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EDITED BY THE DOMINICAN FATHERS
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THE THOMIST

A THEOLOGICAL AND PHILOSOPHICAL QUARTERLY

EDITED BY THE DOMINICAN FATHERS
OF ST. JOSEPH'S PROVINCE

VOL. I APRIL, 1939 No. 1

HUMILITY ACCORDING TO ST. THOMAS[1]

"The Son of man is not come to be ministered unto, but to minister, and to give his life a redemption for many."—*Matthew, xx, 28.*

It is well known that St. Thomas[2] admits a *specific distinction,* and, indeed, even a *diversity of order,* between the *acquired* moral virtues, which the pagan philosophers describe, and the *infused* moral virtues, of which the Gospel speaks; for example, between acquired and infused prudence. There is, as a matter of fact, a difference of formal object, of regulation, and of end, since the acquired virtue of its very nature is *ordained to a natural end,* while the infused virtue is *ordained to a supernatural end.*

The superior level of the infused moral virtues is brought out with special clarity in St. Thomas' teaching on humility. All Christian tradition has considered this virtue the *foundation of the spiritual life* inasmuch as it eradicates pride, which, according to Holy Scripture, is the beginning of all sin because of the gulf it makes between us and God. Hence humility is often compared to the excavation dug in preparation for building, an excavation whose depth must be exactly proportioned to the height of the structure, deeper as that is to be higher. From this point of view, the two pillars or the two principal walls of the spiritual edifice are faith and hope, the dome of the temple is charity.

Certainly humility should repress pride in all its forms, understanding here by pride both intellectual and spiritual pride. But the proper, principal, indeed the highest, act of humility is not precisely the repression of actual movements of pride. Obviously in Our Lord and in Mary there was never the least

[1] *Editor's Note:* This article is to form part of the forthcoming Volume II of Père Garrigou-Lagrange's learned treatise on ascetical and mystical theology: *Les trois âges de la vie intérieure,* Editions du Cerf, Boulevard La Tour Maubourg, 29, Paris.

[2] *Summa Theologica,* Ia IIae, q. 63, a. 4.

movement of pride to be repressed; yet they certainly had the virtue of humility and exercised it in an eminent degree. What is then the proper act of humility, first in relation to God and then in relation to neighbor?

Humility Toward God

The proper act of humility consists in bowing down to earth; hence its name humility from the latin *humus*, or ground. To put aside the metaphor, the proper act of humility consists in *abasing oneself before God* and before that which is of God in every creature. To abase oneself before the Most High is to recognize, not only speculatively but practically, our inferiority, our littleness, our indigence; all of which is manifest in us even though we be innocent; much more than this, after sin has been committed, it is necessary to recognize our misery.

Humility, then, is closely united to obedience and to religion, yet it differs from both: obedience looks to the authority of God and his precepts; religion regards the excellence of God and the worship which is his due; humility, in bending us down to earth, has made recognition of our littleness, of our poverty, and thus in its own manner glorifies the grandeur of God. Humility chants his glory as did the Archangel Michael in his question: *Quis ut Deus?* "Who is like God?" The interior soul experiences a holy joy in annihilating itself in some way before God for the sake of recognizing practically that God alone is great and that in comparison with his divine greatness all human greatness is as empty of truth as a lie.

Humility so conceived is founded upon truth, especially upon this truth: there is an infinite distance between the Creator and the creature. The more vividly and concretely this distance is perceived, the greater the humility. However high the creature may be, this abyss is infinite; the higher one climbs in true progress, the more evident becomes the infinite character of this chasm. In this sense, the highest is the most humble, because he is more enlightened: the Virgin Mary is more humble than all the saints, and Our Lord is yet much more humble than his Holy Mother.

The affinity of humility to the theological virtues can be readily seen in an examination of its *double dogmatic foundation*, an aspect of humility of which the pagans were ignorant. For there are two dogmas at the root of humility.

Humility is based first on the *mystery of creation* (*creatio ex nihilo*), a truth which the philosophers of antiquity did not know, at least explicitly, but which reason, by its natural powers can know. We were *created from nothing*, this is the foundation of humility in the light of natural reason.[3]

Humility is also based[4] on the *mystery of grace* and of the necessity of *actual grace* for placing the least salutary act. This mystery surpasses the natural forces of reason; it is known by faith and finds explicit expression in the words of the Saviour: "Without me you can do nothing" in the order of salvation.[5]

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These two principles involve four consequences relative to: God the creator, to his providence, and to his goodness, which is the source both of grace and of the remission of sin.

First of all, in relation to God the creator, we *must recognize*, not only in a speculative way but *practically* and concretely, that *we of ourselves are nothing:* "My substance is as nothing before thee,"[6] "What have we that we have not received?"[7] We have been created from nothing by the sovereignly free *fiat* of God—by his benevolent love which conserves us in existence and without which we should be instantly annihilated.

Moreover, though after the creation there were more beings, there was not more of reality, more of perfection, more of wisdom, nor more of love; for before all creation there already existed the infinite plenitude of divine perfection; therefore in comparison with God, we are not. Indeed, if from the very best of our free acts we take away that which comes from God,

[3] It is from this point of view that the conception of acquired humility proceeds.
[4] The precise question here is of infused humility.
[5] John, xv, 5.
[6] Ps. xxxviii, 6.
[7] I Cor., iv, 7.

there is literally nothing left. It is not as though one part of these acts came from us and another from God; the *whole and entire act* comes from God as its first cause, the whole and entire act comes from us as its second cause. In the same way the fruit of a tree is entirely from God as the first cause, entirely from the tree as the second cause.

We must recognize, and in a practical manner, this truth: without God, the creator and conserver of all things, we are nothing.

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Likewise without God, the *supreme source of order*, without his providence, which *directs* all things, our life is totally lacking in direction. To gain eternal life, we must then humbly receive from him the general direction of the precepts, and that particular direction which the Most High, from all eternity, has chosen for each one of us. This particular direction is manifested to us by our superiors, who are the intermediaries between ourselves and God, by the counsels to which we should have recourse, by the events of life, by the inspirations of the Holy Ghost. In the same way we should humbly accept the place, perhaps an extremely modest place, which the good God has willed for each of us from all eternity. So it is that in the religious life some should be as the branches of the tree, others as its blossoms, still others as its root hidden under the earth. But it is very useful, this root which draws up from the soil the material that constitutes the sap necessary for the sustenance of the tree. Indeed if all the roots are cut the tree will die; but it does not die even though stripped of all its branches and all of its blossoms. In a christian, in a religious, the humility which moves him to accept willingly an obscure place is most fruitful not only for the individual himself, but also for others. The Saviour, in his passion, very humbly chose the last place, the place where Barrabas was preferred to him, the shame of the Cross; and it is in this way that he became the cornerstone in the temple of the kingdom of God: " *The stone which*

the builders rejected, the same is become the head of the corner. By the Lord this has been done; and it is wonderful in our eyes." [8] St. Paul wrote to the Ephesians: "Now therefore you are no more strangers . . . but you are fellow citizens with the saints, and the domestics of God, built upon the foundation of the apostles and prophets, Jesus Christ himself being the chief corner-stone." [9]

Such is the very solid virtue of humility, marvellously fruitful, which even in the most hidden places sings forth the glory of God. It is necessary, then, to receive humbly from God the special direction that he has chosen for us, even if it should lead us to a profound immolation: "The Lord killeth and maketh alive, he bringeth to every extremity and bringeth back alive." [10] This is one of the most beautiful themes of the Holy Scriptures.

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Further, we cannot take the least step forward in this special direction chosen for us by God, nor place the slightest salutary and meritorious act, without the *help of an actual grace*; particularly have we need of actual grace to persevere even to the end. This grace must be humbly asked.

Even if we should have a high degree of sanctifying grace and charity, full ten talents, we should still have need of actual grace for the least salutary act, and especially should we need, for a good death, the great gift of final perseverance, which should be asked for with humility and confidence each day in the Hail Mary.

Christian humility confesses joyfully with St. Paul: "Not that we are sufficient to think anything of value to salvation of ourselves, as of ourselves; but our sufficiency is from God." [11] "No man can say Jesus is the Lord, but by the Holy Ghost." [12]

In short, humility should recognize, practically and a little

[8] Matt., xxi, 42.
[9] Eph., ii, 19, 20.
[10] I Kings, ii, 6.
[11] II Cor., iii, 5.
[12] I Cor., xii, 3.

better each day, the greatness of God the creator, the governor of all things and the author of grace.

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This humility, which recognizes our insufficiency, should be in all the just; it would, indeed, have been found in man in the state of innocence. But *after sin,* we must recognize practically not only our indigence but also our misery: the miseries of our narrow, egotistic heart, of our fickle will, of our unbalanced, violent, capricious character; miseries of our soul with its unpardonable omissions and the contradictions into which it falls, contradictions that could and should have been avoided; the misery of pride, of greed, which leads to indifference to the glory of God and the salvation of souls. This misery is inferior to nothingness itself, for it is a disorder and it puts our soul in a state of truly contemptible vileness.

In the divine office we frequently recall these great truths in the *Miserere:* "Have mercy on me, O God, according to thy goodness. And according to thy great mercy blot out my transgressions. Wash me completely from my iniquity and cleanse me from my sin. . . . Against thee only have I sinned, I have done that which is evil in thy eyes . . . purify me. Wash me and I shall be made whiter than snow. . . . Turn away thy face from my sins. . . . Create a pure heart in me, O God, and a firm spirit. . . . Restore unto me the joy of thy salvation. . . ." "Who can know his sins? From sins of which I am ignorant, cleanse me, O Lord." [18]

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How much this abasement of true humility differs from the pusillanimity that is born of human respect or spiritual laziness! Pusillanimity, the contrary of magnanimity, refuses necessary labor! Humility, far from being opposed to greatness of soul is rather bound to it in ties of unity; the true christian should strive towards great things, things worthy of great honors, but

[18] Ps., xviii, 13.

he should do so humbly and, if it be necessary, even by the way of great humiliation.[14] He should learn to say frequently: "*Non nobis, Domine, non nobis, sed nomini tuo da gloriam.* Not to us, O Lord, not to us, but to thy name be the glory."

The pusillanimous person is he who refuses to do the things he can and should do; and he can sin mortally when he refuses to do what is of grave obligation. On the contrary, humility bows a man down before the Most High, that he may find his true place. It abases us before God to allow him to operate more freely in us. Far from being discouraged, the humble soul puts himself in the hands of God, and if the Saviour does great works through him, he is no more puffed up with his own greatness than is the axe in the hands of the woodsman or the harp in the hands of the musician. He says with the Blessed Virgin Mary: "Behold the handmaid of the Lord, be it done unto me according to thy word."

The Relation of Humility to Neighbour

In a way as simple as it is profound, St. Thomas says of this matter: "Every man should recognize that in what he has of himself he is inferior to that which is of God in every other person."[15] In fact each man, considering that of himself he is nothing, that what comes from himself is only his insufficiency, his defectibility, his deficiencies, should recognize, not only in a speculative but also in a practical way, that what he has from himself, as from himself, is inferior to what every other man has from God, both in the order of nature and in the order of grace.

[14] Confer St. Thomas, *Summa*, Ia IIae, a. 1: "Humilitas reprimit appetitum, ne tendat ad magna praeter rationem rectam. Magnanimitas autem animum ad magna impellit secundum rationem rectam." Item, Ib. a. 2 ad 3um, et q. 129, a. 3 ad 4um. These two virtues are complimentary, like the two halves of an arched window. The virtues from the fact of their connection, increase together like the five fingers of the hand, so that one cannot have a profound humility without true nobility of soul or magnanimity.

[15] "Quilibet homo secundum quod suum est, debet se cuilibet proximo subjicere quantum ad id quod est Dei in ipso." Ia IIae, q. 161, a. 3

The angelic doctor adds, in substance: [16] " The truly humble man considers himself inferior to others not only with an eye to external acts, but because he fears lest even the good that he does be done from a secret pride. This is why the Psalmist says: " *Ab occultis meis munda me, Domine.* From my hidden faults, purify me, Lord." St. Augustine too says: " Esteem some your superiors internally whom you surpass in things external." [17]

It must also be said with the same Augustine: " There is no sin committed by another man but which I could commit by reason of my own weakness, and if I have not committed it, it is only because God in his mercy has not permitted it and has conserved me in goodness." [18] It is he to whom the glory of it must be given and to whom we must say with the Scriptures: " Create in me, O Lord, a pure heart, a right spirit. Turn me to thyself and I shall be converted. Have pity on me a sinner, for I am poor and weak."

As St. Thomas says in Ia, q. 20, a. 3: " Since God's love for us is the cause of all good, no one would be better than another if he were not loved more by God. ' What hast thou that thou hast not received? ' " [19] It was this that led the saints, seeing a criminal being brought out to execution, to say: " If this man had received the same graces I have for so many years, perhaps he would be less faithless than I am; and if God had permitted in my life the faults which he has permitted in this man's, I should be in his place and he in mine.—' What hast thou that thou hast not received? ' " This is the true foundation of Christian humility. All pride should shatter itself against the divine word.

Thus the humility of the saints became always more profound, for they knew better and better their own weakness in contrast with the greatness and goodness of God. To this humility of the saints we must strive, refraining from using their

[16] *Ibid.*, a. 6 ad 1um.

[17] " Existimate aliquos in occulto superiores, quibus estis in manifesto meliores." *De Virginitate*, ch. LII.

[18] This is said in substance in the *Confessions*, Book II, ch. vii.

[19] I Cor., iv, 7.

terms and formulas so long as we are not profoundly convinced that these are true; otherwise, these would evidently be from false humility, which, compared to the true, is as a glass trinket compared to a genuine diamond.

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Humility toward our neighbour, thus defined by St. Thomas, differs immensely from human respect and from pusillanimity. Human respect (*timor mundanus*) is fear of the judgment and the anger of the wicked that turns us away from God. Pusillanimity refuses to do the necessary work, runs away from the great things that could have been accomplished and inclines towards the least things. But humility bows us down before God and before what is of God in our neighbour, in a noble gesture. The humble man does not bow down before the power of the wicked; therein says St. Thomas he differs from the ambitious man who abases himself much more than he should in order to obtain that which he desires, and becomes a cringing knave to gain power.

Humility does not fly great deeds; on the contrary it strengthens magnanimity in making us tend to sublime actions humbly. These two are complementary virtues, supporting one another like the wings of an arch.

These two virtues appear splendidly in our Lord when he says: " The Son of man is come not to be ministered to, but to minister (his humility) and to give his life for the redemption of many (his magnanimity, with his zeal for the glory of God and the salvation of souls)."[20] Our Saviour could not have moved towards greater things, nor moved more humbly: He wished to give us eternal life and to give that gift by the medium of the humiliations of his Passion and of the Cross. In like manner, keeping a just proportion of the human to the divine, do these two apparently contrary virtues unite in the saints. The humble John the Baptist did not fear the anger of Herod but said to him: " What you are doing is not lawful ";

[20] Matt., xx, 28.

the Apostles in their humility had no fear of the opposition of men; they were magnanimous to the point of martyrdom. There is something of the same thing in all the saints, and the more humble they are, the more courageous they are, the less do they fear human opinions however formidable they may be; such was the humble Vincent de Paul, intrepid before jansenistic pride, which he recognized and denounced that he might save for souls the privilege of frequent communion.

In practise what must be done to arrive at the perfection of humility, without which we cannot reach the perfection of charity? To this end it is above all necessary that we behave well both in the face of praise and of blame.

As for praise, *we must not praise ourselves*; that would be to dishonour ourselves, as the Italian proverb has it: "*chi si loda, s'imbroda*"; they praise themselves who find they are not praised by others.—Further, *we must not look for praise*; indeed that would be to render oneself ridiculous and to lose the merit of one's good actions.—Finally, *we must not take pleasure in praises* that are given; this would be to lose, if not the merit of our good actions, at least the full flower of that merit.

But we must climb a few degrees still higher to meet reproaches as we should. *Merited reproofs must be accepted patiently*, especially when they are given by superiors who have the right and the duty to correct; sulkiness will cause the loss of the benefit of these corrections. *It is sometimes fitting to accept a rebuke that has been little merited, or that is even undeserved.* Thus St. Thomas, while still a novice, was reprimanded for a supposed mistake in his reading of latin in the refectory; he made the suggested correction and continued with the reading; later, in recreation, his astonished brethren said: "You were not mistaken, you read correctly; why did you allow yourself to be corrected? "It is better in the eyes of God," he answered, "to be guilty of a grammatical error than to be lacking in obedience and humility." Finally, it is fitting to petition for *a love of contempt*, calling to mind the examples of the saints. St. John of the Cross, responding to our Lord's

question "What reward do you wish?" answered: "To be despised and to suffer for love of you"; his request was granted a few days later and in a most painful manner; he was looked on as an unworthy religious and mistreated in an almost incredible way. In the same way St. Francis of Assisi said to brother Leo: "If, when we arrive this evening at the door of the convent, the brother porter takes us for robbers and refuses to let us in, giving us blows and leaving us out the whole night in the rain and the cold, that will be the time to say: *santa latizia:* what joy, O Lord, to suffer for you and to become a little like you." The saints have climbed even as high as this.

St. Anselm [21] has admirably described the degrees of humility: "1. To know that from some aspects one is worthy of contempt; 2. to endure contempt; 3. to declare that one is contemptible; 4. to wish that one's neighbour believe it; 5. to sustain patiently the remarks that are made; 6. to accept being actually treated as one worthy of contempt; 7. to love to be so treated."

These higher degrees are given in all pious books, but, as St. Theresa says, "These are pure gifts of God, they are supernatural," [22] they presuppose a certain infused contemplation of the humility of the Saviour crucified for us and an ardent desire to become like him.

It is of course proper to strive for this high perfection; those who arrive at such heights are rare; but before reaching them, the interior soul has many an occasion to recall the words of Jesus, simple, profound words that we are truly able to imitate in our own way; "The Son of man is come, not to be ministered to, but to minister and to give his life for the redemption of many." [23] Here is the most profound humility united to the most sublime grandeur of soul.

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[21] *Lib. de similitudinibus,* ch. CI-CIX, cited by St. Thomas Ia IIae, q. 161, a. 6 ad 3um.

[22] *Vie,* ch. XXXI, *Obras,* t. I, p. 257. *Chemin de la perfection,* ch. XII, *Obras,* t. III, p. 61.

[23] Matt., xx, 28.

THE ROOTS OF OBLIGATION

Perhaps men have taken moral obligation too much for granted in the ages which have preceded our own. It is, after all, a human thing to take the natural for granted. Its quiet solidity would seem to make it immune to attack, particularly since its destruction would involve the destruction of its attackers. Nevertheless the drift of our times indicates clearly that there is danger in taking even the natural for granted. There is, for instance, a double danger in taking so natural a thing as obligation for granted, a danger that has been brought home to us emphatically as the danger of an open manhole is brought home to the man who lies crushed at the bottom of one.

This double danger is the danger of loss and the even more tragic danger of ignorance of what has been lost. Our age has seen both dangers translated into damages and no one seems to worry about paying the bill. Somehow, in these past few centuries, obligation became identified with authority, as though authority were its only source. When the point was reached where that human principle of government which is authority was about to be discarded for the introduction of inhuman force or chaos, of course obligation ceased to be a matter of serious consideration.

Once authority was driven out of the house, the destruction of obligation seemed to represent no more difficulty than the murder of an infant orphan. Men advanced to the execution readily but variously. In the enervating atmosphere of a degenerate society bent only on pleasure, obligation was declared to be a matter of social sanction, of custom, and, ultimately, of personal taste; that is, the notion of moral obligation had its life-blood sucked out of it with none of the fuss or fury of murderous assault. Where the attack on human personality and sovereignty was open and brutal, though no more devastating, obligation was supplanted by the whip, the club, the sword, the machine-gun.

In either case, the notion of moral obligation was lost: in the first, to the accompaniment of deep, stultifying toasts drunk to the new freedom; in the other to the huzzas of a fanatic idolatry of the group, the party, the race, the state. In neither case was there a realization of what had been lost, a truth that is evidenced by the very willingness, even eagerness, with which this thing was given up. It is not through keen penetration and sharp judgment that a man plucks out his own eyes in an effort to achieve better vision.

It is important that we realize the extent to which the notion of moral obligation has been lost. It is even more important that we realize what has been and is being lost by realizing the exact nature of moral obligation. Such knowledge makes horribly clear the fundamental character of the attack on humanity itself which is going forward so vigorously today; until we know that we are under attack, we shall hardly give our best efforts to the work of defense. It is the purpose of this article to examine thoroughly the notion of moral obligation, its sources, its nature, its presuppositions, its implications for human life.

The notion of moral obligation is inextricably involved with two other notions: that of precept and that of necessity. The first of these, precept or command (*imperium*), is looked upon as the source of obligation.

That there is a connection between command and obligation in the common estimation of men seems fairly obvious. A command that does not have some force is as vapid a contradiction as a joke without a laugh in it. To command oneself seems as silly as to wheedle oneself or to sit in one's own lap. Where the presence of obligation is thought to be detected, men naturally search for a lawgiver or a source of this obligation.

St. Thomas considered the connection between these two as almost self-evident. In fact he states again and again that precept implies obligation, almost as though it were something to be taken for granted,[1] much as we might answer a curious child, somewhat impatiently and without explanation, by

[1] *Summa Theologica*, II-II, q. 44, a. 1: praeceptum importat rationem debiti. *Quaestiones Quodlibetales*, Quodl. V, art. 19; *Summ. Theol.*, I-II, q. 99, a. 1.

saying "of course the Washington monument sways in the wind." In fact Thomas goes so far as to make obligation the measure of the extent of command.[2]

The second notion closely involved with that of obligation is the notion of necessity, the idea of some sort of compulsion. Indeed the notion of compulsion seems to be so closely connected with obligation that without it the idea of obligation ceases to be.[3] Words of direction that do not involve compulsion may be admonitions, advice, counsel—helpful, even priceless, things; but they leave the one to whom they are directed under no necessity whatsoever, and consequently free of obligation.

In search of a knowledge of moral obligation, it would seem well worth while to examine the link that binds obligation both to command and to necessity. It is not merely that their intimate relation must reveal much about all three. On extrinsic grounds such a study will repay the effort; for it is precisely the erroneous resentment to command and necessity as infringing on the sovereignty and freedom of man that has contributed so much to the unpopularity of the notion of obligation. It is this very resentment that reveals how fundamentally the nature of man is misunderstood and how basic is the attack unwittingly directed against man in the name of his defense.

Precept and Obligation

To examine the relation between precept and obligation, it is necessary to look into the nature of precept; indeed a momentary examination of this act will show clearly what has to be done in the determination of its connection with obligation. The study of precept runs the risk of the boredom familiar things bring about so quickly and persistently. For precept is familiar, as familiar indeed as human action, and as common in human life. But it is much too brisk to be boring. It is

[2] *Ibid.*, II-II, q. 44, a. 1: In tantum ergo aliquid cadit sub praecepto, in quantum habet rationem debiti.

[3] *Ibid.*, I-II, q. 100, a. 9; q. 99, a. 1; *Contra Gentiles*, lib. II, c. 28.

definitely of the practical order, for its aim is not to uncover truth, but to accomplish action; and in the practical order it aims, not at making things, but at getting things done, at action, not art. It is then an act of the practical intellectual virtue of prudence.[4] As an act of prudence, it deals exclusively with the means to an end, bridging the gap between the order of intention and execution, sharply distinguishing the dreamer from the man who makes dreams come true.

From Thomas' analysis of this act of prudence[5] it is clear that it has three integrating elements: there is first of all an element of ordering or ordination essential to the correlation of means to end; then an element of intimation or notification—to the subject faculties or individuals according as the prudence is monastic or political—a note obviously essential, since a command hidden in the depths of a superior's mind can hardly win obedience; and finally an element of motion, an element essential to the work of precept which is to get things *done*.

This triple characteristic of precept might be summed up by defining the act as effective direction or as directive motion. At least this double notion of order and motion cannot be split without removing precept from the discussion. Precept distinctly is not mere motion; no less is it mere direction. It is direction which gets results, motion that is going to a definite place.

Since intellect is the source of all order, and will is the first principle of motion, both intellect and will enter into the making of this act of precept. Intellect furnishes the elements of order and notification, will that of motion. Or, to put it in scholastic terminology, command is immediately and substantially from the intellect, radically it is from the will; it is an elicited act of the practical reason, presupposing an act of the will.[6]

The determination of the relation of this act of prudence, which is command, to obligation means no more than a determination of which of the three integrating elements (ordering,

[4] *Summa Theol.*, II-II, q. 47, a. 8. [5] *Ibid.*, I-II, q. 17, a. 1.
[6] *Ibid.* Confer commentaries of John of St. Thomas and Cajetan on this article.

intimation, motion) plays the major part in imposing necessity or compulsion, if such compulsion can be imposed. Radically of course the question is a double one: a) how can necessity or compulsion be introduced into the life of a man? b) is compulsion or necessity in the life of man the product primarily of will or of intellect? Answers to these questions will be impossible until we have inquired more closely into the nature of necessity and its relation to obligation. Only then, too, can we determine more accurately the relation of precept to obligation.

Necessity In General

The difference between a man urged on to desperate efforts by the pangs of hunger and another urged on to no less desperate efforts by the whip in the hands of a tyrant is a statement of the general distinction of necessity to which a man may be subject, intrinsic or extrinsic necessity. Extrinsic necessity,[7] is an artificial, wholly external thing, that must be immediately excluded from the question of obligation. As far as nature goes, it is a type of violence, whereas the precise point of obligation is that it can be violated; it is not violence, not force, it does not take a man by the scruff of the neck. Rather if it urges him at all, it is by means of his mind and his heart, not by means of his neck.

To inquire whether this necessity is the necessity involved with obligation is really to ask whether obligation can be imposed wholly from the outside i.e. whether it can be an extrinsic, artificial, even a violent thing. Such a question has modern implications of some significance, for obligation has indeed been paraded and rejected under just such colors. The question then is worth an answer; and it is to be hoped that in a later article it can be answered conclusively. The present article is restricted to the attempt to investigate the existence and nature of an intrinsic obligation, i.e. one that is natural, harmonious, somehow a part of the naturally effective direction of the universe.

[7] *Summa Theol.*, I-II, q. 6, a. 5.

