within the strict limits of the natural order this supreme science is metaphysics. Thus, then, science deals, and necessarily deals, with universals from the first; and, as it progresses, it encounters on its road higher and yet higher universals, till in the supreme science it arrives at the transcendentals which permeate, so to say, all being. Are these universals mere creations of the voice? If so, then all science is vanity; and the only truths if you can call them such, which are not logical fictions, would emerge out of a complete identity between subject and predicate, representable by the now familiar formula,— $A = A$. But the facts of nature give the lie to so monstrous an hypothesis. In the varied orders of being the inferior is virtually, and in many cases actually, contained under the higher,—simple bodies under compounds, compound bodies under vegetative life, this latter under animal life, animal

life under man, the human soul under the pure Intelligences, all under God as the Supreme, all-containing Reality; not in any case by identity of essence but by an infinite supremacy of Being; after a not unsimilar manner as to the inclusion of the less number under the greater in arithmetic.

(5) I must add in the last place, by way of confirmation, an argument which will not seem trivial to such as have carefully considered the question. Abstract and, generally speaking, universal *terms* are national—that is to say, each nation has its own vocabulary; whereas the *concepts* represented by the terms are œcumenical. But, if the articulated sound were parent of the concept (or of the fiction that would stand for the concept), as diverse as are the words, so in proportion would the corresponding mental figments be diverse. If, on the other hand (as sane philosophy teaches), the concept claims some term that may symbolise and transmit it to others, one can well understand, taking into account the diversity of races and families of men, how a variety of articulated sounds may be made to represent one and the same idea.

To sum up the doctrine evolved in this article, by way of conclusion: The perceptions of sense are singular, and represent an individual existent thing exclusively, as manifested by its group of accidents that are pervious to the sense. Hence, a sensible perception exhibits two things only, to wit, quantity, shape, colour, and other qualitative accidents on the one hand, the collection of these into unity of some sort on the other hand—that act of the *common sense* which collects in one the impressions of each particular sense, and completes the sensible perception. Such perceptions are common to man and irrational animals. But in these *essence* is neither denoted nor even connoted, but only objectively presupposed. The intellectual act represents the same object as an essence, or specific form, which of its nature is an absolute universal. This essence the intellect may represent either as individual, and then its concept connotes existence; or it may represent the same purely as a form, in which case it does not connote existence. Existence predicated answers the question, *Whether a thing is*, and connotes the individual; sensible as well as intellectual perception respond to the question, *What a thing is*, but each in a different way. The perception of sense exhibits what a thing is by its individual accidents only, and as a consequence must be singular; intellectual perception represents the essential notes of the object, and accordingly in its own right (so to say) is a universal; when it includes or connotes

singularity, it does so under compulsion of the sensible perception by which the intellectual faculty was first determined to the representation of such object and of the sensible phantasma which invariably accompanies every act of the human intellect in the actual order. Hence it follows that every concept of the mind in its own native power is a universal. If so, universal ideas are the property of the intellect of man, and begin with the first exercise of reason. These universal concepts, direct and necessary, are concrete; but the human mind from these can form abstract universals, reflex and voluntary, by its faculty of abstraction. Neither the one nor the other class of universal concepts is the formal representation of a *physical* reality, because all things that are physically real are singular; nevertheless each is *metaphysically* real, because it represents the essential notes—really existing in each individual of a group according to a common type—by which every individual entity is determined to its own grade in the universe of created being. These essential notes are the real foundation for the concept, and give to it a universality unlimited by space or time; so that, wherever and whenever an entity shall appear with such notes, it will of necessity be covered by the species, or universal, that exhibits these notes. Such are the internal words of the human intellect; and they postulate a common term as medium of intercommunication between mind and mind. This is in strict analogy with the internal and external words of angels, and more particularly, with the Prototypal Word in the Blessed Trinity. That the intellect of man has naturally such universals as its proper object is clear from the instance of children when they first arrive at the age of reason, from an examination of the parts of speech in all languages, from the specific order of the universe, from the nature of science, from the sensible origin of individual differences. That the universal reflex and philosophical concept is possible, clearly appears from the fact that the human mind has those faculties of abstraction and generalisation which are necessary and sufficient for the production of such concepts. That language cannot give birth to the concept—the external word generate the internal—is an evident deduction from the symbolical nature of language, from the innate deficiency of the supposed cause, and from the fact that universal concepts are common to all men, whereas the terms which express them differ in different languages. Whether these conclusions square or not with the nominalist theory, I leave to the judgment of the reader.

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