The second necessity to which a man may be subject is intrinsic or natural necessity. By that is meant the necessity that flows from the very causes that enter into the makeup of a creature; consequently, it is a necessity that flows either from the intrinsic (material and formal) or from the extrinsic (efficient and final) causes. When this necessity proceeds from the material, formal, or efficient cause it precludes liberty as effectively as does extrinsic necessity. For this reason it is called *absolute* natural necessity.[8] It is the necessity found in irrational creation, the necessity we describe in action in the physical laws of nature.

That there can be no question of a relation of this necessity to obligation is clear not only from the wreckage of disdained obligations, not merely from the evidence of freedom in obligation adduced by conscience, but from such an obvious fact as the presentation of the prizes in a flower show, not to the plants, but to the owners of those plants. The obligatory has attached to it the implication of merit and blame; under this

[8] *Contra Gentiles*, lib. II, c. 29-30: (cap. 29) Nam si illa quae sunt priora naturaliter, sint etiam priora in esse, posteriora (in esse) ex prioribus (in esse) debitum trahunt; debitum enim est ut, positis causis, habeant actiones per quas producunt effectus. Si vero quae sunt priora naturaliter, sint posteriora in esse, tunc e converso priora (in esse) debitum trahunt a posterioribus (in esse) . . . . Utrobique hoc commune existit, quod debitum sive necessitas sumitur ab eo quod est prius natura, circa id quod est natura posterius. Necessitas autem quae est a posteriori in esse, licet sit prius natura, non est absoluta necessitas, sed conditionalis; . . . Invenitur autem et alius necessitatis modus in rerum natura, secundum quod aliquid dicitur necessarium absolute; quae quidam necessitas dependet ex causis prioribus in esse, sicut ex principiis essentialibus et ex causis efficientibus sive moventibus. . . . Ea vero quae voluntate fiunt necessitatem habere non possunt, nisi ex sola finis suppositione, secundum quam debitum est fini ut ea sint per quae pervenitur ad finem.

In Libros Physicorum, lib. II, lect. XV: necessitas quae dependet ex causis prioribus, est necessitas absoluta; ut patet ex necessario quod dependet ex materia . . . similiter . . . ex causa formali . . . similiter ex causa efficiente . . .: quod autem habet necessitatem ab eo quod est posterius in esse, est necessarium ex conditione vel suppositione . . . et hujusmodi necessitas est ex fine et ex forma in quantum est finis generationis. Quaerere, igitur, utrum in rebus naturalibus sit necessarium simpliciter aut ex suppositione, nihil aliud est quam quaerere, utrum in rebus naturalibus necessitas inveniatur ex fine, aut ex materia.

absolute necessity there can be no question of victory or defeat, sin or virtue, observance or violation; under its influence actions proceed with the inevitability of physical creation.

If the intrinsic natural necessity is that engendered by a final cause, it is not absolute but *hypothetical, suppositional,* or *moral* necessity. In other words the means are necessary, supposing the necessity of the end. The means do not depend from the end for their existence but for their character as means, indeed they pre-exist the end; what necessity they have, then, is in relation to the end and through a participation of the necessity of the end. It is on the note of pre-existence that St. Thomas [9] hinges the sharp distinction between absolute and moral natural necessity. In the case of the absolute necessity the dependents are posterior not only in nature but in actual existence; in the case of moral necessity, the dependents are actually prior in existence, though posterior in nature. And of course dependence is a statement of priority of some kind.

The matter of fact language of everyday action whips away the obscurity of this with the ease of a brisk wind clearing a fog. The purchaser of a boat ticket to Europe certainly has bought his ticket before his arrival in Europe; no less certainly he would have bought no such ticket at all if there could be no such thing as an arrival in Europe; and Europe as a goal entered into his planning long before the idea of purchasing the ticket.

It seems plain from experience that obligation does not involve extrinsic necessity in any of its various forms of whips, clubs, chains, or blows; nor does it involve that absolute natural necessity whose inevitable processes preclude all possibility of refusal or rebellion. Men do violate obligations. The question then of the necessity which is inextricably involved with obligation is a question of moral or hypothetical necessity, the necessity that, while natural, flows from the extrinsic cause which is called final.[10]

[9] *Ibid.*

[10] *Summa Theol.*, II-II, q. 44, a. 1, ad 2um; I-II, q. 99, a. 1; I, q. 21, a. 1, ad 3um.

The Nature of Moral Necessity

Our question here has to do with human action and the necessity that attaches to it. With this in mind, a comparison of necessity with the causes [11] will expose the roots of moral necessity. The material and formal causes refer directly to things, not to motion or operation. The goal of the material and formal causes is the intrinsic constitution of the agent that acts, the thing or the person; only in this remote way do they deal with action i.e. as radical principles. On the other hand, both the efficient and final causes directly refer to motion and operation; for the first is the agent producing the action, the second is the reason why the agent acts.

The precise question here then is of the agent or the end of the act as the basis of moral necessity. Let us look at the efficient cause or the agent as the possible source of moral necessity. An efficient cause is either determined or it is not. If it is determined, then it is the source, not of moral or suppositional, but of absolute necessity; as we have seen above, the necessity flowing from intrinsic causes is an absolute necessity. The thing is obvious in everyday experience. Because a plant can only grow and propagate itself (i.e. is determined to growth and propagation), grow and propagate it must; it has no choice in the matter of welcoming rain or plunging its roots into the ground, it can never know the bother of carrying an umbrella or the comfort of putting its feet up on a chair.

On the other hand, if the efficient cause is indetermined, then it not only is not the source of moral necessity, it is the source of no necessity whatever. Because the knowledge and appetite of the animal is determined to particular goods, it must respond to this particular good, cringe from that, rush in terror from another as a driven thing; because man's appetite is determined to the universal good, however heavy the weight of years or the burden of disillusionment, he must roam the roads of the world in tireless quest of the all-satisfying; but because a man's knowledge and appetite are determined *only* to the universal

[11] *Ibid.*, I-II, q. 72, a. 3; q. 1, a. 2; *Lib. Physicorum*, l. c.

good, he is his own master in the face of any particular good. He is not determined, but indetermined in the face of this or that particular good. As an agent, he cannot give to his acts a determination that he does not possess. One morning he will hum while he shaves, the next remain stubbornly silent while in the next room the whistling kettle gives out its wheezing music morning after morning with never a variation.

In other words, there is no possibility of finding moral necessity in any other than an indetermined agent. And in an indetermined agent there is no hope of finding an intrinsic cause of that moral necessity precisely because of the indetermination of the agent. Such determination as does find its way into the acts of an indetermined agent must come from the end or final cause of the action. A man puts on his rubbers at one time and at another takes off his shoes because he has different ends in view in the two actions; if he has no reason or end in view he cannot do either the one or the other; if he does, it is because he has ceased to be indetermined, ceased to be rational; he is driven by things beyond his control, and we lock him up as insane.[12]

Determination, then, in the actions of an indetermined agent—or moral necessity—is a matter of finality, of end. This is not a peculiarity of moral necessity, it is a common note of all necessity; the peculiarity of moral necessity is that it is exclusively a matter of finality, strictly ruling out the formal, material, and efficient causes as its sources. As a result of this common note of finality in necessity there is an intimate bond of union in the necessity of all nature.[13] All the acts in all of nature are called into being by an end or goal, for action in its essential notion means no more than movement to an end or possession of an end; it exists either because some perfection is not had and is being reached out for, or because a perfection is had and must be held on to.

[12] *Summa Theol.*, I-II, q. 1, a. 2; *Contra Gentiles*, l. c.: Ea vero quae voluntate fiunt necessitatem habere non possunt, nisi ex sola finis suppositione, secundum quam debitum est fini ut ea sint per quae pervenitur ad finem.

[13] *Summa Theol.*, I-II, q. 91, a. 3; q. 93, art. 1 et 6; q. 1 art. 1 et 8.

Moreover the objective end of all things is exactly the same, i. e. God; some natures reach this end in one way, some in another, each in accordance with its native capacities, but all aim at the same thing. Consequently there can be and is a complete unity of direction, i. e. a complete unity of law, or, in other words, there is a complete unity of determination. Back of this unity in nature and nature's action there is the unity of necessity and behind that there is the unity of end or goal.

That man should be subjected to this universal necessity of nature is demanded by his place *in* nature.[14] He is not above nature nor below it, he is in it; he is not a freak standing in the dreary solitude of a recent immigrant, strange, afraid, out of place; rather he is a part of nature. Like all the rest of nature, he is moved by that common direction to the common end, subject to the common bond of necessity.

Yet that there should be a sharp difference between the natural necessity that rules his actions and the necessity that rules the rest of physical creation is demanded by the sharp difference between his rational nature and the irrational natures of all else in the universe. The movement of nature to the goal of nature does no violence to the individual natures of other creatures; of course it does no violence to human nature. All else is moved to the common end according to its nature; so also is man.

That there is a sharp difference, of kind, not of degree, between rational and irrational nature is attested by its attempted denial; for only a man can stand far enough off from himself to be able to deny himself.[15] The difference in action is the difference between movement by instinct and movement by reason, between being driven and also driving; it is the difference between determination and freedom, between absolute and moral necessity—difference between movement according to irrational and rational nature.

The basis of this difference in action is precisely in man's

[14] *Ibid.*, II-II, q. 104, a. 4.

[15] The difference exists—*Ibid.*, I-II, q. 17, a. 2 ad 3um; II-II, q. 50 a. 2; q. 104, a. 1.

ability to know the end as an end and so to know the meaning of means. It is the infant or the animal that puts a sweepstakes ticket into its mouth and chews it up; not the adult. The adult knows the meaning of this ticket, knows its *relation* to an end. Or, more briefly, he is capable of recognizing ordination and of ordaining.[16] He is capable of that distinctly human faculty of moving and being moved by reason and will rather than by force, to command and be commanded, rather than be pushed.[17]

Moral necessity, then, like all necessity in nature, is closely linked up with the notion of order, more specifically, with the order to an end; unlike the rest of necessity in nature, it can be found only in an indetermined agent. In all the rest of nature, other than man, the order flowing from the intrinsic causes is identical with the order from the extrinsic final cause, for the other agents in nature are determined. In the creatures which alone are subject to moral necessity, i. e. those which are indetermined or free of absolute necessity, the only natural necessity is a suppositional or moral necessity flowing from the final cause or goal.

It is clear, then, that the only compulsion to which man can be subjected as man, i. e. as an indetermined agent, is moral necessity, which is established by a necessary end in reference to acts which are necessary for the attainment of that end. To state that this act is obligatory is to declare that this act is necessary in relation to this necessary end; obligation will be no more than the relation of a necessary act to a necessary end.[18]

Ultimate Sources of Obligation

The question of the source of obligation is evidently the question of the source of order in acts leading necessarily to a necessary end. The *basis* of this order must always be the good

[16] *Ibid.*, I-II, q. 17, a. 2 ad 2um; II-II, q. 50, a. 2.

[17] *Ibid.*, q. 104, a. 1.

[18] *Ibid.*, I, q. 21, a. 1 ad 3um: Dicitur esse suum alicujus (quod ei debetur) quod ad ipsum ordinatur, et non e converso. In nomine ergo debiti importatur quidam ordo exigentiae vel necessitatis alicujus ad quod ordinatur.

or the end, for the acts of man are essentially means to an end. As means they are incapable of order except in relation to an end, a fact readily recognized in the pity or irritation awakened by the idiocies of the absent-minded. It is the end which is the first principle in the practical order; all else must be referred to it. Indeed it is the money lender in the order of action; all else operates on the funds it advances. Only an absolutely necessary end can be the basis of strict obligation, for no means can be more necessary than the end from which it derives its necessity. It is the ultimate or absolutely necessary end which is the root of strict suppositional or moral necessity and so of obligation.[19]

But the order is essentially *produced* by an intellect. Obviously the work of ordering involves the consideration of one thing in reference to another; it demands the grasp or the establishment of a *relationship* between these two. On both counts, that of consideration and the knowledge of relationship as such, it is a work restricted to an immaterial knowing faculty, i. e. to an intellect. Moreover, order in creatures is a created thing, and, as do all other things created, it traces back to a first cause intelligent by its very essence.

That *first cause* of all order in general and of the order of human acts, or the moral order, in particular, is the intellect of God. To postulate disorder in the effects produced by God is tantamount to a denial of divinity; yet to insist that the order in such created effects as the acts of man is the exclusive work of the first cause is naively to disregard the facts about

[19] *Quodlibet.*, V, a. 19: praeceptum importat rationem debiti; debitum autem aliquod est dupliciter. Uno modo secundum se; et hoc modo finis est debitus in unoquoque negotio. . . . Alio modo est aliquod debitum propter aliud; scilicet id sine quo non potest perveniri ad finem; . . . Illud vero quod ordinatur in finem ut melius aut facilius finem consequatur, si sine hoc aliqualiter possit haberi finis, non habet rationem debiti.

Summa Theol., II-II, q. 44, a. 1: In tantum ergo aliquid cadit sub praecepto, in quantum habet rationem debiti. Est autem aliquid debitum dupliciter, uno modo per se, alio modo propter aliud. Per se quidem debitum est in unoquoque negotio id quod est finis, quia habet rationem per se boni. Propter aliud autem est debitum id quod ordinatur ad finem.

God, man and creation. The moral order has a *secondary cause*, the intellectual nature of man.

As we have seen in the previous pages of this article, the *act* of man's intellect by which order is established in the field of action is the act of command or precept, an act of the practical intellect. Of its integrating elements (ordering, intimation and motion) it is immediately and substantially to "ordering" that obligation must be traced since obligation is primarily a thing of order, i.e. a relation; fundamentally and radically it must be traced to "motion," for it is after all an *effective* relation.

To trace moral obligation to its last source in the intellect of God and of man is really no more than a statement of the unity of man's direction with the direction of all nature; it is to insist upon man's place in nature as an harmonious part of it. For the divine reason ordering all things is the eternal law; and that universal order is established by the establishment of the forms of things. The order thus established is the natural or intrinsic order, an effect possible to God alone.

The intellect of man, ordering the acts of man, is no more than a secondary cause acting under and in virtue of the first cause (as all secondary causes must act), but in the moral, not the physical order. This is again an intrinsic and natural, though a moral, order. The divine law directing all things by way of their forms, also directs man by way of his form, i.e., by way of his rational soul and its proper act of intellect. In a word, the proximate cause of man's direction, as of all else, is the essential order of things.[20]

Restriction of Obligation to Intellectual Nature

It is clear then that it is the privilege of intellectual nature to impose obligation since obligation is a consequent of order, and order is a proper, an exclusive, effect of reason. For exactly the same reason it is only an intellectual nature that can be

[20] For fuller treatment of this question see Garrigou-Lagrange, *God: His Existence and Nature*, Vol. I, pp. 199 ff., pp. 331 ff.; Lehu, *Philosophia Moralis*, p. 124, p. 250; Farrell, *The Natural Moral Law*, pp. 130 ff.

obliged. The profound truth that subjection to obligation is no less an exclusive privilege of intellectual nature than is the power to impose obligation is inherent in the very nature of obligation.

The subject being obliged must produce the same act as that by which his superior obliged him i. e. an act of precept or command. A man who moves in obedience to an obligation hasn't grabbed himself by the arm and pushed himself into action; he has moved himself by intellect and will. That movement, as we have seen, is moral movement, movement involving not a matter of extrinsic, nor of absolute, but of suppositional, necessity. In other words, subjection to suppositional necessity involves two things proper to intellectual nature: first, a knowledge of the end as an end and the relation of means to that end; secondly, free choice, indetermination in action, absolution from extrinsic or absolute necessity. It is because he knows the end as an end that a man can construct artificial ends, foolish fantastic things, that still serve the purpose of calling forth action and furnish reasons, however frail, for disregarding the moral compulsion of solidly real ends. The subject must know the relation of means to end to appreciate alternatives or to refuse any means whatever, i. e. in order to choose. Reducing his choice to action, obedient or disobedient, or obedient in this way or that, the subject passes from the order of intention to the order of execution over the solitary bridge of command.

We cannot say he obliges his body, for while his soul is capable of command, his body is incapable of obligation. And this incapacity is as marked in all irrational creation as it is in the body of man. These things cannot say effectively that they will or will not do this or that; they are driven, not driving, for they cannot know the relation of means to end nor can they have free choice. To be obliged is a statement of and a prerogative of mastery.[21]

[21] *Summa Theol.*, I-II, q. 17, a. 2, ad 2um et 3um; II-II, q. 50, a. 2.: servus per imperium movetur a domino, et subditus a principante; aliter tamen quam irrationalia et inanimata moveantur a suis motoribus. Nam . . . Sed homines servi, vel quicumque

It is not only true that intellectual nature alone can oblige and be obliged. Intellectual nature, by its very essence, *must* oblige and, short of divine nature, *must be* obliged.

Nor is this statement difficult to establish. The sole sufficient reason of being of a power or faculty is its proper effect; every power in nature has an order to its proper effect, an order proceeding from the intellect of God. A man whose stomach is revolted at the sight of a good breakfast is indisposed. If he were well disposed he would, like all well disposed things in nature, have an order to—not away from—all those things to which by his very nature he is ordained, such as breakfast.[22] An intellectual nature by its very essence is an ordering and a ruling nature, for intellect is the principle of order and the measure or rule of the order which proceeds from it. As such it is directive, effectively directive, i.e. it moves by intellect and will or it obliges; in other words it has dominion, for direction is the essential note of dominion.[23]

On the other hand, intellectual nature, by its very essence, can be subject only to moral, not physical, necessity. Short of the divine nature which is its own end, every intellectual nature must move towards an end or goal by its proper action of intellect and will, i.e. by command, for action is the fruit only of command. Obligation is the inseparable consequent of command. To ask that it be wholly and exclusively responsible for its own movement is to demand too much from an indetermined nature, for it is asking that it be responsible for the extrinsic cause, the end, which alone explains its action and the necessity of the action, and which is indeed the very reason for the existence of the intellectual nature. This is not only asking that it give birth to itself but that it be responsible for the ultimate reason for its own birth.

If a created intellectual nature were, by an impossible hypothesis, to be free of all obligation, it would, by that very fact,

subditi, ita aguntur ab aliis per praeceptum, quod tamen agunt seipsos per liberum arbitrium; et ideo requiritur in eis quaedam rectitudo regiminis per quam seipsos dirigant in obediendo principantibus.

[22] *Contra Gentiles*, lib. III, c. 78. [23] *Ibid.*, c. 78 et 81.

be extracted from the universe, the order of nature, in which it moves, released from the universal direction of nature to an end and set loose to whirl in mad chaos that would be a negation of all order. Indeed, without this visualization of head-on crashes with stars, the removal of the need for obligation would, in its way, parallel an operation for the removal of a soul from a man—and with the same result of the destruction of the individual nature.

All intellectual nature, as created, is necessarily limited, i. e. it has something above it; all intellectual nature as intellectual, has something beneath it, both within its own intellectual order and outside that order. Since it is the universal order of Providence that the inferiors be moved to their end by the superiors, that the superiors move the inferiors to their end, intellectual nature moves and is moved to an end. Moreover it is moved and moves in the one way proper to it, i. e. by intellect and will, or by the act of command. And, as we have seen, command of its very nature involves obligation. So that intellectual nature, by its very place in nature, demands that it oblige and be obliged. Briefly then the answers to the two questions asked at the beginning of this article (pg. 6) are: (1) Obligation cannot be kept out of human life. (2) It is primarily a product of intellect.

Summary

I. *Presuppositions of moral obligation:*

1. Intellectual natures—as sources and subjects.
2. A hierarchy of being, movers and moved, superiors and inferiors.
3. An absolutely necessary (or ultimate) end as yet unattained—as a basis of absolute moral or suppositional necessity.
4. Actions necessary, supposing the necessary goal—as material for obligation.
5. Act of practical reason, which is command—producing the order of means to end.

II. *Precept, Obligation and Necessity:*

1. The act of precept is immediately and substantially

directive or ordering. It is precisely from this note of precept that obligation arises and so it is primarily a product of intellect. Radically—and no less essentially—obligation is motive or effective and thus is a product of will.

2. The extrinsic cause, or end, which sets up the order at the basis of strict moral obligation, can only be an absolutely necessary end. Its necessity is participated by the means in proportion to the proximity of their relation to the end. The necessity of the means is always a suppositional necessity, i.e. it is always in reference to the end from which it springs.
3. Neither precept nor moral necessity is the obligation. Precept is the immediate cause as the cause of order; necessity is the basis upon which alone order can be founded in practical things. Obligation is the relation of the necessary acts to the necessary end.

III. *Corollaries:*

1. Obligation, considered in relation to nature:
   a) Is inevitable to intellectual nature.
   b) Is essentially necessary to intellectual nature.
   c) Is the note of harmony between the direction of human nature and of all other natures.
   d) Is desirable as primarily a direction, a push towards the good.
2. Obligation with immediate reference to the individual:
   a) Is a statement of his independence and the basic dependence from which this flows.
   b) Is a declaration in action of his rationality.
   c) Is an insistence on his significance and truth.
   d) Is a recognition of order and stability.

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SOCIAL UNITY AND THE INDIVIDUAL

Stated in simplest terms, a social problem is merely a difficulty which people experience in living together. It goes without saying that there are many difficulties, and so, many problems, in contemporary social life, from its most elementary form, domestic society, to its most complex, world society. When specific difficulties arise there is an attempt made, either by the parties immediately concerned or by third parties, to discover their causes and to apply effective remedies. The wise counsel of a friend or a pastor of souls may prevent the disruption of a family by divorce; a joint conference of employer and employees may obviate a disastrous strike; an action in court may clearly determine apparently conflicting rights and so forestall recourse to personal combat; an international board of arbitration may serve to moderate national passions and so avert war. But in all efforts of this kind to preserve social unity, appeal is necessarily made to some general principles, acceptable to both sides in controversy, as norms for reaching just conclusions. In other words, there is always in the background some theory or philosophy of man and of society, of law and of right, in the light of which particular conflicts are resolved. Now it is not impossible that a given conflict may be eliminated by the application of an erroneous philosophy, in which case, as in settling marital difficulties by divorce, a wrong precedent is set; thus the unity of the larger social body is damaged for the sake of the individuals in the smaller and constituent body. Again, a decision may be rendered on some controversy over the use of wealth on the erroneous principle that the right to private property is an unlimited right. In this event also the claim of the individual is protected even though injury thereby results to the common good. In any case of conflict within society the question of the status of the individual within the social body, or the nature of his true relations to it, is bound to arise, and the correct answer to this question must be found

before any just decision can be made either as to individual rights and liberties or as to the legitimate extent of public authority acting in the name of the common welfare. It is the purpose of this paper to consider this question.

I

In philosophical language it is a question of the one and the many, or more precisely, of how to explain the existence of a multitude which nevertheless possesses unity. If we say that that is impossible, it becomes a question of the one or the many, and thus a question as to whether it is more reasonable to admit the all-embracing one and to deny the multitude of individuals, or to admit the individuals and to deny the bonds of unity. Must we then be either ethical monists or ethical anarchists, or is it possible to retain an ethical dualism which incorporates a genuine synthesis of unity and multiplicity, and provides for a legitimate status for the individual even while he is a member of a unified multitude? Stated in this way, it is clear that our question is but an integral part of the far larger question of one of the basic attributes of the universe as a whole, that is, a question of whether its unity is generic, or only analogical; a question too of whether the unity of conceptual knowledge is supplied by the mind, or discovered by it in extra-mental reality.

The moral order, it will be conceded, presupposes and is conditioned by both the real and the logical orders, for society is made up of real agents guided in their actions by the intellectual apprehension of ends. This being so, the question of the one and the many in the moral order will be solved on the basis of principles drawn from the real and the logical orders. Now it is a principle of metaphysics that the only subject of existence is the individual. Finite existence is a perfection conferred upon something that is possible. To be is to be something, and so a definite entity, one with itself and as such not to be confounded with anything else, that is, an undivided whole, an individual. Its unity is the undividedness of its being. Its status as an

individual excludes the possibility of its being merged or fused with or of "finding its essence in" any other being,—it is incommunicable. The manifold of experience is a multitude of individual things, each existing and acting in its own right, each pursuing its own end, and yet that manifold is also somehow a unity. The world is one, and mankind is one, and truth is one. But how can we predicate unity of a group or class of individuals, each of which is itself an incommunicable unit? How can we speak of animal, when only animals exist, or of man, when only men exist? Does not existence itself preclude any other unity except the unity of the existing individual? In other words, how are logical or moral wholes possible? At any rate, how can such wholes have any but a subjective kind of unity, a mere thought-or-willed-togetherness? Or, to put it the other way round, if unity is a transcendental attribute of being, how can we without contradiction speak of beings, and so of unities or wholes?

II

Well, to say that a thing is exclusively itself is not to say that it is essentially simple. There are, no doubt, simple beings whose unity is the undividedness of their uncompounded essences. But unity does not exclude composition, nor therefore diversity, and so neither various modes of being, such as substance and qualities. It is by recognizing this fact that in the real order we can speak of a real one-in-many, potentially so, and, in the logical order, of a one-in-many, actually so. As the individual is the principle of multitude, so by mentally divesting individuals of the attributes which individuate them within the multitude, we apprehend the reality (substance, essence) specifically common to them, the real, though potential, grounds for the actual logical unity or universal. While then each animal, each man, each individual of any species, is and ever remains, in the existential order, itself whole and incommunicable, while it retains its own transcendental unity, each is, nevertheless, a member of a whole which embraces all individuals of a like nature. The unity of this whole is not, however,

purely logical, in the sense that it derives exclusively or arbitrarily from the mind itself. If scientific and philosophical knowledge is a process whereby the mind reduces to unities, or logical wholes, the manifold of sense experience, the principle of this unity is not drawn from its own resources, but rather from the realities investigated. Its syntheses result from previous analyses. Analysis reveals a one-in-the-many, a one multiplied in many individuals, a one which when abstracted from the individuating qualia, is seen to be the specifying principle of the manifold itself, the reality in terms of which definitions are drawn up and basic classifications made. The essence, then, regarded in its physical entity, is one and entire, actually singular and concrete; but, since each is understood by the mind through one and the same concept, a concept which can be predicated of each member of the class to which it belongs, taken distributively or collectively, in exactly the same sense, the concrete, singular, physical essences become in the mind one undivided logical whole.[1] The multitude of the real order has been synthesized into the unity of the logical order, the potential unity of the real has become the actual unity of the logical. And as the actual is the complement of the potential, so there is a relationship of cognitive correspondence of one with the other. The incommunicable individual retains its essential and integral unity, but this, being a unity of composition, the unity of a being compounded of substance and accidents, does not exclude the possibility of its entering into a logical whole whose principle of unity is the specific commonality of its substance with the substance of other individuals of the same class.

III

But what of a moral whole, a social unity, a society? It too is a one-and-many. It is a multitude of complete individuals, free beings, possessing a stable unity. This element of freedom adds a new difficulty to the problem. For in addition to the

[1] St. Thomas, *De Ente et Essentia*, c. 4.

task of harmonizing the one with the many we have to deal with the apparent paradoxes of liberty and law, of independence and interdependence, of individualism and the common life, of private good and public welfare. What, then, is the character of social unity?

Society has been called both organic and atomic. Yet in a sense it is neither. As the universe is not an animal, so society is not a man, even a conglomerate man. To speak of society as an organism may be a useful analogy; it is nothing more. An organism possesses substantial unity. Its members can in no sense be independent of the whole body. They exist in it and for it and are wholly subordinate to its welfare. Each is a function of the whole and they are so coordinated with and subordinated to each other as to minister to the welfare of the whole organism. Apart from the organism, the living body, they have neither meaning nor significance, for they cease to be. As parts or members of the whole, none is an individual, none exists *sui iuris*, none is an end in itself, none has or can have any activity apart from the whole. They are one with the whole with a unity that affects their very substance, and the principle of that unity is intrinsic to the organism itself.

Doubtless society is similar to an organism, but similarity implies likenesses with differences. Here the differences are not superficial, but radical. The resemblances lie in the functional relationship of the members respectively of the social and the organic whole, not in their ontological status as members within the whole. In both cases there is cooperation of the members for the good of the whole, an interdependence of member on member, an interchange of goods, a solidarity in which the good of each is to a degree the good of all. But none of these relationships are of the same kind or degree. It is only by doing violence to the facts that the cooperation of individual with society, or of group with group within society, can be put in the same genus with the cooperation of the will with the hands or feet, or the cooperation of the intellect with the brain and the nervous system. Still greater violence is done when the solidarity of the members of society is identified with the soli-

darity of the parts or systems of a living organism. And the violence consists precisely in ignoring the fact of human personality, and that persons do not cease to be their individual selves, nor lose their individual rights nor are bound by individual duties on becoming members of society.[2] Metaphors are indeed legitimate, but however frequently they may be repeated, the similarities on which they rest do not become identities.

The view that society is atomic is neither so clear nor so grounded in verisimilitude as the view that it is organic. It is in fact a view entertained by none except the critics of democracy, that is, the protagonists of the totalitarian state. As will be seen later, it is not true at all of genuine democracy, and only partially true of pseudo-democracy. It arises, these critics tell us,[3] from the error of identifying society with the sum of its members. Each member is as it were an atom, a complete and independent unit, which by no stretch of the imagination can form a genuine unity with the others. Society, or the state, is thus robbed of its true nature as an entity existing above and independently of the succeeding generations that enter into and pass out of it. True social unity and geniuine continuity require that the state be regarded as something over and above its members. It subsists independently of them. They exist within it and are totally subordinate to it, deriving all their rights and their full significance as living agents from it. Liberalism in theory and parliamentarianism in practice, with fantastic notions of individual liberty on the one hand, and frequent change of ruling personnel on the other are incompatible with either social welfare or genuine sovereignty. The individual finds his true liberty in complete subordination to the state, since it is for the state that he exists and since outside of it he has neither importance nor significance.[4]

[2] Cf. St. Thomas, *Ethicorum*, iv, 5.

[3] Cf. Rocco, "The Political Doctrine of Fascism," in *International Conciliation*, Oct., 1926, p. 295.

[4] Cf. Rocco, Alfred, *ibid.*, p. 403.

IV

The obvious difficulty here is the failure to differentiate between substantial unity and moral unity, between a literally organic and an analogically organic whole. It is true that each individual member of society is an "atom" in the sense that he is ontologically a complete being existing in his own right and having an end proper to himself, and so also certain duties and rights prior to and independently of the state. This very completeness of being is the basis of his independence and the grounds of his most essential and cherished liberties. It is this completeness also that makes it impossible for him to be a part of or wholly subordinate to society conceived of literally as a subsisting organism. Finally, it is due to this completeness of being that he is forever an individual, a person, whole and incommunicable. Nevertheless, from this fact it does not at all follow that men are self-sufficient. Completeness on the finite level can never signify more than a relative perfection, which of course leaves room for many imperfections. These imperfections indicate the need men have for one another's services and mark them also as social beings, as interdependent, as meant by nature to live in and seek their full natural perfection in society. For it is simply a truism to say that the individual living wholly by himself could never reach his full physical, intellectual, or moral development. Of all living things the human infant and the human adolescent are the least able to shift for themselves, the most dependent upon others for the common necessities of life and for the direction and the training which will eventually enable them to make their own way in the world. While the young of other species are born into an order predetermined for them, and equipped with powers of activity to begin successful living within that order, human beings, by nature free, are under the necessity of setting up for themselves an order of living which will be in conformity with their nature and of training their intellectual and moral capacities so as to be able to reach the ultimate good of this order, that is, the ultimate good of human life.

In other words, individuals of the human species must be educated, and education is a social process. Man is by nature a social animal. Society is the spontaneous result of the efforts of men seeking a suitable means of satisfying a common need.

It follows therefore that man, both in nature and in time, is prior to and, in his existence independent of society, and that society is not his ultimate end, but merely a means to an end. It follows also that as an individual he has an end that is not identical with the end of society. That he cannot rightly be wholly subordinated to society, that society exists for him and that he does not exist for society. What his ultimate end is, is determined, not by considerations of social welfare, but by determining what it is that will enable him to reach his full perfection as a man. That this does not and cannot consist of any social or finite good,[5] or an accumulation of them, is clearly seen when one considers the attributes of a final end or perfect good. A final end in the moral order—and it is of that we are speaking—is one which renders the desire for any ulterior good impossible. It must be of such a nature as fully and permanently to satisfy the rational appetites of man, to exhaust all their latent capacities, to bring them to their full fruition. But the briefest sort of reflection shows us that such attributes are not to be found in finite goods of any kind. True, they satisfy in a measure and for a time, but no more. Their possession brings a modicum of joy and happiness, but it also brings care and worry and fear of loss. Finite goods are by nature limited and corruptible, never ends in themselves, but only means to some end. The simple fact is that man can know God, the infinitely perfect Being, and for that reason he cannot help desiring to possess Him, nor can his desire ever find surcease until it possesses Him. Man will thus find his perfection, not only outside himself, but also outside all finite things. His ultimate end is God.

It is precisely this conception of man as a person, a complete, yet not self-sufficient, being whose ultimate end transcends both

[5] Cf. St. Thomas, *Summa Theol.*, I-II, questions 2 and 3.

self and society that rules out both social atomism and social organicism, and enables one to assert without contradiction that society is both one and many, and not merely one or many. There is multitude or plurality in its members, but there is unity in its ordered whole. Apart from its members, society has no substantial existence and accordingly no substantial unity. Society is the multitude of its members, whence its plurality, but it is also a multitude characterized by a definite and stable order, whence its unity. As the principle of this union, which is the divinely instituted end of social living, is external to society, so the unity of society is a unity of external order. It does not affect the substance of individuals, but only such of their actions as regard cooperation with other members toward the common welfare, the end of society. It is the attainment of this end that provides the reason for its existence, defines its functions and sets just limits to the exercise of its power.

V

Such is the concept of social unity in a true democracy. Government exists for the sake of the governed, in order to enable them to achieve those things which by individual effort they could not attain. Society is conceived as a union of many free persons striving for a common end, and, *to that extent,* submitting to authority, exercised indeed by one (or several) of their own choice, but which is ultimately derived from God, the Author of society as He is of the individuals and families that compose society. The bond of their union is not internal, wherefore society is not a real organism, not indeed a reality at all distinct from the members. And yet because in the social union there is interdependence of group on group and of all groups on the institution of government, in order to the satisfaction of their common needs, social life closely resembles the interdependent parts and systems of a real organism. There is a relation of proportionality between the welfare of the individual organism and social welfare. Within the limits permitted by the ontological completeness of the individual members of

which the social whole is composed, it may be said that what the subordination of the parts of an organism is to its welfare, that the subordination of the individual members in society is to its welfare. But beyond that the analogy does not hold.

On account of these limitations, however, one may not qualify democratic society as atomic, as though in all matters the individual citizen could prefer private good to social good. For, though he is within the social whole, and a part of it, though as a part he still retains his full integrity and inviolable personality, ever justified in vindicating to himself such rights as spring from his status as a complete moral agent, the rights, that is, of life, liberty and the pursuit of his own ultimate end, he is, nevertheless, because of his personal insufficiency, bound together with all other citizens in the solidarity of social life. For the exercise of his personal and inalienable rights, the pursuit of his own perfection as an individual, not only do not militate against but actually promote the general welfare. Moreover, in this very exercise of his natural rights and in the fulfilment of his natural duties he derives great assistance from social institutions. His social life is not at cross purposes with, but complementary of, his individual life. His liberty is not destroyed but safeguarded by law, his independence is increased through interdependence, his private welfare is bound up with the common welfare. Individuals as parts of society are homogeneous. They have the same nature, the same essential needs, the same specific ultimate end. They have, therefore, a real community of interests, and so also real obligations of justice, and because of their common incorporation in the Kingdom of God, an obligation of charity toward one another. To render to others what is their due, and beyond that, to manifest toward them an affection similar to the love he bears himself, are but ways in which the individual recognizes the spiritual bonds which unite him with others in the vital solidarity of social life.

The weakness of both the totalitarian and the ultra-liberal theories of social unity is their failure rightly to evaluate the position of the individual within the social whole. The former exaggerates his dependence upon it, the latter his independence

of it. The one by insisting upon his complete subordination to the social body ignores his spiritual nature and supernatural end, suppresses his natural rights, ridicules his natural duties, and robs him of the liberties that are his by reason of his moral nature and human personality. It calls upon him to dedicate his energies and his life to a particular social order or racial group—an object by nature incapable of satisfying his rational desires, and so of allowing him to reach his perfection as a man. The other by minimizing his dependence upon the social body incites him to exaggerated estimation of his own importance and ability, to the false conception of right as the freedom to do as he likes so long as he is willing to allow others to do the same, and to the conviction that he may justly pursue his own fortune without much concern for its possible effect upon the other members of the social body. While totalitarianism seeks to deprive the individual of property and of power, ultra-liberalism tends to set no limits to the personal accumulation of wealth or to the grasping of power. These represent the two extremes, and though the former is undoubtedly the worse, it owes its existence precisely to the intolerable conditions brought about by the abuses of the latter. Sound judgment cannot therefore entertain the view that the modern world must choose between the two. It insists rather upon that synthesis of the two, which consists in the recognition on the one hand of the limited independence of the individual within the social whole and, on the other, of the genuine moral solidarity of all individuals within the one social structure, one, that is, in its external order, and many in the multitude of its members.

VI

Now in a being endowed with substantial unity, unlike one having only a unity of order, there may be no activities of a part which are not likewise activities of the whole. Of human beings it may be said that it is the whole man that thinks, that wills, and that acts. All his actions are said to be of the person. This is true because the principle of his being is also the princi-

ple of his actions, and so also of his unity. Despite the duality of body and soul, there is between them a substantial union resulting in one undivided whole with a single vital principle which is the radical source of all man's activities, so that they are all referred to him as to a person, and not to his diverse integral parts. There neither is nor can be in such a being such a disarrangement of parts that while union is maintained unity is lost. Here there is realized and maintained a union of equal and unequal parts in such manner that none may assume or arrogate to itself a rôle advantageous to itself, but disadvantageous to the welfare of the whole. There is in the whole a hierarchy of parts, a subordination of one to another and a coordination of one with another so that the symmetry of the whole is maintained.[6] This would also be, inasfar as possible, the ideal of unity in the social body. But alas in it there may be activities of the parts, whether of individual or of groups, which are not the activities of the whole. For here the parts are free agents, and being free, they may and often do seek individual ends which are at variance with the common welfare. As the parts become selfish and self-seeking, strife between individuals and groups arise, the unity of the whole is weakened, the necessary subordination of the individual to the whole is lost sight of, and the notion of human equality is falsely interpreted as justifying unrestricted competition and freedom, except after the manner of a policeman interfering in a public brawl, from all government regulation of social activity. Or, what is still worse, those wielding public authority may so overstep the limits of their official power as to prohibit all initiative and freedom on the part of the individual, deprive him of all independent status, and insist that the full direction of his life be accepted from them.

The problem then that confronts those who would defend the individual both against his own exaggerated claims for independence and against those who, in the name of public welfare, would totally deprive him of it, is to provide him with a motive

[6] Cf. Grabmann, Martin, *St. Thomas' Philosophy of Civilization.*

[illegible] attractive to make him willing to subordinate his [illegible] the common welfare in all matters except in those [illegible] his natural liberty of conscience. No easy task, to be [illegible] there is no other way, short of violence, in which free [illegible] effectively be moved to pursue a definite goal. It [illegible] course follow that once men are enlightened on what [illegible] highest interest they will all at once choose to make [illegible] means to attain it. Yet experience does show that [illegible] will do so, for the majority of men love truth [illegible] error, and peace more than violence. What then may this motive be?

It will be easier to say, first, what it is not. It is not humanitarianism, for, despite the general truth that man feels and manifests sympathy and pity and compassion for his kind, and despite the historical examples that might be cited of extraordinary devotion of one individual to another or to a group, no single person nor any combination of them is so perfect that others may rightly find in their service a sufficiently compelling reason for the habitual sacrifice of personal pleasure or profit or both, or that in such service they will find the full measure of happiness which they are capable of enjoying. Such devotion, where it is found, is the exception rather than the rule, and is rather to be condemned than commended. For in sober truth it amounts to an apotheosis of human nature, and a kind of fetishism as well, a travesty on truth. The same may be said of the good of race as a supreme motive of action or norm of morality. The naivete of him who proclaims that whereas the individual is nothing, the sum total of individuals amounts to everything, needs no commentary. No, the cry of every cynic has been man's inhumanity to man, which is implicitly a proclamation that men have not loved and will not love one another for their own sake, that the effective motive for a reign of justice and charity must be sought in something higher than man or the society of men. Thus our question answers itself, for over the creature there exists only the Creator.

It has been said that there are two classes of men, "those who fear lest they lose God, and those who are fearful lest they

find Him." Be that as it may, it is certain that there is no adequate substitute for Him. In a world of graded values He alone is the Absolute Value, for He alone is the Absolute Good. In the hierarchy of ends, He is the supreme end. In the hierarchy of legislators, He is the supreme legislator. Nothing in creation finds its full explanation apart from Him, the Creator. Nothing in human living is fully understood apart from His life. In Him alone is the ultimate bond of unity and gage of peace, for in Him is supreme sovereignty, the source of all law and authority and of the justice which guarantees to each what is his due. Under His supreme dominion all men are subjects of a common ruler, bound by common laws, experience the same essential needs, recognize the same essential rights. Cutting across all differences of race, of blood, of nationality, of culture, or of civilization, runs the bond of their common created humanity, the mark of their common origin in the Fatherhood of God. As members then of the same family they are brothers one of another. Thus they find themselves caught up into another social whole, all-embracing, universal, a society of the spirit, the kingdom, that is, of God. Here there is a maximum of solidarity, for it is a real democracy of persons, spiritual in its origin, in its means, and in its end. It demands as a condition of membership the exercise of that essential act of personality, which is to have love for God and for our neighbor as for ourselves. In a society thus constituted there is a perfect synthesis of the one and the many, for it insures not only a unity of order through the bond of God's will above us, but also something of the unity of a living whole through the internal bond of God within us.

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THE PHILOSOPHICAL APPROACH TO GOD IN THOMISM

If Thomism concerns itself so largely with philosophy, it is only because in St. Thomas's view practically the whole field of philosophical investigation is directed to the knowledge of God [1] and his enquiries have but one end in view, namely, " to manifest, in a spirit of filial piety towards God, the truth which the Catholic Faith proclaims," [2] for he knows by personal experience that " it is sweet and joyous to be able to see, even with inadequate and feeble sight something of the highest realities." [3] St. Thomas is fully aware of both the limitations and the value of human reason and therefore he makes his philosophic approach to the supreme question of the existence and the mode of existence of God in a spirit of profound humility combined with assured confidence in the validity of human thinking. It is this humility which causes him to recognise with crystal clarity the abyss which separates the creature from the Creator, to see the human mind confined within the narrow limits of the lowest grade in the hierarchy of intelligence; but it is his confidence in the objective value of human reasoning which supports his fearless recognition of the possibilities of real and fruitful intellectual contact with God, notwithstanding the clearly defined limitations implied in the modality of human understanding. In other words, he knows precisely to what extent God is unknowable and knowable through the unaided capacities of reason. Aristotle had written,[4] and St. Thomas quotes him with approval: [5] "As the eyes of bats are to the blaze of the noonday sun, so is reason in our soul to the things which are by nature most evident of all." But neither Aristotle nor, still less, St. Thomas supposes that

[1] " *Quum fere totius philosophiae consideratio ad Dei cognitionem ordinetur.*" *Cont. Gentiles,* I. 4.

[2] *Ibid.* 2.

[3] *Ibid.* 8.

[4] *Metaph.* 993b9.

[5] *Contra Gentiles.* I. 2, et *alibi.*

the reason in our soul is therefore entirely precluded from the discovery, and even the discussion, of God Who is at once the most knowable and most incomprehensible of all beings. Having adopted and made his own the " common sense " fundamentals of the peripatetic philosophy, the Angelic Doctor takes for granted the validity of sense and thought processes as productive of truth, a truth which essentially denotes an adequation of identity between the intellect and known objective reality, a truth which necessarily connotes and is based exclusively upon the real and actual existence of the things known. The whole strength of his intellectual position lies in his complete and fearless application of the axiomatic principles of reasoning which, being innate in the human mind, serve as the piers of a bridge between that mind and extra-mental being; " being " is itself at once the primary common predicate and lowest common denominator of the knowable.

St. Thomas is well aware that truth, or knowledge in its completest form, being the outcome of the conjunction of knower and known, is conditioned by the active and passive potentialities of both terms, and those potentialities are conditions or modifications of being. He appreciates more profoundly than its author, the Aristotelian dictum: "As each thing is in respect of being, so is it in respect of truth." [6] Not only is a thing knowable to the extent that it *is,* but further the power of knowing is also exactly commensurate with the *grade of being* or actuality of the subject knowing. God, subsistent Being and pure Actuality, is in Himself supremely intelligent and intelligible. In all things other than God, " being " or " actuality " implies both a positive element and a negative or restrictive element; it implies a measure of positive actuality or being (the specific perfection called for by the essence) and a negation of actuality or being (implied in the restriction of each thing to the limits of its specific perfection). An actual man has the measure of positive perfection called for by the definition of man: he is a rational animal; and this perfection is

[6] *Metaph.* 993b30.

measured or restricted by the limitations implied in rational animality: he is " a little less than the angels." Man's power of knowing is thus precisely conditioned, positively and negatively, by his grade of being.

Directed by these elementary considerations St. Thomas is able to embark upon his investigations into natural theology with the most accurate estimate of its possibilities and limitations. As to the essential knowability of the Supreme and Subsistent Being there could be no doubt. Such restrictions as arise, therefore, derive directly and only from the subject knowing and in no sense from the object known. Though " being " in its widest connotation is the adequate object of human intelligence, man's primary and immediate contact is with material being alone and even this is initially effected only through the narrow medium of sense knowledge. " Nil in intellectu quin prius in sensu," as the Scholastic dictum has it. While there can be and is direct knowledge of material reality, there can never be, naturally speaking at least, direct contact with or knowledge of the quiddity of supra-sensible reality. Nevertheless, indirect though it be, a valid contact can be effected and its validity is guaranteed by the unassailable first principles of reasoning together with the process of intellection implied in them. The direct and immediate object of human knowledge is material reality, but in so far as the latter has anything in common with supra-sensible reality, that reality itself can also be known. In other words, whenever and however being can be reached through material reality, being is to that extent knowable by the unaided human mind. Even Subsistent Being itself will be knowable to the extent that any metaphysically necessary community or link can be established between material reality and God. St. Thomas is not, like Aristotle, groping his way in the dark, exploring as it were the ramifications and possible extent of human knowledge. He does not, like the Greek, hopefully analyse the content of material reality and arrive ultimately, almost in amazement, at the tenuous and inevitable conclusion of the existence of a Supreme and Perfect First Cause. Armed with the truth and certitude which Faith

gives, he has a definite object in view, namely to reach upwards towards the same truth to the very limits of human reason, both for the conviction of the infidel and for the instruction of the faithful. The accomplishment of this object demands first of all a demonstrative proof from reason of the existence of God.[7] Too true to reason to allow himself to be led astray from truth by the persuasive fallacies of the Ontological group, even when the revered Anselm himself is the spokesman, he adheres firmly to the manifest truth that the quiddity of God, supremely knowable in itself, is not knowable positively and directly to the human mind. His position is not dictated by whim or fancy; it is dictated by the natural, and therefore inevitable and unchangeable, conditions of human cognition. This point is so important that it will be worth while to quote St. Thomas himself at some length.

It is clear that difficulty in the knowing of truth arises mainly from the defect of our understanding. . . . Since the human soul is the lowest in the order of intelligent substances, it participates least of all in the power of understanding; and because it is itself of its nature the actualizing principle of a body, though its intellective faculty is not the actualizing principle of a bodily organ, it has a natural aptitude for knowing the truth of corporeal and sensible things, which are in themselves the least knowable of things by reason of their materiality but nevertheless can be known through abstraction by means of phantasms. Because this mode of knowing truth pertains to the human soul as being the form of such a body and because the implications of any thing's essential nature must remain forever unchanged, it is impossible that the human soul united to a body of this sort should know anything of truth or reality except in so far as it can be brought thereto by the knowledge that comes as the result of abstraction from phantasms. But by means of the latter it cannot be elevated to the knowledge of the quiddities of immaterial substances for the latter are disproportionate to the former. Hence it is impossible that the human soul united to a body should apprehend the essence (*quod quid est*) of any immaterial substances.[8]

[7] "Praemittenda est, quasi totius operis necessarium fundamentum, consideratio qua demonstratur Deum esse. Quo non habito, omnis consideratio de rebus divinis necessario tollitur." *Contra Gentiles.* I. 9.

[8] *Comm. in Metaph. Arist.* Lib. II. Lect. 1.

It must be remembered, however, that St. Thomas's purpose is not merely to establish the truth of the proposition: *Deus est.*

> Sensible reality cannot lead our intellect to see therein what the divine substance is. . . . Nevertheless from sensible reality our intellect is led to knowledge of God to the extent of knowing the fact of His existence (*quia est*) *and other things of this nature* which must be predicated of the first cause. So that there are certain divine truths open to the investigation of the human reason.[9]

Though the divine substance is unknowable *quoad nos*, God is not, even in respect of human reason, the " absolutely unknowable noumenon." The Angelic Doctor, therefore, elaborates with exquisite genius a five-fold proof for the *fact* of the existence of God which, while being incontrovertible, provides at the same time certain vital implications as to the *mode* of that existence. It is futile merely to attempt to establish the existence of an unknown X; the peculiar value of the proof, if any, is the light thrown on the significance of X. St. Thomas has two co-ordinated ends in view; he desires to establish the fact of God's existence in order to arrive at some knowledge, however minute and inadequate, of the *mode* of that existence.

There are two methods, recognised by St. Thomas, following Aristotle, and by the Scholastics in general, whereby the truth of a proposition may be demonstrated, and each of them results in metaphysical certitude, for in each the medium of demonstration is a metaphysical entity. The first method is that which employs as medium the quiddity or essence of the subject of the proposition to be proved and deduces the conclusion by an analysis of that quiddity based upon the first metaphysical principle of identity. Thus, to prove that the man Peter has an organized body: Peter is a man; but every man has an organized body; therefore Peter has an organized body. This method of demonstration *propter quid*, as the Scholastics called it, clearly pre-supposes a knowledge of the metaphysical content of the quiddity; if the quiddity be entirely unknown this method cannot be employed. The alternative method (*demon-*

[9] *Contra Gentiles.* I. 3.

stratio quia) employs as medium not the quiddity of the subject of the proposition to be proved but the quiddity of some other known thing whose very being demands of necessity the truth of the proposition in question. In this case the metaphysical principle involved is particularly that of *sufficient reason* or in its more precise determination, that of *causality*. It is true, according to the Aristotelian dictum, that we know a thing best and most perfectly only when we know its causes, but it is equally true that we have some knowledge of a thing when we know its effects. For the principle of causality demands not only that an effect necessarily presupposes a cause but also that there should be some *formal similarity* of effect to cause. Thus, while the hypothetic demonstration of God *propter quid* presupposes an adequate knowledge of the divine quiddity, and is therefore entirely ruled out, the demonstration *quia* does not presuppose this knowledge but in some fashion and to the extent possible, as will be explained, supplies it. In the classical words of St. Paul: "That which is known of God is manifest . . . for God hath manifested it unto them. For the invisible things of Him from the creation of the world are clearly seen, being understood by the things that are made: His eternal power also and His divinity." [10]

Having rejected the possibility of establishing the existence of God by a demonstration *propter quid*, St. Thomas turns therefore to the alternative method and makes his proofs turn upon the essential and metaphysical implications of actually existing material reality whose quiddity is directly known to the human mind. The entitative characteristics of this type of reality are mutability, dependent being, contingence, gradation in perfection and finality. There are others, but these are the most fundamental and most manifest. The metaphysical implication in each case is that of causality; it is essentially included in the very notion of all these characteristics. It is thus clear that while the five proofs evolved from them are one in respect of their fundamental metaphysical implication,

[10] *Romans* I, 19-20.

the manifest difference in the formal concept of the [illegible] points results in a more varied, and therefore [illegible] multiple concept of the First Cause to which [illegible] over the resulting concept squares with the common concept notion of God and at the same time turns what was a mode of doubt, opinion or belief, into one of scientific certainty metaphysical truth, for though the divine quiddity as such unknowable to the human mind, nevertheless the term *Deus* must have some common and preconceived meaning. It would be impossible to prove or deny the truth of the proposition *X est*, unless *X* be admitted, at least by those concerned, to stand for something intelligible. Similarly it would be futile and impossible to attempt a demonstration of the proposition *Deus est*, unless *Deus* has a commonly accepted significance which is at least the concept of a possibility. This common concept may be formulated scientifically as follows: The term " God " signifies the immutable, uncaused, necessary and most perfect being, the First Cause and Ultimate End of all things known. St. Thomas's purpose is to prove apodictically that there is an objective reality corresponding to that concept. Knowledge of the *fact* of such a Being's existence presupposes and depends upon the *fact* that material effects exist; that is why the five proofs each begin with the statement of a fact of experience. Knowledge of the *mode* of that existence, implied in the terms of the concept depends upon and inevitably results from a knowledge of the *mode* of existence of material reality expressed by its entitative characteristics. Admittedly the knowledge of God's mode of existence gained in the *Quinque Viae* is inchoate and as yet indeterminate. But two significant facts are to be noted; the knowledge, such as it is, of God's mode of existence is in some sort a knowledge of what God is, and it is at the same time patient of notable expansion and determination. The terms of the multiple concept are in themselves essentially negative, derived from a negation of the positive predicates of material things; but they are none the less true and form the basis of a further enquiry into both the quidditative and qualitative significance of the term *God*. For

the moment, however, it is of first importance to recognise this salient point that the demonstration *quia* gives not only the certainty *that* God is but also some knowledge of *what* God is. If his mode of existence were known positively and perfectly, the quiddity or substance of God would be comprehended. In fact, however, it is known perfectly only to God himself, positively though imperfectly by those who enjoy the Beatific Vision or far less perfectly " as in a mirror darkly " by those who have supernatural faith; the unaided human mind cannot know the quiddity of God at all except indirectly and negatively.

St. Thomas pursues the analysis or expansion of the primary concept throughout his treatises *De Deo Uno* and in this sense " the proof of God " even as the Ultimate Reality " is the task of the entire theodicy." [11] The method of progress is signified by him as *Via Remotionis,* the process of removing every kind of defect, every implication of non-being, from the concepts of known reality and proving that the concept resulting from this process is to be validly predicated of God. It can never be an adequate predication; it must fail either through being purely negative or through being analogical and not univocal, according as the enquiry concerns the *quiddity* of God or the *qualities* of God respectively. It matters nothing that, as we come to know later, there is no objective difference between what we call *God, quiddity* of God and *qualities* of God. If we are to speak of God at all, we must perforce use terms primarily signifying some form of reality known to us. We know as a fact the objective identity of God and all things predicated of Him, but we have no concept, no terms, in which to comprehend and express that transcendent reality which infinitely surpasses the conceptual power of any created intelligence. We are therefore obliged to make use of a variety of concepts each giving, as it were, some different infinitesimal glimpse of one and the same incomprehensible and indivisible infinity. What we call the quiddity of God and what we call the qualities of God are objectively one and identical with God, but the word

[11] Sertillanges: *St. Thomas d'Aquin* I, p. 157.

" quiddity " represents to our limited mind a concept different from that represented by the word " qualities," and rightly so, for the corresponding realities in the immediate objects of our knowledge are in fact different. St. Thomas, therefore, recognising that such a limitation does not exclude the possibility of truth, first analyses the essential notes of known quiddities, such as temporal, passive, material, composite and corporeal, and from these establishes in each case a purely negative predication as to the quiddity of God, all of which can be summed up under the general term: *Divine Simplicity*. As an immediate corollary of the divine simplicity, he shows that the quiddity of God cannot be a part of God, as the quiddity is part of a material thing, but must be wholly identical with Him. This conclusion, be it observed, is verbally positive but conceptually negative. Similarly a further corollary of the same notion is equally manifest, and equally negative. In all known reality *esse* [12] is the ultimate actualizing principle in respect of which essence itself plays a passive rôle, for essence is that which is capable of receiving *esse* and limits *esse* to a determined measure of actual perfection. But such composition and interaction of diverse principles is incompatible with the divine simplicity; therefore a negation of such divergence (verbally an assertion of identity) adds the final word to the sum of negative knowledge as to the quiddity of God.

In the second corollary St. Thomas scales the highest peak in the negative approach to God. Many students of Thomism have failed, I venture to think, to appreciate the gigantic advance here made from the first corollary. The argument for the identity of divine essence and God, abscinding from the notion of *esse*, would apply equally well to any purely immaterial substance. But identity of essence and *esse* is the unique predication of God; it represents a negative statement of the personal name of God known to us positively by Revelation and Faith, as the Angelic Doctor points out:

Moses was taught this sublime truth by the Lord; when he asked

[12] I explain later why the Latin term is to be retained.

the Lord: *If the children of Israel shall say to me*: *What is his name? what shall I say to them?* The Lord replied: I AM WHO AM. *Thus shalt thou say to the children of Israel*: HE WHO IS *hath sent me to you* (Exod. III, 13, 14), thus showing His Personal name to be WHO IS." [13]

To appreciate the sublimity of this truth it is supremely necessary to understand the Thomist significance of the word *esse*, the keyword to the study of St. Thomas. We have deliberately refrained from translating it in the present context because there is no English equivalent which accurately and completely expresses its meaning. To render it simply by the word " existence " is to court misunderstanding. Used substantively the word *esse* implies far more than the mere fact of existence; it is synonymous with " actual perfection." [14] The *esse* of every individual thing is proper to that thing; [15] it includes every actual perfection of that individual. Essence, on the other hand, represents the real *possibility* of that perfection as well as the *limits* of that perfection. It is clear, therefore, that the reality of the individual, or the real actual element in the individual, is its *esse*. The *esse* of the man Peter, for example, signifies every actual perfection of this man and not merely the fact that he exists. It includes the actuality of those perfections proper to man as such, perfections higher than those of a mere animal, less than those of a pure spirit; it includes also the actuality of the accidental perfections proper to Peter as distinct from all other men. The real *possibility* of these perfections and the limitation implied in them pertain to the essence of Peter. Now if we abstract the notion of *esse* from the limiting embrace of all essence, we realise that in itself *esse* denotes complete actual perfection without defect and without limitation. This abstract notion of unlimited perfection (*esse commune*, as St. Thomas calls it), [16] is, like all other abstractions,

[13] *Cont. Gent.* I. 22.

[14] *Esse* is the equivalent of Aristotle's τὸ εἶναι, as used in the well known compound τὸ τί ἦν εἶναι, somewhat unhappily transliterated in Latin: *Quod quid erat esse.*

[15] *De Pot.* Q. 7, art. 3.

[16] *Cont. Gent.* I, 26.

a thing of the mind only; it is not a reality apart from the concrete individuals from which it was drawn, any more than man-in-general is a reality apart from individual men. Moreover the sum of all known perfections clearly does not exhaust the implications of *esse* in this absolute sense of unlimited perfection. But if it could be proved that there is an objective reality in which *esse* is entirely unlimited by any composition with essence, in which what we should call in all other beings the ' actual essence ' is in this unique instance *esse* itself, then it would follow that absolute actuality and perfection is not merely a negative abstract concept of the mind but a positive though incomprehensible, extra-mental reality. It is precisely this that St. Thomas proves in expounding the thesis: *In Deo idem est esse et essentia*, or, to use another proposition of his,[17] *Deus non habet essentiam quae non sit suum esse*. God is *Esse Subsistens*; He is not *esse commune*, for that is a mere mental abstraction; still less is He *esse proprium omnium*, for, apart from other compelling reasons, that is limited perfection. Even now we do not grasp positively what God is, for no created intelligence could conceive the content of absolute and unlimited perfection, but we do know in what absolute a fashion every conceivable defect must be denied in our predications about God.

From even this brief exposition of the important word *esse* it will be abundantly clear that " existence," which implies merely the bare fact that a thing is, is an insufficient and misleading equivalent. It will also be clear why we have insisted that in the *Quinque Viae* St. Thomas proves not only the *fact* that God is but to some extent the *mode* of that existence. It further explains our assertion that to comprehend fully the mode of God's existence would be to comprehend fully the quiddity of God, for it would imply a complete intellectual grasp of the objective content of *Esse Subsistens*. This might seem to some, however, to negative St. Thomas's rejection of the *a priori* position and to establish the validity of St. Anselm's ontological

[17] *Ibid.* 22.

argument. If the divine *esse* is God, then the proposition *Deus est* and the name *Deus* are one and the same thing, and one has only to know the term God to know at least the fact that He exists. The Angelic Doctor has forseen and answered this objection.[19] If we could see the quiddity of God, we should see that His existence is necessarily included in it because we should see that His *esse* is His essence. But because in this life we cannot see or come into direct intellectual contact with the divine quiddity, we must first of all prove as best we may that He exists in objective reality before we can know by further demonstration that there is this identity. St. Anselm's mental concept of God proves nothing as to the objective reality of God. The human mind is not the measure of reality; the truth of the concept can be gauged only by reference to the objective reality which causes it and upon which it depends. The mental concept of God *presupposes* the existence of God, for its truth depends absolutely upon the fact of that existence which must therefore be either known, proved, or assumed before the concept, so far as it has any pretensions to truth, can be formulated. But granted that the fact and something of the mode of God's existence be known, it can further be deduced, by way of negation, that His *esse* and essence are one. From this it is now known with certainty that the term God must include the fact of existence, but our knowledge of this is absolutely dependent upon the primary proof of His existence which is the *sine qua non* of any natural knowledge about God.

"*The Via negativa*," writes Dr. Patterson in his book *The Conception of God in the Philosophy of Aquinas*,[20] "represents a mode of thought congenial to mystics of a certain type in all ages and lands." In another place he says: "I . . . have called attention to the unmistakable inclination—strange in so devout a philosopher as St. Thomas—to discount the claims of mysti-

[19] *Sum. Theol.* I. 2. 1.; *Cont. Gent.* I. 10, 11.

[20] P. 101. Since its appearance some five years ago, this impressive volume seems to have found favour in some Thomist eyes, but it is in fact fundamentally marred by a complete misunderstanding of the true essence of Thomism, which is not a philosophical system but a synthesis of Truth.

cism to metaphysical importance." [21] St. Thomas is, indeed, a great mystic but he does not belong to that "certain type" of mystic. He is rigid in his distinction between the natural and the supernatural. When "mysticism" invades the province of reason it is a false mysticism; when "philosophy" incorporates mysticism within its confines it is a false philosophy. For this reason he dissociated himself as completely from the so-called mysticism and ontologism of the Neo-platonists as from the rationalism of the Latin Averroists. Experience of the supra-sensible, perception of the purely spiritual, is not to be accepted as pertinent to a rational enquiry. It is truly "worthy of emphasis," as Dr. Patterson remarks,[22] that St. Thomas makes "no appeal to religious experience as an evidence of the existence of God." In this connection it is perhaps significant that while St. Thomas makes great use of the work of "Denis the Areopagite," *De Divinis Nominibus*, upon which he wrote a Commentary, he does not make any use of the *Theologia Mystica* of the same author. The Pseudo-Dionysius, as he is usually styled, one of the earliest of the Christian "mystical philosophers" (if the combination be allowed), laid great stress, especially in the *Mystical Theology*, upon the *Via Negativa* and even overstated its significance to the extent of teaching that negatives are the proper predicates of God. The possible extremes of fatuity to which this could lead is seen in the doctrine of his 9th century disciple, John Scotus Erigena, who at the invitation of his patron, Charles the Bald, translated the writings of Denis into Latin. In his most notable work *De Divisione Naturae* John Scotus follows and expounds the Dionysian teaching on the intrinsic incomprehensibility of God and ultimately, in Book III, expounds the theory that God is the *nihilum* out of which the universe is said to be created. It is seen also in the equally irrational thesis (*insania*, as St. Thomas calls it) of David of Dinant "who dared to say that God is the same thing as *materia prima*." [23]

St. Thomas has no place for, is impatient with, the counter-

[21] *Ibid.*, p. 10. [22] *Ibid.*, p. 490. [23] *Cont. Gent.* I, 17.

feit mysticism that leads to such excesses. Conscious both of the immensity of God and of the feeble capacity of human intelligence, he neither overrates nor undervalues the " negative way." The negative approach to the quiddity of God through the quiddity of material things is soon exhausted, but there still remain the *qualities* of material things. These too, he is well aware, will lead to knowledge of God, not now however to knowledge of the divine quiddity as such but of what he will call, for the convenience of human understanding, the divine qualities.[24] We have already explained in what sense such a distinction is admissible and even necessary. From this point onwards the development of natural knowledge of God takes on a new and more satisfying positive aspect. It is no longer a process of mere negation, but results in the establishment of predicates at least partly positive. It is the way of analogy, and the bridge between the two ways is the proof of the universal perfection of God. *Esse Subsistens* means subsistent universal perfection and the total exclusion of all defect whatsoever, for any deficiency of perfection signifies deficiency of *esse*.[25] Following this, he finds open to him a multifarious and fruitful source of information as to certain facets of this transcendent perfection. This source is the whole known universe of creation. The fundamental principle justifying its use is again that of causality, but the principle is now applied precisely in view of the *similarity* which must necessarily exist between effect and cause. The causality in question is primarily efficient causality, but every efficient cause is also of its nature an exemplary cause. In other words there must necessarily be some likeness of form between the effect as such and the cause as such. That similarity consists in the reproduction, adequate or inadequate, of the perfection of the cause. If the reproduction is adequate, the similarity is one of substantial nature; thus a

[24] *Cf.* Sylvester Ferrarensis *Comm. in Cont. Gent.* I. 28. " Postquam determinavit S. Thomas de simplicitate divina, ex qua haberi potest *quid sit* Deus, secundum quod a nobis cognosci potest, nunc incipit de perfectione divina, per quod ostenditur *qualis sit.*"

[25] *Cont. Gent.* I. 28.

man, begetting a son, produces an effect which is an adequate reproduction of his own essential perfection. If the reproduction is inadequate, the perfection of the effect will be found existing is some supereminent fashion as a quality in the cause; thus the perfection of a work of art bears a likeness to the artistic perfection of the artist but is an inadequate reproduction of his essential nature. Where a cause produces effects of this latter kind, it is called in Scholastic language an *equivocal* cause.[26] In this sense St. Thomas sees God as an equivocal cause of all creation. No creature could bear an adequate similarity to the Creator, but every creature necessarily bears some inadequate similarity to its Creator.[27] Hence, wherever and however *esse* or perfection of any sort or degree is found in things created, it is a finite similitude of the infinite God and is somehow included in the divine perfection which is its source. That is the basis and justification of the whole subsequent investigation of the quality of God by way of analogy, and its peculiar excellence is that it results in a multitude of conclusions about God which are in some degree positive. We need no longer content ourselves with the knowledge of *what God is not*; we can now know something of *what sort God is.*

With this fundamental notion of analogy, necessarily included in the notion of efficient causality, St. Thomas can proceed to examine and classify the grades and variety of being and can choose what is best suited to his purpose in view of the transcendence of God as well as of the limitations of human understanding. From the one point of view he will pass over the less perfect in favour of the more perfect; from the other point of view he must utilize perfections within the scope of man's natural apprehension. Amongst the latter the more perfect are those which imply of themselves no defect whatever, even though as known to man and expressed in

[26] Not *equivoca a casu,* where the name alone happens by chance to be shared in common by things which have no other similarity, but *equivoca a consilio,* or *analogia,* which signifies not only a community of name but also some real though incomplete similarity of being. Cf. *Cont. Gent.* I. 33.

[27] *Cont. Gent.* I. 8.

human language they are not in fact without defect. Thus we see in the world of things known " good things," and by abstraction we acquire the idea of " goodness." The perfection in question implies of itself no defect, but as we see it objectively in things it does in fact include some defect, for it is merely an accidental part of a composite, and though in its abstract form this defect is eliminated another defect is implied, for it has no reality in this form outside the mind. Such perfections, then, are rightly predicable of God provided it be understood that all allied defects are absolutely excluded. Thus it is true to say: *God is good*, because this predication is truly made of created things. The perfection is common, but its mode differs as the infinite differs from the finite. It is more accurate, therefore, to add a negative superlative in order to express that mode in God. Thus the proper predicate of God is *Supreme Good* or *Subsistent Goodness*.

Obviously, then, St. Thomas will concentrate upon that object of human knowledge which is highest in the limited scale of being or perfection directly known to him. That object is man, highest of the corporeal beings, lowest of the intellectual beings, who straddles the gap between the material and immaterial worlds of reality. If his enquiry seems at times to have an anthropomorphical flavour it will not occasion surprise, for man is the best stepping-stone to truth about God, and human language must in any case be employed; but at each step he will carefully eliminate the defects implied in the human mode of the qualities which form his starting points. He will prove, for example, that intelligence is to be predicated of God, but not human intelligence. He will first segregate the essential notes of intelligence as such, excluding the limitations implied in rationality, and will predicate of God intelligence in its mode of supreme perfection. He sets himself out to exhaust the possibilities of knowledge thus presented by nature as summed up in the person of man. This magnificent undertaking, first offered to the more learned in the *Summa Contra Gentiles*, is presented in its perfection in the *Summa Theologica*.

Though we have discussed only the more natural element in

his theology, it is to be understood that St. Thomas uses the same media to expound as far as it is patient of exposition the content of Revelation. The outcome of his undertaking, itself a masterpiece of organic unity, represents the most comprehensive effort on the part of any human intelligence to know God through the medium of Reason and Faith. St. Thomas did not live to complete the actual writing of the great *Summa Theologica*. Urged on to this by his friend and disciple, Brother Reginald, he answered: " I can do no more; such things have been revealed to me that all I have written seems to me as straw." We cannot know what Vision of God had been vouchsafed him, but we can understand how pitiable and useless is a dim candlelight reflection to one who faces the blaze of the midday sun with the eye of an eagle. He had seen some vision of God Himself. Is it a thing of wonder that his former glimpses of the divine splendour, reflected so dimly and inadequately in the mirror of created things and seen by the poor candlelight of human reason, seemed to him so worthless in comparison? But to those many of us " who sit in darkness," to whom the Vision is as yet denied, the Angelic Doctor is as a light that has discovered for us in things made the invisible things of God, through the mediumship of Reason, Servant of God and Handmaid of Faith and of Divine Revelation.

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THE MANSIONS OF THOMISTIC PHILOSOPHY

I

The offices of wisdom are many, but all of them may be resolved into a single function which Aristotle describes as a correct ordering of reality. Looking at the Stagirite's own philosophy, we are impressed at once by the symmetry of its total structure and the delicate balance of all its numerous elements, which suggests so naturally the analogue of a living organism. These features, however, are merely indicia of the truth and beauty that lie within. For, the actual value of Aristotelian thought derives from its essential correspondence with reality. It starts with the primary datum of an objective world of order; and it ends by following, to their very last outposts, the leads given by our immediate experience of this objective world.

Thomas Aquinas was the Stagirite's most brilliant expositor. Indeed, the gifts of the two men were so much alike that it is difficult to say who was the greater: Aristotle in discovering truth, or Aquinas in expounding and developing it. To the latter was allotted the task of rehabilitating the ancient pagan's wisdom, and of consecrating it to the service of a new Christian Revelation. This extremely important undertaking extended not only to the content of Aristotle's work, but to its method and order of exposition as well. The impulse which the Angelic Doctor thus gave to Greek speculation has lasted down through the ages; and in our own day we can point to an abundant and fruitful scholarship to demonstrate that the principles of Aristotelico-Thomistic philosophy are not without significance for contemporary thought.

Unfortunately, however, the devotion which our modern schoolmen have shown to the content of the *philosophia perennis* has not always been a guarantee of their allegiance to the original Peripatetic method of dividing and exposing the philo-

sophic sciences. Even a casual survey of the texts in common use today shows a startling diversity of approach to the various disciplines of wisdom, suggesting, perhaps, that there were no fixed rules for the governance of so important a matter. The fact is, of course, that both Aristotle and Aquinas have left us some very definite criteria for establishing the position and sequence of the several parts of philosophy; and it is this ground plan of a Peripatetic's education, as Aquinas conceived it, that we wish to discuss here.

II

The principle of management for bringing the philosophic disciplines into proper array is the abstractive process. By this tool Aquinas shows how the human mind expands its knowledge of the different strata of reality, and how it fixes the gradients of its ascent from physical observation to the highest concepts of metaphysics. Abstraction is of two sorts: the kind that dissociates things that are naturally found together; and the kind that enables us to apprehend, simply and absolutely, the nature or essence of things. For example, we can study the coloring of a fruit without reference to its other properties; or we can concentrate on the notion of fruit itself without reference to the concrete characters that make it this or that particular fruit. In the first instance we have a sample of what the modern psychologist calls abstraction, which in reality is nothing more than a form of attention, bringing the observer into focus with a given fact at the same time that it shuts out other impressions. Thus we examine the coloring of the fruit and disregard its shape, surface texture, odor and so forth. In the second instance we are dealing with what is called ideogenetic abstraction, where a universal concept is derived from the concrete experience of sense, or where intellect grasps reality without the phenomenal garb which clothes it. It is by means of this second type of abstraction that the mind of man is able to stratify reality.[1]

[1] *Summa Theol.* I, q. 85, a. 1, reply to obj. 1. Cf. also the commentaries of

The degrees of knowledge depend upon the relative depth or penetration of the abstractive act. Now, Aquinas always believes in beginning at the bottom of the ladder; and so he starts with matter, not only because it is the lowliest kind of existence, but also and more especially because it is the first thing of which we are sensorily conscious. In fact, the intuitions of sense are at the basis of all our ideational achievements. But matter has different connotations for the abstractive process and it is important that we understand them. The initial distinction laid down by Aquinas is between sensible matter, which is subject to qualitative determinations; and intelligible matter, which is subject to quantity. The qualities of an object lie on its perimeter, so to speak; its quantity, on the other hand, is more deeply imbedded in the very substance of the thing. The former, therefore, appeal directly to the senses; but the latter is really known only to the intellect. Furthermore, each kind of matter just described may be regarded as something individual, marked off by characteristic features from everything else; or as something common to a whole group of individuals.[2]

With these refinements in mind, we are now able to grasp what Aquinas means when he says that in the first degree of knowledge intellect abstracts from individual sensible matter. Here we tear off the identification marks that distinguish singular objects among themselves. The degree of remotion eliminates matter only insofar as it is the source of numerical multiplication; and the idea which emerges leaves physical nature still subject to the conditions of movement and change. What intellect is seeking on this level is an understanding of the universe of sensible being, which is the proper area of investigation for both *natural science* and *natural philosophy*. It is quite manifest that the object of this level of abstraction can neither exist nor be thought of without matter.

In the second degree of knowledge, intellect abstracts from

Cajetan on this article. The distinction to which Aquinas here refers is discussed by modern schoolmen in terms of total and formal abstraction.

[2] *Summa Theol. loc. cit.* reply to obj. 2.

sensible matter altogether and also from individual intelligible matter. At this point in its explorations, it is dealing with the quantified aspect of things. Matter is now no longer viewed as a principle of motion and change, but only as a foundation of dimensionality and extension. Here we have advanced into the region of *mathematics* where quantity, with all its special determinations, becomes the goal of our searching effort. Again observe that an object of this sort cannot exist without matter, although it can be thought of without matter.

The third degree of abstraction places us at the farthest remove from matter; and all that is left is the being of the thing under consideration. Here we are ushered into the illimitable domain of *metaphysics*, whose object both exists and can be thought of without matter. Now our vision is of being *qua* being; and it makes no shred of difference where we discover it—in the heavens above or on the earth beneath—the vision is exalted beyond the confines of space and time and isolated from all material context. On such an empyrean plane, even material realities are made to yield up their intelligible content of substance, act, potency, accident, and all the other metaphysical elements of their being. On a basis of these three steps in the abstractive process, Aquinas establishes his tripartite division of speculative wisdom.[3]

III

We are introduced to philosophy through *logic*, not because it is the easiest thing to learn, but, as Thomas says, because it furnishes us with the needed instruments for philosophizing.[4] Here we should be very definite about our order, since we are laying the groundwork of induction and establishing the value of real definitions against a nominalistic empiricism that would deny the truth of universal knowledge. Aristotle's plan for the

[3] The classical treatment of the degrees of abstraction is given by Aquinas in his *In Librum Boetii de Trinitate Expositio*, quest. 5, *de divisione scientiae speculativae*. Also v. Maritain, J. *Les Degrés du Savoir*. Paris, Desclée de Brouwer, 1932, pp. 78-82.

[4] *In Lib. Boet. de Trin.*, quest. 6, art. 1, *ad sec. quaest.*, reply to obj. 3.

Organon should be our model: the *Categories*, which treat of simple apprehension; *Interpretation*, which examines the judicial acts of composition and division; and the *Analytics*, in which syllogistic modes of reasoning and particularly the demonstration are studied. With this excellent background at our command, we are ready to deal with the subtler material of the *Topics* and the *Book of Elenchs*, where the forms of dialectic syllogizing and the numerous patterns of fallacious argumentation are resolved in great detail.[5]

At this point it may not be out of place to remark on the common present-day habit of making *dialectics* synonymous with the whole field of *logic*. The practice may be justified for certain systems in philosophy, but there are no grounds for it in the authentic tradition of Aristotle, where the term is restricted to mean those forms of reasoning which proceed from opinion or probability. In this connection, it may be well to recall that Aquinas always uses the word "dialectics" in the strict Aristotelian sense, to designate merely a part of logical knowledge. He would disapprove, we are sure, of this modern identification of formalities that should be kept separate.

We enter the temple of wisdom through the gateway of *natural philosophy*, which, as Aquinas indicates in his commentaries, should open with a survey of the general principles of Aristotle's *Physics*. With this broad information as a framework for interpretation, we pass on to the more specialized analyses that are found in the *De Coelo et Mundo* and the *De Generatione et Corruptione*, thus completing the foundations of what we call today the science of *cosmology*.[6] Through the

[5] Aquinas has left us commentaries on Aristotle's *Interpretation* and *Posterior Analytics*. The latter are particularly valuable in showing us how to set about the methodic pursuit of essential definitions. Here we learn how the mind passes from confused knowledge (*quid nominis*) to distinct knowledge (*quid rei*) and how it reaches demonstrative certitude by analysis of generic and specific properties. Judging by these Thomistic criteria, modern science stands in need of a re-formulation of many of its definitions.

[6] The terms "physics" and the "philosophy of nature" are used synonymously by Aquinas. "Cosmology" and "psychology," which represent the two divisions of the "philosophy of nature," are words of comparatively recent origin, the for-

Stagirite's *De Anima* and *Parva Naturalia* we are admitted to the field of *psychology*, where soul becomes the object of speculation—not an isolated or transcendent soul, capable of separate existence, but a soul which is actually the form of living matter. The point is critical especially when we are discussing *human psychology*, where so many important issues are confused by a failure to appreciate the essentially anthropological approach of Aristotle and Aquinas.[7]

According to our plan of abstraction, *mathematics* should follow *psychology*. But in the order of learning, Thomas places it ahead of *natural philosophy* on the grounds that it can be acquired without experience. For this reason it is customary to teach children the elements of mathematical knowledge before they study anything about science.[8] Its easy omission from the classical texts brings out the further interesting fact that the three degrees of abstraction do not actually form one sequence. Thus *natural philosophy* and *metaphysics* are both concerned with entities that are real; *mathematics*, on the other hand, deals with fictions of the imagination, just as freely as it treats of real objects.[9] The inference is that a direct transit from the first to the third levels of abstraction is lawful to the extent that it does not violate any principle of mental continuity. If and when an autonomous philosophy of mathematics

mer coming into use with Christian von Wolff in the 18th century, the latter appearing at the end of the 16th century. Wolff was also the first to popularize the term "ontology" which he made equivalent to "general metaphysics." It was not until the middle of the 19th century that the word "epistemology" was adopted into our present-day philosophic nomenclature, with its variant forms: "criteriology," "gnoseology," "Erkenntnistheorie," "theory of knowledge," and so on.

[7] Properly speaking, the discussion of "soul" as a subsistent entity or separated substance falls within the area of *metaphysics*. It may be pointed out here that Aquinas made a distinct improvement upon the *psychology* of Aristotle when he shifted his analysis from *soul* to *man besouled*. Cf. the "Tract on Man" in the *Summa Theologica*.

[8] *In Lib. Boet. de Trin.*, quest. 5, art. 1, reply to obj. 3. Also, his commentary *In Lib. Ethic. ad Nichom.*, book 6, lect. 7.

[9] Cf. John of St. Thomas: *Cursus Theol.* part 1, quest. 6, disp. VI, art. 2, no. 20. In the commentary on the *Ethics* of Aristotle to which we just referred, (8), Aquinas says: "The laws of mathematics are laws of imaginable entities."

is written, it can assume its proper position in the categories of Thomistic thought. Now its basic concepts, such as those of unity, number, quantity, space, and extension are dispersed throughout other sections of our philosophic manuals.

In the ordered development of speculative wisdom, therefore, it is quite permissible for us to proceed at once from the *philosophy of nature* to *metaphysics*. Towards the end of our psychological studies we analyze the functions of intelligence, whose adequate object is being. Accordingly, our first problem in *metaphysics* should deal with a critique of reason. Is being really knowable, and what is the value of the first principles of knowledge? Our answer to these questions is a defense of the power of mind to grasp reality. Here we follow the criteria that were proposed by Aristotle in the fourth book of his *Metaphysics* and explained at greater length by Aquinas in his commentaries. This material, with all its complex additions since the time of Thomas, forms the basis of our modern science of *epistemology*. Once the knowable character of being is established we are in a position to penetrate the meaning of being itself and its attributes, in the manner of the sixth and subsequent books of the Stagirite's *Metaphysics*. This is the field of *ontology*, from which, in rapid strides, reason is now able to lift itself up to the contemplation of Supreme Being. In the twelfth book of his *Metaphysics*, Aristotle comes to the end of his long and magnificent flight of intellect which now reaches to the being of the very Godhead. "For the actuality of thought is life," he says, "and God is this actuality. Indeed, God is actuality by His Essence, and His Life is most good and eternal."[10] The Aristotelian concept of the Deity has been richly clarified by Aquinas, both in his exegesis of the *Metaphysics* and in numerous other sections of his philosophic treatises. These are the things that we investigate in *natural theology*; and when this stage of the journey is done, we have finished with our speculative labors. The perfection of human

[10] "... ἡ γὰρ νοῦ ἐνέργεια ζωή, ἐκεῖνος δὲ ἡ ἐνέργεια· ἐνέργεια δὲ ἡ καθ'αὐτὴν ἐκείνου ζωὴ ἀρίστη καὶ ἀΐδιος."

wisdom is reached, however, when knowledge is diffused into the sphere of practice and when the principles of art and prudence are made incorporate in our works and actions. We complete our philosophic training, therefore, with our studies of *esthetics* and *ethics*.[11]

Let us present again, in schematic form, the order in which philosophy disposes all things in proportion and is itself disposed:

1. *Logic*		
2. *Cosmology*	*Mobilia*	: *Physica*
3. *Psychology*		
4. *Epistemology*		
5. *Ontology*	*Immobilia*	: *Metaphysica*
6. *Natural Theology*		
7. *Esthetics*	*Factibilia*	: *Mechanica*
8. *Ethics*	*Agibilia*	: *Moralia*

IV

There is abundant evidence to show that this is the true Peripatetic order of exposition for the philosophic sciences. Thus in the opening pages of his *Physics,* Aristotle lays it down as a general rule that human knowledge should advance from the less complex to the more complex. Aquinas expresses the same idea in other terms when he says: "The natural method and order of learning is to start with the known and proceed to the unknown." Now, the thing with which we are most familiar from birth is the material universe with all its kaleidoscopic changes in color, sound, and tangible properties, its wealth of physical elements, and the constant interplay of its living and non-living energies. These are the sorts of entities that supply us with food for speculation in the *philosophy of*

[11] *Esthetics* is first in the order of invention, but *ethics* is first in the order of excellence. The relation here is analogous to that which obtains between the *philosophy of nature* and *metaphysics,* since in both the speculative and the practical dimensions, that which is prior in the order of dignity is basically regulative of that which is prior in the order of learning.

nature. But this is only the beginning of wisdom. Our ultimate aim is to progress "from what is better known to us to what is better known in itself." For being is knowable to the degree that it is in act, that is, to the degree of its remotion from matter. Rather unfortunately for us, our intellects at first are in a state of potency in reference to all knowledge; and the principle of human cognition is the world of sensible being, which, because of its material nature, is only potentially understandable. It is at this level that our quest of supreme reality begins. The ascent to the lofty reaches of *metaphysics*, whose object is completely devoid of matter, is difficult under any circumstances; but it would be impossible obviously without the illuminations and insights that we receive in our analyses of the physical universe.[12]

Again, in his exposition of the *Book of Boethius on the Trinity*, Aquinas tells us that the term "metaphysics" itself gives the proper clue to the position of this discipline in the order of learning, since it indicates a progressive development from sensible to suprasensible objects of cognition. The same drift of thought is expressed in a passage from Avicenna which Aquinas here incorporates into his own text. "In the order of learning," says Avicenna, "*metaphysics* comes after *physics* (that is, after the *philosophy of nature*) which treats of matters that are of great importance to *first philosophy*, such as the notions of generation, corruption, and so forth. Likewise it is placed after *mathematics*, because to grasp the meaning of separated substances, one must have some previous knowledge of the number and arrangement of the heavenly bodies." [13] In his exegesis of the sixth book of the *Nicomachean Ethics*, the Angelic Doctor gives a fuller sketch of his plan for exposing the speculative sciences, proposing the following order; (i) *logic*, because it teaches the mode of all philosophy; (ii) *mathematics*, because it does not demand any special experience and is not above the reaches of the imaginal power; (iii) *physics*, which.

[12] *Cf.* the commentary of Aquinas on Aristotle's *Physics*, book 1, lect. 1.
[13] *In Lib. Boet. de Trin.*, quest. 5, art. 1.

though not transcendent of sense and imagination, yet requires a basis of experience . . . ; (iv) *metaphysics,* which altogether surpasses the imaginal power and calls for a strong intelligence.[14]

Again, in the *Contra Gentiles,* Aquinas draws up a comparison between the method of the philosopher who advances in wisdom from sensible to intelligible reality, and that of the theologian whose point of departure is the God of Revelation.[15] The comparison becomes more fruitful if we lay certain texts from Aristotle, for example, the *De Coelo et Mundo,* alongside those portions of the *Summa Theologica* where Aquinas treats the same cosmological problems.[16] Should the psychologist be interested in making these comparative analyses, we have the Stagirite's *De Anima* and *Parva Naturalia* whose content may be paralleled by the theological *Tract on Man.*[17] The point is that in our discussion of philosophic matters Aquinas would have us follow the natural stages of mental development, which means progression from sensory data and the manifest changes of mobile being to the more remote and intangible realities of metaphysical existence.

Further, Aristotle's picture of man as a substantial composite of mind and matter clearly indicates that the sensory mechanisms are necessary instruments, not obstacles, to the life of intellect. As Aquinas profoundly observes, the soul of man, in order of nature, occupies the lowest rung on the ladder of intellectual substances, inasmuch as it is forced to construct its knowledge-edifice from the concrete data of sense.[18] Now, there is always a natural adequacy between any given power and its object; whence it is concluded that the proper object and first principle of human intellection is neither God, nor the soul, nor any other immaterial entity, but the essence of sensible

[14] *In Lib. Ethic. ad Nichom.,* book 6, lect. 7.

[15] Book 1, chap. 3.

[16] Part I, beginning with quest. 44.

[17] *Summa Theol.,* Part I, beginning with quest. 75.

[18] *Summa Theol.,* I, q. 76, a. 5.

being.[19] Such an essence, like the intellectual form which grasps it, is immersed in the shadows of matter; and towards it the human mind gravitates by the same kind of congenital impulse that makes the eye respond to the lights and colors of the universe. True, this initial urge of intellect results only in a confused and indistinct sort of knowledge; nevertheless, the cognitive product connotes an actual perfection, as Cajetan remarks, to the extent that it enriches our consciousness with the notion of being.[20] It follows from our argument that philosophy should begin with the study of sensible entities; and again we allege the example of Aristotle who places physical analysis before metaphysical synthesis, and leads his pupils to wisdom's inner sanctum through the limina of *natural philosophy*. The supreme advantage of such a method is that it begins with the tangibilities of sense, probing by easy stages into the meanings of corporeal movement and preparing the mind, remotely at least, to understand the highest of all the Aristotelian antitheses: the distinction of potency and act.

We said a moment ago that neither God nor the soul is the first principle of human intellection. If the former alternative were true, then the processes of human knowledge would be purely synthetic in character. As a matter of fact, this is the position assumed by Parmenides and to a certain extent by Plato, among the old Greek thinkers; and this is what the more modern Spinoza undertook to show in his metaphysical construction of reality. But the end, like the beginning, of the Spinozan doctrine was an aprioristic Deity which was primarily known as substance—indeed, the only substance. From this primitive intuition all the divine attributes were deduced as well as all the cosmological entities that succeeded one another from eternity. Thus *ontology* became *ontologism* and *natural theology* became

[19] The first principle of human intellection is not God (*Summa Theol.*, I, q. 88, a. 3); nor the soul (*Summa Theol.*, I, q. 87, aa. 1, 2, 3, 4); nor any other immaterial substance (*Summa Theol.*, I, q. 88, a. 1); but the essence of sensible being (*Summa Theol.*, I, q. 84, a. 7; q. 85, a. 8; q. 87, a. 2, reply to obj. 2; q. 88, a. 3).

[20] *Comm. super Tract. de Ente et Essentia Thomae de Aquino, prœmium.*

pantheism, when being in general was identified with Infinite Being and good in general with Infinite Good.

On the other hand, if the soul were the first principle of human intellection, then we would be, not men, but angels, in our manner of acquiring knowledge. For this is the way that pure spirits think—by contemplating reality in the mirror of their own angelic natures.[21] No amount of exploration into the vast reservoirs of self, however, will ever acquaint us with the nature of our environment. External experience is the starting point of knowledge; and without the information supplied by the senses we would be hopelessly crippled in mind. Of course, it is foolish to neglect what transpires within the field of our intellectual consciousness; yet it is the empirical principle which explains the beginning of human cognition. At the same time we can never subscribe to the theory that our certitude of first principles has merely the value of sense knowledge. The fact is, sensory data represent nothing more than the first step and material cause, or as Aquinas puts it more exactly, "matter for the cause" of our rational accomplishments.[22]

Finally, the degrees of knowledge which Thomas describes with so much precision can mean but one thing in his mind: that philosophy is a hierarchical science whose departments are marked off by very clear-cut formal distinctions. Aristotle is perhaps not quite so explicit on the point; yet there can be little doubt that he held identical views regarding the tripartite division of philosophy.[23] To deny the existence and legitimacy of these formal distinctions is to endanger the whole structure of our knowledge. This is the sin of pure empiricism, which fails to discern any difference between mobile and immobile being as separate objects of cognition. This is also the main objection

[21] *Summa Theol.,* I, q. 56, a. 1.

[22] The total and adequate cause of human knowledge, as explained by Aquinas, includes (a) intellect, functioning as chief agent, and (b) phantasm or sensory datum, acting in the rôle of secondary and instrumental cause. Cf. *Summa Theol.,* I, q. 84, a. 6; q. 85, a. 6, reply to obj. 3 and 4. Also, the *De Veritate,* quest. 10, art. 6, reply to obj. 7 and 8.

[23] *Metaphysics,* book 6, chap. I.

to pure idealism which abolishes all line of demarcation between the world of mind and the world of reality. Confusions of this sort that blot out the proper distinctions of sensible and intelligible being automatically remove the foundation stones upon which the edifice of human wisdom is built.

V

The Aristotelian order which Aquinas handed down to his followers was observed quite faithfully until the 18th century. But with the advent of Christian von Wolff a new arrangement began to prevail. For the sake of historical continuity it must be remembered that Wolff was a disciple of Leibnitz and similarly imbued with strong mathematical propensities. It was quite in line with his tastes and early training, then, to favor an aprioristic methodology in presenting the elements of his philosophical system. By this contrivance he hoped to give a Scholastic turn to the mathematical doctrines of his master, and to provide himself at the same time with the weapons that would destroy both empiricism and Spinozism. To rid his name once and for all of even the suspicion of empirical heresy, therefore, he places *general metaphysics* or *ontology* immediately after *logic*. The whole content of his system is thus conceived in purely synthetic fashion and grounded on two aprioristic elements: the principle of sufficient reason and the principle of identity. On the other hand, by employing the very technique that Spinoza himself used, he proposed to meet the Jewish philosopher on his own grounds, where, with tools of a strictly Spinozan device, *a priori et more geometrico*, he was confident of gaining an ultimate victory over the champion of Infinite Modes. After *ontology*, Wolff expounded in order his *psychology*, *cosmology* and *rational theology*, all of which, by a single blow, became special sorts of *metaphysics*. On the surface, it appeared to be a very convenient way of teaching philosophy; and the student must have rejoiced in the triumph of ingenuousness which made the Aristotelian *philosophy of nature* merely an application of the principles of *ontology*. But

the lure of simplification which is at the bottom of such inclusiveness was only a makeshift expedient that failed to take account of the natural modes of apprehending reality. Furthermore, the *philosophy of nature,* in the Wolffian categories, could no longer be considered as a science distinct by its formal object from *metaphysics*—which was the way that Aristotle and Aquinas regarded it.[24]

Wolff's ideas met with scarcely any opposition in the German schools until Kant made his appearance. In his early years the sage of Königsberg was an ardent disciple of the Wolffian school; but his allegiance did not survive the test of maturity. As is well known, some of the sharpest criticism in the *Kritik der Reinen Vernunft* is directed against the philosophy of Wolff. The interesting thing for us here is the fact that, despite his repudiation of what he calls the "traditional metaphysics," Kant still retained the outlines of the Wolffian order in his own *transcendental dialectics.* Unfortunately, many of the schoolmen of the period also were intrigued by the simplicity of Wolff's new division, the influence of which remained so deep and persistent that even today not a few of the followers of Aquinas are found presenting the subject matter of philosophy in a purely deductive manner, beginning with *logic* and passing on immediately to the consideration of being as such, as an object of the highest degree of abstraction. As if this were not a sufficiently confusing reversal of the natural order of invention, some would insist that *epistemology* is a part of *logic*—when Aquinas would certainly have made it a *metaphysics of intelligence.* The very fact that it is a critical

[24] The Wolffian classification of knowledge is guilty of even more serious faults than those indicated in the text. We might summarize all these faults under three main headings: (a) a failure to make the proper distinctions between the philosophic sciences; (b) a failure to do the same thing for the natural sciences (and by natural sciences we mean such disciplines as *physics, chemistry, geology, biology,* and so forth, which use investigative methods of research, and base their observations on special experience); (c) a failure to differentiate correctly philosophic knowledge, as such, from scientific knowledge, as such (and again, by scientific knowledge we mean knowledge of the investigative sort which employs instruments of precision or clinical research and is founded upon special experience).

science, whose aim is to establish the validity of human knowledge, is sufficient reason, from Aquinas's point of view, for fixing its place on a metaphysical level. And we allege the Angelic Doctor's clear statement to the effect that " in philosophy, the lower disciplines neither seek to prove their principles nor argue with those who deny them. This task is reserved to a higher science, indeed to the highest of all sciences, *metaphysics.*" [25] Again, (and this is a point Aquinas would be sure to emphasize) *epistemology* is a science of the real, since its function is to defend the actual value of human intelligence in its appraisements of the meaning of objective existence. *Logic,* on the contrary, is a science of *entia rationis* or of constructions of the reasoning faculty, and must be formally distinct, therefore, from *epistemology* as such. The identification of the two, as Thomas could have predicted, was bound to lead to idealistic errors such as those into which Kant and Hegel and their followers fell.

VI

Difficulties are encountered in the Peripatetic order, of course; but they can be settled with much more ease than in a system like Wolff's. One may object, for instance, that the truths of *natural philosophy* depend on *metaphysics,* and that we must be sure of the validity of our first principles before we can pass from sensible to intelligible reality. This argument would be legitimate if the sciences that constitute the *philosophy of nature* were strictly subordinate to *metaphysics* in the manner, for example, that the science of optics depends upon geometrical knowledge. But the situation is not the same at all. For, while optics may have no principles that are properly its own, the *philosophy of nature* does possess such autonomous concepts which form the remote metaphysical substratum upon which it operates. These concepts, however, are of the sort that require no immediate proving. To illustrate: physical movement is based on the idea that every change

[25] *Summa Theol.,* I, q. 1, a. 8.

postulates a subject of change; that an effect must have an adequate cause; that whatever is moved is moved by something else. Axioms such as these are matters of public experience and need not be established in their universal context before the *philosophy of nature* is begun. Indeed, their transcendental nature would not be grasped in any case by novices in the philosophic disciplines. At this stage Aquinas would merely hint at their final resolution, reserving to *metaphysics* the task of explaining their ultimate significance both *in se* and in their relation to change of every kind—even to the operations of separated substances and of God. There is no doubt that in Thomas's mind *metaphysics* precedes *physics* in order of dignity; but we are speaking here of the priority of invention, not of excellence; and from this point of view the precedence is reversed. To develop a *philosophy of nature*, therefore, all that is necessary, as Garrigou-Lagrange says, is an "implicit metaphysics of common sense," which is *ontology* in its rudimentary stages. On this, the lowest level of abstraction, a partial and indistinct acquaintance with the laws of being is enough to carry us through. Later on, with a higher degree of knowledge, we can face these laws in all their supreme implications.[26]

It is almost unnecessary to add that the order of invention, in Aquinas's philosophy, is also the order of teaching. In a famous passage from the *De Veritate* the Angelic Doctor tells us that art and nature both operate by the same methodic laws—and he is speaking in particular of the art of pedagogy.[27] Now, the natural way of learning philosophy is by the processes of analysis and synthesis, beginning with the motions of matter, and ascending step by step, in the scale of generalized knowledge. The goal of this inventive technique is synthesis; and our arrival there is simultaneous with the emergence of some metaphysical principle which explains the physical movements with which we started at the same time that it furnishes clues to a

[26] Garrigou-Lagrange, P. R., "Dans quel ordre proposer les sciences philosophiques." *Revue Thomiste*, 1924, nouvelle série, p. 30.

[27] Quest. 11, art. 1.

deeper understanding of all sensible reality.[28] Aquinas sums it up beautifully when he says: "Through our knowledge of temporal things we advance, by way of invention, to a knowledge of eternal things . . . whence, by way of judgment, we pass back again to temporal things, re-evaluating them in the light of eternal principles." [29]

Suppose, on the other hand, that we place *ontology* immediately after *logic*, as Wolff did: at once the unsuspecting mind of the student is exposed to the danger of overlooking or missing completely the deep importance of *metaphysics*. This is espcially true with reference to the meaning of potency and act, the pivotal distinction around which the whole structure of Aristotelian and Thomistic philosophy revolves. By forcing its birth prematurely in his consciousness we are almost certain to distort his perspective of the Stagirite's most profound antithesis. How much better for him to approach it through the hylomorphic concept of matter and form, the cosmological significance of motion and the quantitative continuum, the mind-body relationship and the specification of the faculties by objects! Indeed, to present it in any other fashion is to leave his immature intellect open to altogether wrong sorts of impressions—either that it dropped, meteor-like, out of space; or that it is merely a pseudo-philosophic transcript of popular modes of speech.

The effects of all the loose currents of apriorism which were set in motion in the 18th century are still with us; and it is not an unusual sight to see the philosophy of Aristotle and Aquinas displayed to the modern world in garments of a definite Spinozan or Wolffian cut. To be sure, the habit does not make the philosopher any more than it makes the monk; nevertheless, raiment of this style must ill fit one who is accustomed to moving in the deeply experiential atmosphere of Peripatetic thought. Doubtless it is easy to remember the divisions of the

[28] Cf. Garrigou-Lagrange, P. R., *De Methodo Sancti Thomae.* Romae: ex Schola typographica "Pio X," 1928.

[29] *Summa Theol.*, I, q. 79, a. 9.

philosophic sciences by a mnemonic term like "locate"; just as it is easy to think of the whole field of philosophy as conterminous with "metaphysics." But simplifications of this sort are dangerous, especially when they result either in a false purview of reality, or in an inversion of the natural modes of investigating it. These are the tendencies against which great schoolmen like Garrigou-Lagrange and Maritain are constantly warning us; and with good reason, since the basic complexities of philosophic thought corresponding to the physical, mathematical and metaphysical levels of abstraction would seem to be irreducible. At any rate it is a rather vain hardihood that would attempt, by Wolffian categories or any other instruments of purely pedagogical convenience, to make them more simple than Aristotle and Aquinas found them.

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PROBLEMS FOR THOMISTS

I. THE PROBLEM OF SPECIES

I. INTRODUCTION

1. This is the first in a series of articles which will try to formulate and explore problems which lie on the periphery of settled philosophical knowledge. The word "problem" is being used to signify an open question, an issue or dilemma not yet demonstratively resolved. We frequently use the word in another sense to mean a question to which several contrary answers have been given, among which we have been able to discriminate the true from the false, or the better from the worse. Before this discrimination was made, the problem was genuinely a challenge to the philosopher in the pursuit of additional truth. After one answer became an established conclusion, the problem which generated the discovery was no longer a problem in the same sense. If we continue to speak of it as a problem, after we know the answer, we do so either in an historical sense or for the pedagogical purpose of giving students a dialectical initiation to philosophy. In contrast, the only problems which remain genuinely open questions for the initiated are those where dialectical exploration has not yet yielded demonstrative resolution, where, in short, knowledge (*scientia*) has not yet been achieved. It need not be the case that no answers at all have been offered to such questions; in fact, the opposite situation usually prevails: several conflicting answers have been given and their conflict makes the issue or dilemma.

This distinction between problems which call for philosophical work and those which belong to history or pedagogy enables us to avoid two lamentable extremes which men who call themselves philosophers sometimes take. On the one hand, there are those who think that philosophy consists of nothing but problems, persistent questions which have not been and probably never can be answered demonstratively. There is no philosophical knowledge. On the other hand, there are those who think, or at least act as if, there are only answers. There may have been problems at one time, but no longer, except for the untutored. Perhaps, this is an exaggeration, but the caricatures depict tendencies with which we are all familiar.

The conception of *philosophia perennis* requires us both to acknowledge answers where problems have been solved and to recognize problems where definitive answers have not yet been given. To know only answers and no problems is to have no philosophical work to do. One can only teach but not philosophize. And if there were no answers, one could formulate new problems only for skeptical or dialectical purposes. The conception of *philosophia perennis* regards philosophy as knowledge, evident principles and demonstrated conclusions, and philosophizing as the pursuit of truth, not dialectical display. To pursue truth is to seek to solve problems as yet unanswered and thereby to add to the fund of knowledge. Philosophy is thus perennial in two respects: its established truths endure and its search for truth continues. It differs from the experimental or investigative sciences in that the latter are perennial chiefly in their research.

Those of us who are devoted to the doctrines of Aristotle and St. Thomas,—and sometimes permit ourselves to identify them with philosophy itself,—have repeatedly affirmed all that is involved in the conception of philosophy as perennial. We have spoken of the deepening of Thomistic thought. What could we have meant except that Aristotle and St. Thomas did not solve all philosophical problems, that there is still work to be done? But that is an empty remark to make unless we have some problems to work at. Unless we believe that there are genuinely unsolved problems in philosophy, are we not hypocrites when we talk about deepening Thomistic thought? And unless we can definitely formulate such problems,—avoiding the worse hypocrisy of presenting *as problems* questions to which we think we know the answer,—we are in no position to undertake the task we have accepted as our obligation. In fact, it is difficult to know what one means by believing there are problems when one does not know any.

Philosophical problems can arise in two ways. The general growth of human knowledge in the course of time, and especially through the progressive experimental sciences, is an extrinsic and accidental cause of new questions. Because of its close relation to the natural sciences, the philosophy of nature, rather than metaphysics, is most likely to be the locus of such questions. The other, the intrinsic and essential, source is greater penetration in the sphere of philosophy itself. Distinctions proliferate; consequences and corollaries of all sorts become apparent; even principles can be seen in new connections. Something has been gained with every new distinction, corollary or connection. Such gains are in the dimension of intensity, a fuller and better understanding of truths already known. Perhaps those who speak of deepening Thomistic

thought mean only such explication of accepted doctrine. But as a result of greater explictness or penetration, it sometimes happens that difficulties are encountered, inconsistencies or even contradictions. If the difficulties are real and not apparent,— founded on a correct apprehension and not a misunderstanding of doctrine,— then a real philosophical problem can be formulated, and new truth may be discovered. If it is, the gain is in the dimension of extensity. The increase of philosophical understanding has generated a problem, the solution of which is an addition to philosophical knowledge. This, it seems to me, is the fruition we must be seeking when we engage in philosophical work. It certainly was the goal of Aristotle and St. Thomas in their day.

One important exception must be noted. Not all problems can be solved, if a solution means the affirmation of one answer to the exclusion of all its contraries. There are problems at the limits of philosophical knowledge,—the ultimate questions of metaphysics and natural theology,—which result in antinomies rather than solutions. If the antinomy is real, that is, if the contrary positions are valid consequences of valid principles, then the problem should be called a mystery because it marks the boundary of our natural knowledge, it indicates the inadequacy of our intellects to comprehend what is in itself intelligible.[1] But, if proper humility calls upon us to acknowledge that there are mysteries, we must not be too hasty in supposing a difficult problem to be a mystery. Difficult problems have been solved in the past. And though it be true that we may yet discover mysteries not now recognized, as well as formulate new problems, we must distinguish between the different contributions which can thus be made: on the one hand, a more determinate marking of the limits of our knowledge; on the other, an addition thereto.

2. In this and subsequent articles I shall try to present problems, not mysteries,—problems which can be answered and to which I do not know the answers. I have called them problems for Thomists, not because they are occasions for Thomistic philology or scholarship rather than invitations to philosophical inquiry, but because I think that Aristotle and St. Thomas have answered more philosophical questions than any other thinkers in the European tradition. These problems arise from the answers which they have given to other problems. In part due to the development of the investigative sciences, in part to the more pene-

[1] Vd. my discussion of philosophical mysteries and the criteria which distinguish them from other problems, in *St. Thomas and the Gentiles*, Milwaukee, 1938: pp. 52-53 and Note 48.

trating and explicit grasp of Aristotelian and Thomistic doctrine itself, which the labor of many minds has accomplished, these questions can be significantly raised only in the context of the principles and conclusions of that doctrine. If I did not believe that doctrine to be the most substantial contribution to perennial philosophy, I could not make "problems for Thomists" convertible with "philosophical problems." [1a]

If we do not identify philosophy and Thomism, we must be prepared for one consequence of exploring problems generated by Thomistic principles, namely, that we shall find no solution of the problem compatible with all the principles. In that case we must be ready to question the principles themselves and to abandon them in whole or part if necessary. The difficulties which constitute the problem may be due to some fundamental error which has long been ignored or neglected. There are two possibilities, in short: *either* we shall find a solution which extends the doctrine, in whose terms the problems is set, by adding an analysis thereto which is thoroughly compatible with its leading tenets; *or* we shall find a solution only by altering the doctrine itself on some fundamental points, perhaps even surrendering the doctrine in favor of an alternative theory. To engage in philosophical inquiry without open-mindedness of this sort would be to make a sham of dialectic. Apologetics can use reason to defend or clarify dogma, because there are theological dogmas which are above reason. Though philosophical inquiry may begin with the acceptance of certain conclusions, their truth is never above the questioning of reason and hence cannot set a limit to the exercise of reason. I am excepting, of course, the natural principles of the intellect itself, without which reasoning cannot occur.

I must mention certain other misgivings which I have in undertaking the project I have outlined. Those who are ignorant see

[1a] In recent times, it has been stylish to write books under the title "Problems of Philosophy." William James's most mature effort was *Some Problems of Philosophy* (New York, 1911), intended as an introduction; and Bertrand Russell's *The Problems of Philosophy* (New York, 1912), reprinted 15 times, was, perhaps, his most philosophical book. But such writers find *only* problems in philosophy, and they have difficulty in stating the problems because they seem to know no answers at all, except negative ones. Books of this sort contrast sharply with the Disputed Questions of the middle ages, which dealt with philosophical problems in the light of affirmative principles. It has been said, jocularly, that the difference between modern philosophers and neo-scholastics is that the former know all the good problems, while the latter know all the right answers. But this is more jest than truth, for good problems can be formulated only in the light of some truths known, and to know some truths in a vital way is to know many more unanswered questions.

problems where the learned know the answers. I am aware that to ask questions sincerely is to confess one's ignorance of the answers. Such ignorance is more or less culpable according as the knowledge is more or less available. In proposing these problems I claim only that I have not been able to find the answers to my questions in the works of Aristotle and St. Thomas, and I make this claim tentatively for I know that better readers than I may be able to correct me on this point. Beyond Aristotle, and St. Thomas I have not read widely enough to know whether some who have written more recently in their tradition have solved these problems. Perhaps the answers are in Cajetan, John of St. Thomas or others. My only reason for supposing that they either did not see the problems or solve them is that I can find nothing in the writings of those of my contemporaries who have learned much from Cajetan and John of St. Thomas, which clearly and definitely indicates the situation to be otherwise. This is, I know, a merely probable conjecture, and no substitute for sound scholarship.

I hope that my admission of insufficient scholarship does not bar me from raising philosophical questions. There may be others in my position who will profit, as I shall, if the more learned can answer these questions; and even those of greater scholarly attainments may profit by having their attention re-directed to the texts by questions of this sort. For the sake of orderly criticism, and so that those who can will provide help where it is most needed, may I propose that the judgments to be made on this sort of work be made in the following order: (1) that the problems are not genuine because generated by a misunderstanding of the principles; (2) that although once genuine, these problems are no longer open questions because they were fully answered by Aristotle and St. Thomas; or (3) if not by Aristotle and St. Thomas, by some later writers who discovered the problems and solved them, *without denying any of the fundamental principles in terms of which they are here stated.* If none of these three judgments can be sustained then two possibilities remain: (4) that these problems can be solved only by denying one or another of the principles which generate them; or (5) that solutions are possible without such denials. In the first alternative, the solution will be attended by the correction of philosophical error; in the second, there will simply be the extension of philosophical doctrine to include new truths. In either case, philosophical knowledge will be advanced. It seems important that this order be observed because there is no point in considering these problems further if they are false or if they have already been satisfactorily answered. If any one of the first three

judgments can be established, then those who are as ignorant as I will be happily informed. If not, then our ignorance is the common lot of all and makes us fellows in a common research.

3. This first article deals with the problem of species. There are two distinct, though related, problems concerning species: one has to do with determination of species in the substantial order; the other with the specification of accidents, especially such accidents as power, habit and operation. The first of these problems must be further restricted to the questions: What are the principles of specification among natural, physical substances (material composites)? What is the nature of such species? How are they related to one another? How many are there? The second problem is primarily concerned with accidents involved in human life because the difficult question of moral species,—virtues and vices, good and bad human acts,—cannot be solved apart from the natural specification of powers, habits and operations; but it can be extended further to include the specification of any accident, in whatever category, whether an accident of living or non-living matter. Since artificial forms are accidental, the problem of the specification of works of art belongs here, although artificial things, such as a shoe and a statue, have a quasi-substantial character which permits them to be used analogically in a discussion of species of natural substance.[2]

The primary reason for separating these two problems is the analogy of being in substance and accident. An accident and a substance do not have an essence in a univocal sense of "essence." An accidental form and a substantial form do not have the same mode of being and are not subjected in the same way. An accident cannot be defined in the same way as a substance. Hence, insofar as species is related to essence and definition, the principles of specification must necessarily be different in the two orders of being, the substantial and the accidental.[3] Secondarily, there is a difference in the manner in which we come to know the species of substances

[2] The quasi-substantiality of artificial things is due to the fact that as accidental concretions (unities of substance and accident), they are reducible to the category of substance in terms of their matter. Cf. "Creation and Imitation: An Analysis of Poiesis," in the *Proceedings of the American Catholic Philosophical Association* for 1935: pp. 160-170.

[3] Vd. Aristotle, *Metaphysics*, V, 7; VI, 1, 4, 5. "In one sense nothing will have a definition and nothing will have an essence, except substances, but in another sense other things will have them. Clearly, then, definition is the formula of the essence, and essence must belong to substances either alone or chiefly and primarily and in an unqualified sense" (*Meta.*, VI, 5, 1031[a] 10-14). Cf. Aquinas, *De Ente et Essentia*, Ch. I, VI.

and the species of accidents. Although substance is prior to accident in the order of being, accidents are prior in the order of human knowing. At least some accidents are directly known, whereas no substance is. Accidents may have species only in an analogical sense, but their specific characters are more readily apprehended by us. Insofar, then, as our problem involves how species are known, as well as their constitution, we must separate our discussion into two parts, one dealing with substances, the other with accidents. Because the first of these parts is sufficiently difficult by itself, and the second is extremely elaborate, it seems wise to devote this first article to the problem of substantial species alone.

The problem of substantial species is here being considered as a problem in the philosophy of nature, not in metaphysics, or logic, or epistemology. To locate the problem thus in a definite sphere of discourse is not to exclude these other considerations, but to relegate them to their proper place in relation to the main question. The philosophy of nature is, of course, an application of metaphysical principles to the analysis of the hylomorphic constitution of changing substances. But the problem of the differences and relations among physical things, the problem of the hierarchy and continuity of natural substances which raises all the main questions about species, belongs strictly to the natural philosopher, not the metaphysician. (In contrast, the questions about the essence of composite substances which are discussed in *De Ente et Essentia* are strictly metaphysical.) In this discussion, as anywhere in philosophy, metaphysical principles will be regulative, but not all metaphysical truths will be equally relevant everywhere. It would be hazardous to say in advance that a given point is not even remotely relevant. That can be ascertained only in the course of the discussion itself.

Whereas metaphysical principles are regulative in the philosophy of nature, and metaphysical considerations are always more or less relevant, logical and epistemological interests can never be more than tangential. No problem in natural philosophy, or for that matter metaphysics, can be solved by an appeal to logical principles, for logic as a science is of *entia rationis* and not *entia naturae*. This is not to deny that the problem of species has a logical dimension, insofar as logic is concerned with definition and division, with the predicables, with the distinction between real and nominal definitions, and so forth. All that is being insisted is that the distinction between first and second intentions be preserved, that ontological and logical species be not confused. It seems appropriate at this point to express the suspicion that even

Aristotle and St. Thomas do not always keep ontological discussions sufficiently insulated from logical considerations which, though parallel as first and second intentions must be, are never regulative or relevant. The problem of species is a case in point, for it seems to me that some of the difficulties which engender the problem are due to a confusion of logic and ontology.

Like logic, epistemology is related but not relevant in the sense of contributing to the solution of the problem of species. No question about the nature of things is ever answered by an account of the character or extent of our knowledge. Such questions as, What is a natural species and how many are there, are independent of such questions as, How do we know the species of physical substances and how many do we know. By "independent" I mean that answers to the former can never be wholly concluded from answers to the latter, though the latter answers may impose certain limitations upon our search for answers to the former. In fact, if there is a significant dependence, it is the other way. For unless we can first determine precisely what we mean by a natural species, we cannot decide whether we know any, whether our knowledge is dianoetic or perinoetic, to use Maritain's distinction between knowledge through real as opposed to nominal definition,[4] or how many we know in either way. As I shall try to show subsequently, the theory of species has been confused in part because the problem has often been obliquely approached through the theory of knowledge. What St. Thomas has to say about our knowledge of species or substantial forms is often taken by itself as indicating what he thought about the nature or number of species, although the resulting interpretation *apparently* conflicts with other passages directly concerned with the nature of species, quite apart from any consideration of our knowledge. Although a writer who devotes himself in a given work to the analysis of intellection is justified in treating the problem of species *quoad nos*, he is not justified in acting as if he had solved the problem *secundum se*, for that lies beyond the confines of his discourse. If there be such solutions, they must either be argued for in terms of their proper principles,—and this belongs to the philosophy of nature,—or they can be assumed in other discourse. But the question must not be begged or answered tangentially.

With respect to species I have said that natural philosophy is related to logic as first intentions are related to second; and to epistemology as the consideration of anything *secundum se* is to its

[4] Vd. *The Degrees of Knowledge*, New York, 1938: Ch. IV, 1, esp. pp. 252 ff.

consideration *quoad nos*. I have suggested further that some of the difficulties which generate the problem of species are due to a transgression of these distinctions or a confusion of these several spheres of discourse which have different formal objects and, hence, formally distinct problems. Someone might ask, therefore, whether *all* the difficulties are of this sort. If they were, the problem of species could be solved as soon as these confusions were eliminated. But that is not the case. There are difficulties in the philosophy of nature itself. The confusions and transgressions I have mentioned merely complicate the problem for us, often unduly, and it will be necessary to detect these intrusions wherever they occur in order to clarify the problem itself. Only thus can we determine the conditions of a possible solution. Such clarification may even benefit logic and the theory of knowledge to the extent that they deal with related problems.

Finally must be mentioned the relation of traditional natural philosophy to modern natural science. The problem of species not only occurs in both and in the same way,—that is, *secundum se* and on the level of first intentions,—but the findings of empirical research are a vast collection of relevant materials unknown to Aristotle and St. Thomas which must be taken into account if the traditional doctrine is to have contemporary intelligibility.[4a] I do not mean that scientific formulations can solve, or even help solve, a strictly philosophical question. That is *formally* impossible. But scientific findings are *materially* relevant to philosophy, especially the philosophy of nature, in the sense that they provide relevant matter to be analyzed and clarified by philosophical principles. Thus, in making various attempts to classify natural things, the several sciences *appear* to be recognizing species: on the inorganic level, physics and chemistry seem to be specifying elements and mixtures; on the organic level, the biological sciences classify kinds of plants and animals and even call them " species." It is a question, of course, whether the scientists are making essential or accidental distinctions; whether their approximate formulae, or nominal definitions, signify real species, however inadequately; whether the findings of science, both taxonomic and metrical, reveal nature as a material continuum rather than a hierarchy of forms. Each of these questions is, however, purely a philosophical question, and one which it is important to answer, not only to enlighten science, but even more to prevent scientists from indulging in pseudo-philosophical speculations about such matters beyond their com-

[4a] Vd. fn. 35[a] *infra*.

petence *qua* scientists. *Each of these questions requires us to solve the problem of species.*

Furthermore, there is the whole matter of evolution,—the origin of living species and their transformation in the course of natural generation,—the inorganic analogue of which is the transmutation of the elements. Scientific findings in this connection have given rise to a morass of pseudo-philosophical speculation which can be effectively cut through only by a sound doctrine of species. Most of the philosophical perplexities in post-Darwinian thought are due to ambiguities and uncertainties in the notion of species itself rather than to the discovery of any radically significant facts. Yet the mass of facts which scientific research has discovered and attested have had a cumulative effect in making an ancient and traditional problem about the nature and origin of species a currently insistent one, and one which, to a contemporary view, seems to exemplify in the most startling way the incompatibility of modern science and traditional philosophy. It will be illuminating to show that science has not altered the problem of species and, far from making it more difficult for philosophers to solve, has if anything made it easier. A correct philosophical solution will not only be compatible with all the facts of science, but will render them more intelligible than they are at present either in terms of science itself or in terms of the kind of speculations which scientists extrapolate from their findings and call their " philosophy."

The problem of species is thus seen to be doubly good as a problem; for, if it is genuine, it arises both from intrinsic difficulties in philosophy itself and from the extrinsic effect of increased knowledge in the field of the natural sciences. A solution will, therefore, have a twofold consequence: an improvement of philosophical doctrine and a better realization of the harmony between philosophy and science, which always needs to be made explicit. From a cultural point of view, the latter is, perhaps, the more important task which falls to the natural philosopher especially to perform, in an epoch whose culture is dominated by the development of the natural sciences.[5] From a strictly theoretical point of view, the consequences within the interior of philosophy itself may be regarded as more important; as, for instance, the effect of a sound doctrine of species on the analysis of substantial change.

[5] Vd. Maritain, *La Philosophie De La Nature*, Paris, 1935; *The Degrees of Knowledge*, Ch. I, III, esp. pp. 74 ff. and 218 ff. " The task which lies before (us) is to disengage from the enormous contribution which the experimental sciences have accumulated in the past four centuries, a genuine philosophy of nature " (Maritain, *St. Thomas Aquinas*, London, 1933: p. 12).

4. We shall proceed in the following order. It will be necessary, first, briefly to state the major principles,—the concepts, distinctions, theses,—in terms of which the problem can be most intelligibly set forth. At this point a certain amount of clarification can be achieved by freeing the problem of adventitious matter. Then, we can undertake an exposition of the problem itself by formulating a dilemma which embraces incompatible views with regard to species. Here the capital texts which express these opposed views will be quoted, and secondary texts will be cited. At the next stage, we must explore the issue dialectically by comparing the two positions, their relative advantages and disadvantages—that is, the extent to which each appears to be true, in the light of fact and principle, and the extent to which each seems to leave certain difficulties unsolved. Finally, it seems advisable to attempt a tentative resolution of the issue, by proposing a theory of species which reconciles many, if not all, of the oppositions. It must not be supposed that we shall then have arrived at the solution of the problem. The theory will be proposed only for the sake of making the issue clearer, making the dialectic both sharper and more precise, and in order to indicate the sort of consequences which will follow upon any resolution. A different solution would, of course, have other consequences. To all of which, a number of general conclusions may be added, by way of commentary on the philosophical connections of the problem as it has been discussed.

II. ANTECEDENT PRINCIPLES

5. The propositions about to be stated will not be argued. It is here being assumed that they are all well-established philosophical truths. Some of these belong to the philosophy of nature and metaphysics and are formally relevant to any solution of the problem of species. Others belong to logic and the theory of knowledge and are included because, bearing tangentially on the problem, they will be involved in our discussion of it. No attempt will be made to give any analysis of these principles beyond a most rudimentary explication of their meaning.

6. *The species of a composite substance is its fully determinate essence.*[5a] The word "species" is here used to signify the infima

[5a] Note that it is not said that a natural species is a fully determinate essence, for such an essence could be self-subsistent, apart from matter and accidents. To say that a species is the fully determinate essence of the substance it informs does not mean that the essence can exist without the addition of accidental determinations; but these are extrinsic to it, as the determination which a difference adds to

species, for any species other than the last is a genus, and genera are not the fully determinate essences of existing things. (In all that follows the word "species" will always be used as strictly equivalent to "infima species.") Only species exist, in the sense that only a fully determinate essence is capable of receiving existence. The species does not, of course, exist *as such*, but only under conditions of individuation; but the species is that essence which can receive no further determinations except those of individuation; and it is as individuated by union with signate matter that the specific essence exists.[6] When it is said, in contrast, that genera do not exist, what is meant is that no genus *as such* is the fully determinate essence of an existing thing. All genera require further formal determinations. Formal differences including the last specific difference must be added to any genus before it is sufficiently determinate to exist, i. e., before it is capable of receiving individual determinations through union with signate matter. This does not mean that genera are not formal constituents of existing things. They are, insofar as they are involved in species as part of the essence, for the essences of composite substances are themselves composite, and the genus,—i. e., the proximate genus,—is to the difference as matter,—i. e., the common, not the signate, matter,—is to form. Except as the matter of the composite essence, through which it participates in existence, the genus has only intentional being.[7] We need not be concerned here with the kind of

a genus are not. With respect to accidental determinations, then, the specific, substantial form is indeterminate. Vd. Part IV, Section 15, *infra* (in following issue). Cf. Maritain, *Introduction to Philosophy*, New York, 1930: Ch. V.

[6] "By signate matter I mean that which is considered as under determined dimensions. But this matter is not posited in the definition of man as man, although it would be posited in the definition of Socrates if Socrates had a definition. In the definition of man, however, undesignated matter is posited. For in the definition of man there is not posited this particular bone and this particular flesh, but bone and flesh considered absolutely, which are the undesignated matter of man. So therefore it is clear that the essence of man and the essence of Socrates do not differ except inasmuch as the one has undesignated matter and the other designated matter. . . . And, because, as has been said, the nature of species is indeterminate in respect to the individual; as the nature of genus in respect to species implies in its significance, although indistinctly, all that exists determinately in the species; so also species according as it is predicated of the individual must signify all that is essentially in the individual, although indistinctly; and in this way the essence of Socrates is signified by the name of man, and on this account man is predicated of Socrates" (Aquinas, *De Ente et Essentia*, Ch. II).

[7] Vd. *De Ente et Essentia*, Ch. II. "The essence of genus and of species differ according as their matter is or is not designated, although there is a different mode for each of them, because the designation of the individual in respect to the species is through matter determined by dimensions, whereas the definition of the species

difference which obtains between such names as "man" and "humanity," as signifying the species or essence of a composite substance; it is sufficient for our purposes "that the essence of man is signified both by the name man and the name humanity, though in different ways." [8]

7. *The species of a composite substance is its substantial form.*[8a] The truth of this proposition can be seen at once in the light of the preceding one. The substantial form is one of the two principles in a composite substance; the other is signate or individual matter. Through the union of these two principles, *hoc aliquid* or this individual substance, having such and such a nature, results. But the species or essence is that which is capable of being united with signate matter to constitute *hoc aliquid.* Hence, the species or essence is the same as the substantial form. Thus, Aristotle says that "the essence is the indwelling form, from which and the

in respect to the genus is through the constitutive difference which is taken from the form of the thing. . . . Thus the form of animal is implicitly contained in the form of body, according as body is its genus. And such also is the relation of animal to man. . . . Thus, therefore, genus signifies in an undetermined way all that is in species, for it does not signify matter alone. In this same way, too, the difference signifies the whole and not the form only. And definition also signifies the whole, and so does species. But they do this in different ways, because genus signifies the whole as a certain determination determining what is material in a thing, without the determination of the proper form; and so genus is taken from matter, although it is not matter. . . . But difference on the other hand is as a certain determination by form taken in a determined way. . . . And definition or species embraces both, that is, determined matter which is designated by the name genus, and determined form which is designated by the name difference." Cf. Aquinas, *In Meta.*, VII, Lect. XII, 1545: "For the genus is nothing but those things which are the species of the genus. For there is no animal which is neither man, nor ox, nor something else of this sort. But if something be found which is a genus outside of the species, thus taken as it is outside the species, it is not taken as the genus, but as matter." Vd. Aquinas, *Summa Contra Gentiles*, II, 95; IV, 41, 81. Cf. fn. 20 *infra.*

[8] *De Ente et Essentia*, Ch. II. "The name man signifies it (the essence or species) as a whole inasmuch as it does not exclude the designation of matter but contains it implicitly and indistinctly, as it has been said that the genus contains the difference; and therefore this name, man, is predicated of individuals, but this name, humanity, signifies it as a part because it does not contain in its signification anything except what belongs to man inasmuch as he is man, and because it excludes all designation of matter; and on this account it is not predicated of individual men."

[8a] The qualification should, perhaps, be added: *and there is only one substantial form in any substance.* The doctrine that there is or can be a plurality of substantial forms in an individual thing would seriously affect any discussion of the problem of species. Since we are considering that problem in the light of Aristotelian and Thomistic principles, we need not complicate matters by extraneous issues. Vd. fn. 57 *infra.*

matter so-called concrete substance results." [9] And Aquinas says that " things composed of matter and form are established in their respective species by their form." [10] As (signate) matter is the principle of individuation, (substantial) form is the principle of specification. Accordingly, Aristotle sometimes speaks of the form as substance, meaning thereby not substance as signifying the hypostasis or first substance, but essence or second substance.[11] We need add here only the qualification that it is the species or essence as signified, for example, by " man " rather than by " humanity " which is one with the substantial form of the composite individual, Socrates.

In this connection, we should also briefly note the relation between the substantial form or specific nature of a composite substance and the various accidents which inhere in it, as existing. These accidents are of two sorts, necessary and contingent. The former are the proper accidents or properties of the substance,—either generic properties or specific and convertible ones,—and they are necessary in the sense that they flow invariably from the essence or specific nature. Contingent accidents are those which are due to the matter rather than the form of the substance, and are variable with the motions of the substance according to its potentialities. Speaking predicamentally, the essence (substantial form) is divided against all accidents; but properties, though not part of the essence, are essential determinations of the substance, whereas all other accidents are not, and are therefore said to be accidental or contingent determinations.[11a]

[9] *Metaphysics*, VII, 11, 1037^a 29.

[10] *Summa Theologica*, I-II, 1, 3. Cf. *ibid.*, 63, 1: " Each thing derives its species from its form and its individuation from matter "; also *Summa Contra Gentiles*, IV, 63: " Matter is the principle of individuality, just as form is the principle of the species "; and *ibid.*, II, 93: " Whatever things are the same in species but differ numerically, have matter: since a difference resulting from form, involves a specific difference; whereas that which results from matter causes a diversity of number."

[11] Vd. *Metaphysics*, V, 8; VII, 8, 10, 15; VIII, 1-3. Thus: " Since substance is of two kinds, the concrete thing and the form,—I mean, that one kind of substance is the form taken with the matter, while another kind is the form in its generality. . . . " (*Meta.*, VII, 15, 1039^b 20). Cf. *Categorics*, Ch. 5, 2^a 12 — 2^b 14.

[11a] " Since each and every thing is individuated from its matter and placed in a genus or a species by its form, it follows that accidents which follow upon matter are accidents of the individual, according to which individuals of the same species differ from one another. But the accidents which follow upon form, on the other hand, are proper passions of the genus or the species, and, for this reason, they are found in all things which participate in the nature of the genus or of the species. Thus, risibility in man follows upon the form, since a laugh comes out of some apprehension of man's soul " (Aquinas, *De Ente et Essentia*, Ch. VI). Vd. Part IV, Section 15, *infra* (in following issue).

The importance of this discussion for our problem is that a difference in species will always be accompanied by a difference in properties. In contrast to specific difference, numerical diversity will always be attended by a diversity of accidents, i. e., contingent accidents. One further question can be raised, but cannot be decided here because it is involved in the problem itself; namely, whether properties are always powers, as distinguished from operations or the forms which are the termini of accidental change? By "power" is meant not the prime potentiality of matter, of which the substantial form is the first act, but those second potentialities of formed matter, which the substance possesses because it is so formed, and of which operations, or the forms involved in accidental change, are the second acts. If the affirmative answer can be given, then according to the division of first and second act in the analysis of change, the substantial form as the essence is divided against contingent accidents; and according to the division of act and determinate potentiality in the analysis of substantial existence, the substantial form as the essence is divided against properties as powers. The affirmative answer appears to be given in the case of living substances, but whether it holds also for inanimate things remains to be seen.[12]

8. *Species are discrete and integral forms, not subject to the qualification of more and less, and not related* inter se *as contraries are in a common genus.* This truth follows from the very nature of substances, for there is neither contrariety nor variation in degree in the order of substantial being.[13] There is, in short, no

[12] Vd. fn. 80 *infra.*

[13] "Another mark of substance is that it has no contrary. What could be the contrary of any primary substance, such as the individual man or animal. It has none. Nor can the species or the genus have a contrary. . . . Substance, again, does not appear to admit of variation of degree. . . . For instance, one particular substance, 'man,' cannot be more or less man either than himself at some other time or than some other man" (*Aristotle, Categories,* 5, 3^b 24-38). "Of species themselves, except in the case of such as are genera, no one is more truly substance than another. We should not give a more appropriate account of the individual man by stating the species to which he belonged, than we should of the individual horse by adopting the same method of definition. In the same way, of primary substances, no one is more truly substance than another; an individual man is not more truly substance than an individual ox" (*ibid.*, 2^b 23-27). These texts from the *Organon* are subject to objection on the grounds of being logical rather than ontological; but the *Categories* is a book which often combines both of these interests. The combination often leads to confusion; thus, that one substance is not more truly substance than another is true logically when "substance" is regarded as a summum genus or category, but it is questionable ontologically, when "substance" is regarded as a mode of being. But the analogy of substance, which we

continum of substances as there is, for instance, a qualitative continuum, constituted by degrees of more or less of either of the two extremes which are the absolute contraries determining the series. Thus, black and white are contrary species in the genus of color, and between these limits there is a continuous series of grays, more or less white, less or more black, each of which is, of course, relatively contrary to any other term in the series, according to the opposition of the extremes. And because this sort of contrariety obtains among accidental species in the category of quality, one existing thing may be more or less white (or black) than some other thing, or than itself at some other time. Contrariety is thus seen to involve the possibility of variation by continuously graded degrees. To say that there is no contrariety, *in this sense*, in the category of substance, is to say, therefore: first, that two substantial species are not in a genus by an opposition which relates them as limits of a series, between which there are intermediate terms, each more of the one and less of the other; second, that no individual substance can be more or less specifically that sort of thing than some other thing of the same species, or than itself at some other time. The transition from one substantial form to another is always a whole step. This distinguishes generation from alteration or local motion, which are continuous changes.

If the species of substance be related in any way, they must resemble the integral numbers in one respect at least, namely, that there are no fractional terms among them. Whether the resemblance to the integers goes further, in that the order of species is a hierarchy of higher and lower forms as the numbers are a series, remains to be discussed. That is one possibility; the other is the possibility that the species of substance are merely like a set of integers, considered as coordinate rather than as serially ordered. These two alternatives lie at the center of the issue concerning the nature and number of substantial species. But whichever alternative is chosen, one point remains unaffected, that the species of substance are discretely related, as integers are in the absence of fractional intermediates. Consequently, one denial must be made. Nature is not a continuum, in which each existing individual differs from every other according to more or less and only that; and in

shall discuss later, is not inconsistent with the truth that in any given species of substance, no individual possesses more or less of that specific nature. In the *Metaphysics*, Aristotle talks about diverse substantial species in the same genus as contraries, but it is clear that he means "sheer otherness" within a genus, and not the kind of contrariety which obtains among qualities as extremes or limits of a continuum of more and less. Vd. Bk. X, Ch. 8-10.

which "species" are only arbitrarily chosen points, convenient markers in the business of classifying things as alike and different, but never indices of all or none in any given respect. In this view,—which is familiar as a conception supposed to be forced upon us by the findings of natural science,—"species" would be named only in the same way as the integers might be marked in the real number continuum, and for the same purpose, i. e., to indicate a transition to another group of numbers. Hence, specific distinctions would be entirely *quoad nos*, and not *secundum se*. To accept this view is to deny the doctrine of substantial forms; for, according to it, all things would differ only accidentally. If we are to maintain a hylomorphic conception of nature, we must preserve the integrity of substantial species, both *secundum se* and *quoad nos*. But, as we shall subsequently see, we are not required to deny all continuity among natural substances. Our task is to determine the character and extent of the continuities which are compatible with the absolute discontinuity of species. Differences of more and less may be subsequent to specific distinctions; there may be more or less in substance according to the dispositions of matter.[14]

9. The three propositions which have just been discussed belong to metaphysics and the philosophy of nature. Their relevance to the problem of species is immediately apparent. The two following propositions take us into logic and the theory of knowledge, and will have a relevance of a different sort.

10. *A definition is the formula of a species which, in turn, is the formulable essence of a substance.* This proposition is stated in

[14] "Although more and less do not cause diversity of species, yet they are sometimes consequent to specific difference, insofar as they are the result of diversity of form" (Aquinas, *Summa Theologica*, I-II, 72, 8, ad. 1). "Wherefore the Philosopher says that, as a number cannot be more or less, so neither can that which is in the species of substance, that is, in respect of its participation of the specific form; but insofar as substance may be with matter, i. e., in respect of material dispositions, more and less are found in substance" (*ibid.*, 52, 1). St. Thomas, furthermore, appears to take the position that specific substantial forms are ordered as greater and less, but this does not mean that they are degrees of one another: "More and less change the species, not according as they are caused by the intensity or remissness of one form, but according as they are caused by forms of diverse degrees" (*S. T.*, I, 50, 4, ad. 2). "When we say that substance does not admit of more or less, we do not mean that one species of substance is not more perfect than another; but that one and the same individual does not participate in its specific nature at one time more than another; nor do we mean that a species of substance is shared among different individuals in a greater or lesser degree" (*S. T.*, I, 93, 3, ad. 3). This last text must be read together with the one which says that more and less are found in substances of the same species according to diverse material dispositions.

characteristically Aristotelian language because it makes the point so simply clear.[14a] The species is the "formulable essence" of a thing. A definition formulates the formulable. When we define, when we say *what* a substance is, we are expressing its essence or species. The relation of the definition to the essence is so intimate that Aristotle frequently substitutes the word 'formula" for the word "form" in discussing what is united with matter in a composite substance.[15]

As we have already seen, only substances can be defined in a strict sense of "definition," because only substances have essences or species strictly. "Nothing, then, which is not a species of a genus will have an essence,—only species will have it, for in these the subject is not thought to participate in the attribute and to have it as an affection, nor to have it by accident; but for everything else as well, if it has a name, there will be a *formula of its meaning*—viz., that this attribute belongs to this subject; or instead of a simple formula we shall be able to give a more accurate one; but there will be no definition or essence." [16] Two distinctions are involved here: first, simple accidents have essences in an analogical sense, and hence in a correlative analogical sense can be defined; [17] second, other things, which are neither substances simply nor simple accidents but compositions of substance and accident, as "white man," can be defined, but such definitions are strictly nominal, "formulae of the meaning of a name." [18] Only the second distinction is important for our present discussion; for although "an accident and its subject do not constitute a substantial unity (*unum per se*), and for this reason their conjunction does not produce a nature to which the notion of genus or of species

[14a] "Definition is the formula of the essence" (*Metaphysics*, VII, 5, 1031[a] 12). "Therefore there is an essence only of those things whose formula is a definition" (*ibid.*, VII, 4, 1030[a] 7). Cf. Aquinas, *Summa Theologica*, I, 29, 3, ad. 3.

In these and similar passages, the Greek word which "formula" translates is "logos." This indicates that the word "formula" should be understood as signifying interior speech, i. e., mental discourse. In short, definition is the *formulation* of the essence, the intellectual expression of it.

[15] Vd. *Metaphysics*, Bk. VII, VIII.

[16] *Metaphysics*, VII, 4, 1030[a] 12-18. Cf. fn. 3 *supra*. "Essence will belong, just as the "what" does, primarily and in the simple sense to substance, and in a secondary way to the other categories also. . . . . Definition and essence in the primary and simple sense belong to substances. Still they belong to other things as well. . . . There can be a formula or definition even of white man, but not in the sense in which there is a definition either of white or of a substance" (*ibid.*, 1030[a] 29-1030[b] 12).

[17] Vd. Aquinas, *De Ente et Essentia*, Ch. VI.

[18] Vd. Aristotle, *Metaphysics*, VII, 4.

could be attributed," nevertheless, such accidental names which express a concretion, for example, white man or musician, are usually placed in the category of substance by a kind of reduction.[19] A real definition has a unity which reflects the unity of the essence being defined: although the definition is complex, always having such parts as genus and difference, the parts of the formula are related as the parts of the composite being defined, as matter and form. Only matter and form can constitute a substantial unity (*unum per se*); the unity of the essence of composites is similarly a composition of matter and form; and a real definition,—one which formulates an essential unity, and not an accidental one,—must be constituted in the same way. Whenever the terms of a complex formula are related not as matter and form, but as subject and accident, the formula has only accidental unity (*unum per accidens*), what is grasped thereby is not a substantial species but an accidental concretion, classified as a substance only by reduction to its major term, and the definition is *nominal* rather than *real*. It answers the question *quid nominis* rather than *quid rei*.[20] The decision whether a given formula is to be regarded as a real or a nominal definition would, in these terms, seem to depend on whether the parts of the definitory complex are viewed as a composition of matter and form, or one of subject and accident.

Unfortunately, the situation is complicated by another distinction, that between an essential definition and a descriptive defini-

[19] *De Ente et Essentia*, Ch. VI. "From the accident and its subject there is produced not a substantial unity, but an accidental unit, and consequently no essence is produced by their union, as from the union of form and matter; and on this account an accident has not the nature of a complete essence, nor is it part of a complete essence, but just as it has being only in a qualified sense, so too it has essence in a qualified sense."

[20] Vd. Aristotle, *Metaphysics*, VII, 12: "Wherein consists the unity of that the formula of which we call a definition, as for instance in the case of man, 'two-footed animal'; for let this be the formula of man. Why, then, is this one, and not many, viz., 'animal' and 'two-footed'? For in the case of 'man' and 'white' there is a plurality when one term does not belong to the other, but a unity when it does belong and the subject, man, has a certain attribute; for then a unity is produced and we have 'the white man'. . . . Why are these (animal and two-footed) one and not many? Not because they are present in one thing; for on this principle a unity can be made of any set of attributes. But surely all the attributes in the definition must be one; for the definition is a single formula and a formula of substance; so that it must be a formula of some one thing; for a substance means a 'one' and a 'this,' as we maintain" (1037^b 10-27). The answer is given in Bk. VIII, 6: "Clearly, then, if people proceed in their usual manner of definition and speech, they cannot explain and solve the difficulty. But if, as we say, one element is matter and another is form, and one is potentially and the other actually, the question will no longer be thought a difficulty" (1045^a 25). Cf. VII, 10; VIII, 2, 3.

tion, according as the knowledge of the essence being formulated is adequate or inadequate; in the one case, the intrinsically constitutive notes of the essence are apprehended, in the other, we have only extrinsic signs, properties empirically recognized as characteristic.[21] The complication is unfortunate because descriptive definitions are sometimes regarded as nominal. Thus, Maritain, in distinguishing the two sorts of knowledge which we have of the natures of composite substances, identifies dianoetic intellection (or adequate knowledge) with real definitions, and perinoetic intellection (or inadequate knowledge) with nominal definitions.[22] Yet, in the same context, Maritain says that a quiddity is known in both cases, though only in the case of the dianoetic intellection, expressed in a real definition, is it known *quidditatively*. Thus, we have two distinct senses of "nominal definition": first, the formula of that which is not an essential unity, not the species of a substance, but the accidental unity of subject and accident; second, the formula of that which is, in fact, an essential unity, the species of a substance, but inadequate as knowledge of it. In the second case, the nominal definition has the same sort of objective reference as a real definition, differing only as an approximate and inadequate formula from a perfect one. This raises a difficult problem: how do we know that a definition *is not* nominal in the first sense, when we know that it *is* nominal in the second? The problem raised leads us from the logical discussion of definitions to the consideration of the extent and character of our knowledge of essences, i. e., the species of composite substances.[23]

Before we turn to the theory of knowledge, one further point must be added. In the mediaeval tradition, the essence of a thing inofsar as it is formulable,—the object of definition,—was distinguished from other senses of "essence" by the name "quiddity." The *quiddity* of any *hoc aliquid* is that in virtue of which *this somewhat* is some *what*. "Because that by which a thing is constituted in its proper genus or species is that which is signified by the definition indicating what the thing is, hence the name essence is changed by philosophers into the name quiddity." In contradis-

[21] Vd. Maritain, *An Introduction to Logic*, New York, 1937: pp. 23-24. Cf. *Introduction to Philosophy*, p. 204.

[22] *Degrees of Knowledge*, p. 256, and fn. 1. Cf. *An Introduction to Logic*, pp. 76-80.

[23] As will be seen later, Locke was moved by just such considerations to deny that we had knowledge of anything but what he called "nominal essences," because he thought it was clear that all our definitions were nominal in the second sense. He did not deny "real essences," but regarded them as evading the comprehension of human knowledge.

tinction, "the name nature seems to signify the essence of the thing inasmuch as it is related to the thing's proper activity. The name quiddity, however, is taken from what is signified by the definition, but it is called essence inasmuch as through it and in it the being has its existence (esse)." [24] The essence as quiddity, the definable, is the being of anything *qua* intelligible.[25]

11. *The quiddities of composite substances,—hence, their essences as intelligible, their species as definable,—are the proper or cognate objects of the human intellect.*[26] This proposition makes two points. (1) Although being or essence is the adequate object of intellect simply, the power of the human intellect, suffering the limitations of its dependence on sense, does not extend equally to all beings. The Divine essence and the essences which subsist as separate substances are, in respect to man, supra-intelligible: more intelligible in themselves but not for us. The individual natures of physical things are, in their singularity, infra-intelligible. They, too, escape our power of definition. An intellect which must cooperate with sense has for its proportionate object the quiddity, or intelligible essence, of a sensible substance. (2) Our intellects are not only capable of knowing the essences or species of physical composites, but, in the strictest sense, "there is knowledge of each thing only when we know its essence." [27] In the ancient meaning of *scientia*,—for which we have to substitute the name *philosophia* because empirical research has appropriated the ancient name,—science as demonstrative knowledge depends upon definitions, since it arises with knowledge of the essence of things, and proceeds to what ever is consequent thereon. We must not forget the distinction between essential and descriptive definitions at this point. Our knowledge of physical nature is philosophical only so far as we possess real or essential definitions. Otherwise it is scientific,—in Maritain's terms, empiriological as opposed to ontological science.[28] The line between the philosophy of nature and the natural sciences can thus be drawn. It remains a question, however, whether the

[24] Aquinas, *De Ente et Essentia*, Ch. I.

[25] Vd. Maritain, *Introduction to Philosophy*, Ch. V.

[26] Vd. Aquinas, *Summa Theologica*, I, 84, 7; 84, 8; 85, 5, ad. 3.

[27] Aristotle, *Metaphysics*, VII, 6, 1031^b 8. Cf. Aquinas: "Since the principle of all the knowledge which the reason acquires about a thing, is the understanding of that thing's essence, because according to the Philosopher's teaching, the principle of a demonstration is *what a thing is*, it follows that our knowledge about a thing will be in proportion to our understanding of its essence" (*Summa Contra Gentiles*, I, 3). Cf. *De Veritate*, 8, 2; 20, 4.

[28] Vd. *Degrees of Knowledge*, pp. 38-40, 48, 215 ff., 248 ff. Cf. *Introduction to Philosophy*, p. 203; *Introduction to Logic*, p. 79.

definitions which the sciences employ are nominal in both senses, i. e., whether the objects known, however inadequately, are specific substances or only accidental unities.[29]

Next we must consider the manner in which we come to know the essences of things. We do not apprehend the substantial form or specific essence directly, but only by a process from accidents to properties and thence to definitions. What we know directly by sense in every case are the contingent accidents but since these are the workings or effects of the properties, they enable us to determine the latter. Further, since the properties are the necessary consequences of the specific nature or substantial form, a definition can be formulated when the properties are known, i. e., the specific properties which are convertible with the essence. The relation of essence, property and accident in the order of knowing is thus seen to be inverse to their relation in the order of being.[30] In the order of being, accident or operation depends upon power, and power upon essence; but our knowledge of essence depends on our knowledge of powers or properties, and they in turn on our knowledge of operations. Throughout this discussion, the word "accident" has been used as equivalent to "contingent accident," and hence divided against property; for, predicamentally speaking, both contingent and proper accidents are accidents, and are divided against essence as belonging to the substantial order. It should be emphasized that property and accident are not only different from the point of view of *being*, in their relation to the formal and material principles of composite substance; but that they are also different in relation to our mode of *knowing*. Like the essence, a property is not directly known.[31]

Because of the way in which we come to know the essence, there is a further limitation upon our knowledge of it. Not only do we fail to apprehend it directly, but in our knowledge of it we are compelled to substitute an accidental for a substantial difference. Thus, St. Thomas writes, "rational and sensitive, as differences,

[29] As we shall see, two distinctions between natural philosophy and the natural sciences are possible: (1) the former knows essences adequately, the latter inadequately; (2) the former knows essences, the latter only accidents, i. e., accidental concretions.

[30] "The species of a thing is gathered from its operation; since operation indicates the power which reveals the essence" (Aquinas, *Summa Contra Gentiles*, II, 94). Cf. *Summa Theologica*, I, 77, 1, ad. 5; 77, 6. On the point that powers are not directly known, vd. *ibid.*, 87, 2.

[31] This is the ground for identifying property with power for, with the exception of habit, which is a kind of power, all other predicamental accidents are capable of being directly known. Vd. fn. 80[a] *infra*.

are not taken from the powers of sense and reason, but from the sensitive and rational soul itself. But because substantial forms, which in themselves are unknown to us, are known by their accidents, nothing prevents us from sometimes substituting accidents for substantial differences." [32] For a correct interpretation of this, and many similar passages, we must recognize that the accidental difference which is substituted for a substantial difference, is not a contingent accident, but proper accident. The point is not that we use a term which can be predicated only *per accidens* in place of one which can be predicated *per essentiam*, but that in composing the definition, the difference we add to the genus is known by us only as it exists accidentally,—i. e., as a predicamental accident,—and not as it exists in the substantial order.[33] There are two degrees of inadequacy in our knowledge of essences: the *greater* occurs when we must employ accidental differences (contingent accidents) as signs of essential differences (proper accidents); the *lesser* inadequacy occurs whenever we employ an accidental difference (a proper accident) in place of a substantial difference. The latter is always the case for we never know the difference as it exists in the substantial order, for to know it thus would be to apprehend the species in its interior constitution by genus and difference. Such words as "rational" and "sensitive" have two significations: (1) they signify differences which have their being in the substantial order and thus they name parts of the essence and not powers; (2) they signify differences which have their being in the accidental order and thus they name powers (properties) and not parts of the essence.

The two grades of inadequacy in our knowledge of species, just distinguished, correspond to a distinction we have already discussed, namely, between nominal or descriptive definitions, and real or essential definitions; or, in Maritain's terms, the difference between perinoetic and dianoetic intellection.[34] An interesting

[32] *Summa Theologica*, I, 77, 1, ad. 7. Cf. *ibid.*, 29, 1, ad. 3; I-II, 49, 2, ad. 3; *De Pot.*, 9, 2, ad. 5; *De Veritate*, 4, 1 ad. 8; 10, 1, ad. 6; *De Spirit. Creat.*, 11, ad. 3; *In Sent.*, II, dist. 35, 1, 2, ad. 3.

[33] In commenting on *Metaphysics*, VII, 12, where Aristotle discusses the way in which we often use contingent accidents in place of proper ones in making definitions, St. Thomas makes the other and different point: "Sometimes necessity compels us to use accidental differences in place of *per se* differences, insofar as they are signs of essential differences unknown to us" (*In Meta.*, VII, lect. 12, 1552). Vd. Maritain's discussion of this matter in *Degrees of Knowledge*, p. 255, fn. 1.

[34] "A capital distinction imposes itself on the mind between the knowledge of (substantial) essences by 'signs' or the accidents (properties) which manifest them,

question now arises which, as we shall see, bears closely on our problem of species. Do we know the essences of sensible substance dianoetically at all; and if so, how many real definitions do we possess of natural species? It might be thought at once that the question is improper in the light of the principle that quiddities of sensible things are the proper object of the human intellect. If our intellect is proportioned to this formal object, how can it fail to apprehend some or all objects of this sort? What does it mean to say that "our intellect is capable of knowing the essences of things" and then to add that it knows none or few? If any answer can be made to this objection, it must be of the kind that Maritain gives, when he says, "we do not maintain that the intellect always knows the essences of things (in the totality of their properties). The specific essences are often unknown to us and undefined. This is due to the imperfection of the human intellect. But we maintain that our intellect is capable of knowing them—and therefore does actually know them in many cases. Neither do we maintain that the intellect can always know the essences perfectly, that is, distinctly. That it can often know them only confusedly matters

at least in their most universal features (*dianoetic intellection*), and the knowledge of them by the 'signs' which . . . are known *in place of* the natures themselves, in such a case inaccessible in their formal constituents (*perinoetic intellection*). . . . When the mind lays hold on a property in the strict and philosophical (ontological) sense of the word, it attains to a difference of being; an accidental form is grasped in its intelligibility, and, by it, the essence (as human nature by rationality, and animal nature by sensitivity); this is what happens in dianoetic intellection. But on other occasions the properties in the strict sense of the word remain inaccessible; it is sheaves of sensible accidents (general accidents) which are grasped exclusively insofar as they are observable or measurable, which *take their place* (such as the signalizing 'properties,' density, atomic weight, temperature of fusion, of evaporation, spectrum of high frequency, etc., which serve to distinguish a body in chemistry). These signalizing characteristics receive the name 'properties,' but their bearing is as wholly different and as little philosophic as that of the chemical use of the word 'substance.' They are at once exterior signs and masks of the veritable (ontological) properties; they are empiriological ones, substitutes for the properties rightly called. . . . Finally, we can say that every (instrumental) sign reveals in concealing and conceals in revealing. In the case of dianoetic intellection it is a case of signs which reveal more than they hide; in that of perinoetic intellection, of signs which hide more than they reveal. . . . In dianoetic intellection substantial natures are in some degree known *in themselves, by signs* which are their own accidents, properties in the philosophical sense of the word (as to these properties, they are known by other accidents which are their workings). In perinoetic intellection, substances and their properties are known *by signs in signs*" (Maritain, *Degrees of Knowledge*, pp. 253-4). It should be noted that Maritain divides philosophy and science according to these two modes of intellection, and further, that he regards science as knowledge of substances (specific natures), differing from philosophy only in greater inadequacy.

little. What is certain is that it is capable of apprehending them." [35] Whether this answer is tenable or not, cannot be argued here, since the argument depends on points yet to be made. What concerns us here is the main question itself, and the answers it has elicited. This matter is so important for the rest of our discussion that it will not be inappropriate to devote a separate section to it, unavoidably long because of the complexity of the details involved.

III. THE EPISTEMOLOGICAL DIMENSION OF THE PROBLEM

12. The question concerning the extent and validity of our knowledge of the species of composite substance was never explicitly formulated by Aristotle or St. Thomas. It is not answered by St. Thomas's discussion, already noted, of the general inadequacy of our knowledge of substantial forms and essential differences.[35a] Accordingly no answer to it can be found definitely written in their works, although there are texts which yield different answers if construed with this question in mind. Upon analysis, four answers appear to be the leading possibilities, and some of these have been given by post-Thomistic writers.

(1) *That we possess no real definitions, i.e., that we do not adequately apprehend (dianoetically, in a real definition) the species of any natural substance.* This answer is given by Pierre Rousselot. Admitting that St. Thomas, following Aristotle, "believed that definition reveals the intelligible reality of things, and that he saw in it the mental counterpart of the essence of things which is proportionate to the mind's capacities and satisfies it per-

[35] *Introduction to Philosophy*, pp. 203-4. Cf. *Degrees of Knowledge*, p. 256: "To make use of a capital distinction of Cajetan, we can say that it is a different thing to know things 'quidditatively' and to know a 'quiddity.' Thomists teach that the human intelligence has for its connatural object the essence or quiddity of corporeal things; they have never said that it should always know this object 'quidditatively.' That is a perfection of apprehension which can only be realized, and is only realized, within certain narrow limits. The humblest form of human knowledge, that general and inherited knowledge which is implied by language and nominal definitions, deals with quiddities, but in the most imperfect fashion, and the least quidditative, like a needle in a haystack." Cf. Locke, *Essay Concerning Human Understanding*, Bk. III, Ch. 6.

[35a] "The passages from St. Thomas which can be cited with regard to this question are confined generally to the affirmation of the general principle that substantial essences of things and their proper differences are hidden from us, and that we need, in order to attain to the essence, to make use of differences grasped from the accidents. . . . Writing at a time when there was as yet little differentiation between the experimental sciences and natural philosophy, it is understandable how St. Thomas was content to stop at these very general statements" (Maritain, *Degrees of Knowledge*, p. 255, fn. 1).

fectly," [36] Rousselot, nevertheless, argues that the very complexity of any definition makes it only an analogical approximation of the essence, which is perfectly one.[37] Nor does he think that there is any more than an apparent contradiction in St. Thomas on this point, because he regards St. Thomas's claims for definition as "secondary, superficial assertions. The very naivete of some of St. Thomas's expressions cited leads to the belief that he did not go very deeply into the question of the definability of natural substances. . . . The fact that he was not disconcerted by bad results (in trying to make definitions) only goes to show that he did not trouble very much about the consequences of his theory." [38] Even in the case of the definition of man as a rational animal, which Rousselot admits St. Thomas "puts forward as representing the ideal definition," [39]—Rousselot asks: "What shall we say of the ease with which on occasion he abandons the ideal definition itself, that of man, upon which the system seems to rest?" [40]

[36] *The Intellectualism of St. Thomas*, New York, 1935: p. 103.

[37] "With the necessity for reflection (in human knowledge) a certain complexity is introduced into human ideas, not unlike that implied in analogy, which absolutely excludes the possibility of a unique idea corresponding to a material substance. And that is tantamount to admitting that such knowledge is not appropriate to its object. This explanation, which is an echo of the general principles of St. Thomas's theory of knowledge, would have the advantage of showing that *all general ideas of substances are necessarily analogical in character*, and that the true and adequate idea could not be the result of abstraction, but rather the product of *a priori* condensation. It is in this latter way that the angels perceive things. They possess innate forms which are natural to their intelligences and which are types of all reality. The lowest of Angelic ideas are at least equivalent to natural species. In a similar way the human soul has a true and adequate idea of 'things' (non-substantial) of which it is itself the measure, namely, the *artificiata*" (*op. cit.*, p. 108). Cf. Locke, *Essay Concerning Human Understanding*, Bk. III, Ch. 6: Sect. 2, 3, 40, 41.

[38] *Op. cit.*, p. 109.

[39] *Op. cit.*, p. 104.

[40] *Op. cit.*, p. 109. "Because many of the Fathers had looked upon the celestial bodies as so many 'rational animals,' St. Thomas, apparently seeing no contradiction in such a supposition, is quite ready to include under this definition as many species as there are stars in the firmanent. It is well to remember these vacillations and concessions. . . . Having clearly shown how a thing could be identical with an idea, he failed to recognize the contradiction implied in the effort to make one essence identical with two ideas or with one phrase" (p. 110). The reason which Rousselot offers for this is that St. Thomas, "gifted with the subtle power of contemplating things invisible, was comparatively uninterested in the world of sound and color. He is content to repeat what others have said about it. Aristotle the philosopher did not cease to be Aristotle the naturalist. When he describes the external appearances of things he takes his time over it and is not obsessed with the idea of obtaining an intellectual grasp of the underlying essence. St. Thomas, who was more of a metaphysician than a zoologist, is always thinking in terms of the essences of spiritual substances, which are so limpid and transparent" (p. 110).

There are three objections to Rousselot's position: first, that truth is in the human intellect according as it is measured by the object, and not according as it measures it,—hence the fact that human concepts do not measure natural substances is no argument against the adequacy of the knowledge they afford; second, the fact that the definition is not simply one in the same way as the essence it signifies does not argue that our complex concepts must be analogical, because a thing need not be *understood* in the same manner as it *is*; it is enough that the complexity of our definitions reflects the composite character of substantial species. Finally, as Maritain points out, Rousselot fails to distinguish between the two degrees of inadequacy in our knowledge of essences: since we never apprehend the essence through a difference in the substantial order, he concludes that our apprehension never transcends the accidents we must employ.[41]

(2) *That we possess quidditative knowledge (essential definitions) of the species of all things which, in the vocabulary of common speech, are spoken of as substances.* This is the position which Locke attributed to the scholastics and which he so thoroughly refuted and ridiculed, that there never can be need for any further discussion of it.[42]

(3) *That we possess quidditative knowledge (an essential and real definition) of only one species, namely, man; and that with respect to the specific essences of all other composite substances we have only nominal and descriptive definitions.* This position is taken by Maritain and others, notably Garrigou-Lagrange.[43] It

[41] Vd. *Degrees of Knowledge*, p. 251; cf. J. de Tonquedec, *La Critique de la Connaissance*, p. 355, there cited.

[42] Vd. *Essay Concerning Human Understanding*, Bk. III, Ch. 6. "A similar reproach forms the basis of the criticism directed by several contemporary philosophers against what one of the more serious of them has christened 'pre-cartesian thought.' It is humiliating enough even to have need to reply. For the charge comes in part from the flaws of a decadent scholasticism, in part from a superficial reading of some elementary exposition, and most of all from a remarkable ignorance of the philosophical tradition" (Maritain, *Degrees of Knowledge*, pp. 38-9).

[43] "Here on earth man is the sole being whose specific difference belongs to the purely intelligible and not the sensible world: which is what allows us to deduce his different properties. Lower beings only become truly intelligible in their transcendental (or common to all beings) and generic features. We know, for example, that mercury is a corporeal substance, a liquid metal, but we do not know by that its specific differentiation. We only have, when it becomes necessary to make precise these generic notions, an empiric, descriptive definition, which does not stretch to making *intelligible* the properties of this body We content ourselves with saying that mercury is a liquid metal at an ordinary temperature, silver white, soluble at 40 degrees, which boils at 350 degrees, very dense; its salts are very potent anti-

amounts to saying that, although the cognate object of the human intellect is the composite substance, "its most exactly proportionate object in the order of the sensibly real is man himself and the world of his properties which he presents. Mind turns toward mind; the purely spiritual to the purely spiritual; the spirit involved in the senses to the spirit which informs a body." [44] If the angelic natures, because immaterial and supra-sensible, transcend our power of knowing essences by abstraction from sense, there are also many corporeal natures which are "too immersed in matter to fall within the grasp of our intellect." [45]

According to Maritain, the line which divides the philosophy of nature from the empiriological natural sciences,—whether empiriometric or empirioschematic,—can be drawn in terms of this distinction between the two sorts of knowledge we have of natural essences. On the one hand, the sciences can achieve no more than descriptive definitions. Their classifications are entirely in terms of observable accidents which can be empirically correlated as having a certain invariancy, and which are therefore taken as properties even though they are not strictly properties in the sense of rendering the nature intelligible to us. The philosophy of nature, on the other hand, achieves an essential definition, with a consequent deductive ordering of our knowledge, only in the case of human nature. It extends to the essences of all infra-human things only inasmuch as reason apprehends certain generic formalities, of the sort involved in the distinctions between living and non-living bodies, animals and vegetables, men and irrational animals.[46]

septics, but also very toxic. We can state the facts but we cannot state their *why*. It is the same for the plant or the animal: who can assign the specific differences of a species so that one could deduce the properties? If it is a question of man, on the contrary, among all the features common to all men—rationality, liberty, morality, sociability, speech, religion, etc.,—one, *rationality*, appears like the *raison d'etre* of all the others." (Quoted by Maritain from *Le Sens Commun*, 3rd edit., in *Degrees of Knowledge*, pp. 215-6, fn. 1.) Cf. Garrigou-Lagrange, *Le Sens du Mystère*, Paris, 1934: pp. 12-14.

[44] Maritain, *The Degrees of Knowledge*, p. 257.

[45] Maritain, *The Degrees of Knowledge*, p. 254. Cf. fn. 1, p. 252: "If, moreover, even after scientific investigation, the *quod quid est* of the stone is not discovered by us, it is not because it transcends our powers of knowledge, but rather because it does not reach to their level."

[46] Vd. Maritain, *Degrees of Knowledge*, p. 216; cf. pp. 38-40. "If it is true that the nature of substances inferior to man is not accessible to our discovery in its specific diversity, it is necessary to say that the proper object of the philosophy of nature does not extend to this specific diversity of bodies nor to the multitude of their phenomena . . ." (*ibid.*, p. 48). "The philosophy of nature must remain content with certitudes of such a high degree of universality. It must leave all questions of the diversities and specific particularities of the world of bodies, all

What must be emphasized here is that, according to this third position, the empiriological sciences know specific distinctions, even though these specific essences are known indistinctly and inadequately in the manner of descriptive and nominal definitions, *by* and *in* accidental signs "which hide more than they reveal."[47] Scientific classifications are said to distinguish, however inadequately, things which are really specifically different; thus, gold and mercury are species of metal, lion and dog are species of animal, even though the best scientific knowledge we now have of these things,—or, for that matter, ever will have,—does not grasp a single property, in the strict sense, of the substances in question.[48] We are forced, therefore, to ask a crucial question about

the details of the workings of sensible nature, in the hands of that knowledge which Leibnitz called 'symbolic' or 'blind,' and which here I have suggested calling empiriological. That knowledge can enter into the fullest detail: it is the essence that escapes us. . . . There is no other science of the phenomena of nature than the empiriological, and that science is not a philosophy" (*ibid.*, pp. 216-7). The specific natures of the world of bodies are not the object of the philosophy of nature. "These natures *would be* the specifying object of the natural sciences, if these sciences could, as they cannot, attain to it; they stop at an empiriological knowledge. . . . The specific object of the philosophy of nature is, in corporeal natures taken as such, the ontological mutability and the formalities by which the mind can discern a difference of being (corporality, quantity, movement, life, animality, etc.): which is sufficient to assure to it its distinction from and autonomy with regard to the experimental sciences" (*ibid.*, p. 217).

[47] It is not merely that a substantial difference remains unknown and that a property (predicamentally speaking, an accidental difference) must be substituted therefor. That is so in the best of human definitions. Scientific definitions are further inadequate in that what is truly only an accident (speaking according to the predicables) must be substituted for a property.

[48] Maritain suggests, at one point, that common-sense knowledge precedes science in apprehending the specific diversities of natural objects. Though its mode of apprehension is even less precise than what is later accomplished by research, by methodic observation and measurement, common-sense nevertheless knows that there are these many species in nature and rightly distinguishes one from another, despite its lack of quidditative definitions. "The humblest form of human knowledge, that general and inherited knowledge which is implied by language and nominal definitions, deals with quiddities, but in the most imperfect fashion. . . . These nominal definitions precede all science, and are pre-requisites of any motion of intellectual search" (*Degrees of Knowledge*, p. 256 and fn. 1). Two things should be noted here: first, that science does not replace the nominal definitions of common sense by real definitions, but merely improves them by a more exhaustive and precise statement of the accidents; second, that in holding the common names of ordinary language to signify species, Maritain may fall within the scope of Locke's critique. He does not claim we know *what* these species, these real essences, are; but he does maintain we know *that* they are, and that this one is specifically distinct from that. Locke could ask how our merely nominal definitions warranted us in supposing that the common names of ordinary language, or even the technical names of science, signified real essences. Vd. fn. 49[a] *infra*.

this third position: what justification have we for saying that gold and mercury, lion and dog, are real species if our knowledge of these things goes no further, at its best, than nominal and descriptive definitions, with all the limitations of perinoetic intellection? Our nominal definitions may be nominal in both senses of that word, i. e., they may be not only descriptive rather than essential, but also the adequate formulation of accidental concretions (unities constituted by substance and accident) rather than the inadequate formulation of real essences, species of substance.

The point can be readily seen in the following illustrations. In a series of concepts of diminishing generality of extension, such as *living body, animal, irrational animal, vertebrate, mammal, canine, dog, poodle,* etc., there must be one and only concept which designates the essence of Gyp or Fido. According to Maritain, it is not the concept *animal.* Even though we have a real definition of animal, what is defined is only a generic formality and not a species. The species is here indicated by a concept for which we have only a nominal definition. "It is the concept *dog*, as zoology discovers by indirect signs, and without being able to give us a truly distinct knowledge of the essence thus apprehended."[49] But we also have a nominal definition of *poodle.* As a nominal definition, it is neither better nor worse than our definition of *dog.* How do we know that *poodle* is not a species of the genus *dog*? Or how do we know that *dog*, like *poodle*, is not merely a race or variety rather than a species, and that *canine* or *mammal*, or any other concept for which we have only a nominal definition, does not signify the specific essence of a natural substance.[49a] Whichever one is chosen will make concepts of superior generality designate genera, and concepts of inferior generality designate races or varieties. (A race or variety is clearly what we mean by an accidental concretion, i. e., a species further qualified by a general accident, but neverthless a contingent one).[49b] The question, in short, concerns the criteria

[49] *Introduction to Philosophy,* pp. 204-5.

[49a] "I would fain know why a shock and a hound are not as distinct species as a spaniel and an elephant? We have no other idea of the different essence of an elephant and a spaniel, than we have of the different essence of a shock and a hound; all the essential difference, whereby we know and distinguish them one from another, consisting only in the different collection of simple ideas, to which we have given those different names" (Locke, *Essay Concerning Human Understanding,* Bk. III, Ch. 6, Sect. 38). What Locke calls a collection of simple ideas is, in Aristotelian terms, an aggregation of accidents.

[49b] "Nothing is absolutely one except by one form, by which a thing has existence; because a thing has from the same source both existence and unity; and therefore things which are denominated by various forms are not absolutely one; as, for instance, *a white man*" (Aquinas, *Summa Theologica,* I, 76, 3).

by which we are able to select that one from a series of nominal definitions which signifies a species, a real essence. Are these criteria intrinsic to the definition itself, or is the selection made in terms of knowledge which lies outside the definition?

Another example will make the point clearer. " In a series of concepts such as *substance, living body, animal, man, Aryan, Breton,*" Maritain writes, " only the concept *man,* strictly speaking, denotes *Peter's essence.* The concepts *substance, living body, animal,* denote only certain elements or intelligible aspects which enter into the constitution of that essence; in other words, they denote that essence only in one part of its qualifications, and the concepts *Aryan* and *Breton,* only as circumscribed and differentiated by certain additional notes arising from the dispositions of matter. *Aryan* and *Breton* are thus, like the essence *man,* universal objects of thought apprehended by the mind in the individual Peter and liberated by abstraction from the conditions of individual matter; but they are universals whose extension is less than that of the essence, and which belong to a particular class (*race*) divided into a multitude of individuals possessing the same essence; and, since they can be distinguished only by means of characters rooted in certain dispositions of matter, they cannot be the subject of a notion strictly speaking distinct, or a true definition." [50] But the nominal definition of *Aryan* may be no worse as the apprehension of a quiddity, than the nominal definition of *canine, dog,* or *poodle.* In each of the latter cases, it can be said that the contingent accidents by which the distinction is made are rooted in " certain dispositions of matter." Perhaps, then, " canine," " dog," and " poodle " signify races of *animal,*—of which we have a real definition,—just as " Ayran " and ' Breton " signify races of *man.* A Nazi scientist might go in the contrary direction and, taking dog as a species though nominally defined, might say that the nominal definition of Aryan signifies a real species of the genus man. It was an ancient error to suppose that *white man* was merely an accidental unity, a concretion of substance and accident. If in the nominal definition of *dog* as a *toothed, carnivorous, etc., mammal,* the accidental trait of tooth structure be taken as a sign of hidden powers that follow from the dog-essence, so it may be said that in the nominal definition of *Aryan* as *white man,* the accidental trait of complexion can be taken as a sign of hidden powers that follow from the Aryan-essence. The Aryan is not a race but a species of man,—and if we could grasp the essence through the

[50] *Introduction to Philosophy,* pp. 215-6.

powers by a real definition, we would understand the genuine superiority of the white man.[50a]

The questions which Maritain's position thus raises cannot be answered by saying that our initial concepts, which, after reflection or research, get expressed in definitions, nominal or real, tell us when a real essence is signified, as opposed to a genus or a race. As concepts, *Aryan* and *poodle* are just as simple abstractions as *man*, *dog*, and *animal*.[51] To suppose that there is something in the concepts *man* and *dog* which reveal their objects to be real species, despite the fact that we can achieve a real definition only in the first case, would be to suppose that we have an *immediate* knowledge of distinct species through our incomplex apprehension of quiddities.[52] If that is not the case, only two possibilities remain: we know that such and such are species, and that this is specifically distinct from that, only after we have done the work of analysis, through reflection and research, which results in a definition. And *either* (1) we know species only when we achieve real definitions, that is, we know *that* they are, only when we know *what* they are; *or* (2) we know species through both real and nominal definitions and, in the latter case, we know *that* they are, even when we do not know *what* they are. If one takes the second of these two positions, as Maritain and others do, one must be able to furnish the criteria for this *a posteriori* knowledge of specific distinctions when our knowledge of the essences involved is, through nominal definitions, analogical and remote. If, as we have seen, the criteria do not appear to be intrinsic to nominal definitions themselves, marking those which signify species from those which do not, then the only possibility is that there is other relevant knowledge in the light of which the determination can be made.

I suggest at once that there is such extrinsic knowledge, and that it lies outside the spheres of logic and epistemology, in the philosophy of nature, in the ontological theory of species itself. Let me illustrate the suggestion briefly here. Our definitions of artificial things,—of chairs and houses, pens and swords,—are, as Locke and Rousselot point out, adequate to their objects; so much so that

[50a] Vd. fn. 106 *infra*.

[51] "The definition makes known by means of *several concepts* an object of thought that a *single concept* presented to the mind" (Maritain, *Introduction to Logic*, p. 79).

[52] The position which St. Thomas takes, that there can be no error in our incomplex apprehension of quiddities, cannot be interpreted to mean that our simple concepts, without any analysis, signify genera, species and races distinctly. Vd. *Summa Theologica*, I, 85, 6. Nor is the relation of *expressed* to *impressed* intelligible species helpful here. Vd. *S. T.*, I, 85, 2, ad. 3.

these writers employ the definitions of artificiata as standards whereby to measure the inadequacy of our knowledge of natural species. Why, then, do we not say that these are *real* definitions? The answer is immediately at hand: in terms of independent ontological analysis we know that artificial things are not substances, that they are accidental unities, accidental concretions, and hence that they do not have essences, species or definitions, in the primary and strict sense of these words. Hence, however adequate these definitions may be with respect to their objects, we know that they are only nominal definitions because we know that their objects cannot be really defined. This indicates how extrinsic knowledge may be determinative of whether a definition, which objectively is as adequate as a real definition, signifies a species or not. The question is, can we make a similar determination in the case of our nominal definitions of natural things? If the philosophy of nature can provide us grounds for saying what is and is not a species, then we may be able to recognize which of our many nominal definitions signify specific distinctions, or whether any of them do. The epistemological problem concerning our knowledge of species cannot be solved within the theory of knowledge. It requires us to discuss the problem of species from an ontological point of view. Unfortunately, as we shall see, there are two positions concerning species in the philosophy of nature; but the decision between them cannot be made by the theory of knowledge. On the other hand, unless a decision between them can be made independently of the theory of knowledge, the ontological analysis will not help us in our present problem concerning nominal definitions as signifying real essences.

(4) *That we possess quidditative knowledge (real and essential definitions) of other species than man, but that we have a relatively small number of real definitions, considerably less than the number of common or technical names which signify distinct substances.* This position cannot be attributed, so far as I know, to any writer, but it is clearly a fourth alternative which the other three positions suggest. It appears to resemble the second position in that, unlike the first and third, it holds that we do apprehend natural essences in a dianoetic manner, and that we apprehend more than one. It agrees with Maritain against Rousselot in regarding the definition of man as essential and real, but goes further in insisting that we possess similar definitions of other species of sensible substances. It differs crucially from the second position, however, by denying that there are as many real definitions as there are names which signify distinctions in the substantial order.

It denies, in short, that gold and mercury, potato and rose, elephant and butterfly, name species of substance because in each of these cases it is clear that we have only nominal and descriptive definitions. Accepting Maritain's point that we have only nominal definitions of such objects, it nevertheless refuses to regard the object of any except real definitions as real species. The object of a nominal definition is always an accidental rather than an essential unit, a concretion of subject and accident, a race or variety rather than a species.

The gist of this fourth position can be summarized according to the way it interprets the principle that the quiddities of natural substances are the proportionate object of human knowledge. We not only know such quiddities, but know them quidditatively, all that there are. Every real definition we possess has a natural species for its object; and for every natural species that there is we possess a real definition. Only singulars or accidental units elude our dianoetic apprehension. These are truly infra-intelligible for the human mind, but no specific essence is.

But, it will be asked, what are the several real definitions we possess? This is answered by naming the universal concepts which we can define adequately, immediately below which in the order of concepts occur those which we cannot so define. They are: *man, brute, plant, mixture* and *element.* Thus, below *man* there are *Aryan* and *Breton*; below *brute, snail* and *tiger*; below *plant, tulip* and *tomato*; below *mixture, water* and *oil*; and below *element, potassium* and *hydrogen.* In the case of every one of these inferior concepts,—which can be taken as typical of a large multitude of others,—we have only empirical descriptions, known by common-sense or achieved by research. What is thus defined is a race, variety or accidental unit of some sort, and the first really definable concept which is immediately superior in the order of generality signifies an *infima* species. It should be noted that of the five species, which this fourth position regards as exhaustive, all five are admitted by such writers as Maritain to be concepts capable of real definition; but Maritain regards only one of these concepts, *man,* as signifying a species, the other four signifying highly generic formalities which enter into the essential constitution of such natural species as *tiger* and *rose, water* and *gold.*[53] The striking difference is that these same distinctions,—between *element* and *mixture,* between *plant* and *animal,*—are here regarded as specific, *infima* specific, rather than as *merely* generic, essential notes in

[53] Vd. *Degrees of Knowledge,* pp. 216-7; and fn. 46 *supra.*

species. It might be added that no concept, which from the point of view of extension is inferior in universality to these five, is generally admitted to be capable of adequate definition by those who claim we possess a dianoetic intellection of the essence of man. If the fourth position is right in holding that wherever we have a real definition we know a specific essence,—on the further condition, of course, that all concepts of inferior generality can be only nominally defined,—it can justify the soundness of its enumeration of natural species by the accuracy with which it draws the line between the objects of dianoetic and of perinoetic intellection.

One further contrast should be mentioned as a consequence. If the line between the philosophy of nature and the empiriological natural sciences is the same line which divides the dianoetic from the perinoetic, then according to this fourth position the sciences deal only with accidents, whereas natural philosophy occupies itself with essences in the sphere of sensible being. The object of the sciences is not that vast specific diversity among infra-human things which escapes the kind of definitions a philosopher must employ; it is, instead, that equally vast accidental diversity which can only be ordered or classified by the measurements and schema of empirical research. Studying the phenomenal and changing surface of *ens mobile*, the scientist measures and correlates accidents; penetrating to the intelligible being of *ens mobile*, the philosopher reaches to essences, understanding them through their properties, as well as interpreting the phenomena in the light thereof. Common-sense precedes both science and philosophy. Philosophy makes precisely explicit the essential distinctions which the words of common speech signify; whereas science refines the accidental distinctions by its greater accuracy and multiplicity of detail.

Two objections may be made to this fourth position. In the first place, it may be asked whether we do not have better knowledge of human nature than of any other species, even granting that we possess real definitions of the other four? An affirmative answer must be given, for the reflexivity of the intellect makes it inevitable that man understand his own specific nature better than that of any other substance. It may even be admitted, as a consequence, that our understanding of other substances is in proportion to the proximity of their specific natures to our own; we can understand animals better than plants because the sensitive powers are more closely related to the intellectual than the vegetative; and living things better than the non-living because we are alive and know the movement of life intimately.[54] But the affirmative an-

[54] The further significance of this point will appear later when we consider the properties of non-living substances. Vd. Part V, Section 20, *infra*.

swer and the admission which follows is not inconsistent with the position taken. We can know all species essentially, i. e., in terms of genuine properties, without understanding their properties equally well in every case. We understand rationality as a property best because our reason is self-knowing. Because we understand the vegetative powers less well, it does not follow that we fail to achieve an essential definition of the specific nature of plants.[55]

In the second place, it may be objected that to say that whereever we have only nominal definitions the objects are not species, is to conclude from our ignorance to the nature of things. The inadequacy of our knowledge is hardly ground for certitude about the character of the existences inadequately known. We might just as well conclude from our remote and analogical knowledge of separate substances that there are no species of angels because we cannot grasp their essential distinction in real definitions. The force of the objection is not diminished by appealing to the principle that sensible reality is the cognate object of our intellect, whereas angelic natures transcend our powers; because that principle can be reasonably interpreted as not requiring a quidditative knowledge wherever we know quiddities.

This objection cannot be answered, any more than the objection brought against Maritain's position can be. In fact, the two objections are correlative. In the previous case, the point was that nominal definitions afforded us no intrinsic criteria for judging when their objects were real essences and when they were merely accidental concretions. And we decided that that judgment could be made, if at all, only in the light of extrinsic criteria provided by an ontological account of species. Here the point is that the inadequacy of nominal definitions is no basis from which to conclude that they never have species for objects. A sound theory of knowledge will not justify such an inference. That extrinsic evidence must be appealed to is indicated by our situation with respect to the angels. We know in terms of ontological analysis that each angel

[55] In *What Man Has Made of Man*, New York, 1937, I made the point that anthropology,—the analysis of human nature,—is the only body of philosophical knowledge which is distinguished by a specific material object. That would be true if man were the only specific essence we knew. The rest of the philosophy of nature would deal only with highly generic formalities common to the multitude of natural species below man. But if we know species other than man, then there are as many material subdivisions of the philosophy of nature as there are species essentially known. Anthropology would be distinguished from all the rest only through bulking much larger because in this one case,—a unique case, indeed,—man is both the subject and object of knowledge. Vd. *op. cit.*, Lect. II, and Note 32[a].

is a separate species and we are undeflected from this conclusion by acknowledging the limitations of our knowledge concerning angels. The case of artificial things, as we have seen, is similar: though our apprehension of their types is relatively perfect, we are not led thereby to transgress our ontological insight that works of art do not have essences or species, strictly. So, too, in the case of natural, sensible substances, the decision concerning the number of specific distinctions which exist,—whether more than the number which we can define essentially,—should be referred to the theory of species as that is expounded in the philosophy of nature.

13. A brief summary of this long discussion of the epistemological problem concerning species will lead us at once to the ontological problem which is our main concern.

The four positions we have reviewed agree in two major tenets.

(1) They concur in the principle that the quiddity of sensible things is the cognate or proper object of the human mind. The agreement is not perfect, however, for they interpret the principle differently. Rousselot, like Locke before him, seems to say that the object which is strictly proportionate to our powers is a work of art. Maritain, distinguishing between a quidditative knowledge of species and a knowledge of quiddities less perfect than that, holds that the strictly proportionate object for the human intellect is human nature. The other two positions agree in interpreting the principle to mean that men are able to achieve essential definitions of all natural essences, differing only with respect to the number of definitions which must be acknowledged as real rather than nominal.

(2) The four positions concur in holding that there are many specific distinctions among physical substances, though they do not agree about the number. The major difference here is between the first three positions and the fourth: only the latter appears to maintain that there is a small finite number,—such as five,—whereas the others regard the number as indefinitely large. It is noteworthy that this agreement concerning the reality of specific distinctions,—regardless of number,—is independent of the epistemological differences concerning how many species we know essentially, none, or one, or more than one. This shows that a common ontological doctrine is shared: that physical substances are composed of form and matter; that matter is the principle of their individual differences, and substantial form the principle of their specific differences; that the specific powers are determined by the form, etc. In the light of this doctrine, we know enough

about the operations and powers of physical things to be assured that there are many species of substance, or at least that there are more than one.[56] To this extent all four positions belong to the tradition of Aristotle and St. Thomas.[57] The case of John Locke makes a nice contrast. The position he takes in Book III, Ch. 6 of his *Essay* on nominal and real essences is amazingly close to, if not identical with, that of Rousselot.[58] What is even more striking is Locke's repeated affirmation of the existence of many real essences, even though we know none. Being a hylomorphist in some sense,[59] Rousselot can make this affirmation; but for Locke to make it is clearly inconsistent with his persistent denial of substantial forms, and his whole account of substances as that appears in Book II.[60]

So much for the agreement of the four positions. There is one major issue which has been uncovered in the course of our discussion of the third and fourth. It can be formulated in the follow-

[56] To say that there is only one species of substance is tantamount to the Spinozist position that there are no species at all in the order of substance, but only in attributes or modes.

[57] I prefer this mode of speech to calling them "scholastic" positions, for scholasticism is not unambiguous in its hylomorphism, notably with respect to the problem of the plurality of substantial forms. As I have pointed out, the analysis of species would be significantly affected by the pluralist error. It is difficult to tell from Rousselot's book,—since it does not deal directly with ontological problems,—whether or not he was a pluralist. From the complexion of his other principles, one might reasonably suspect that he was; in which case he cannot be classified as a Thomist, though he belongs to the wider tradition of scholasticism.

[58] Vd. fn. 37 *supra.*

[59] Vd. fn. 57 *supra.*

[60] Vd. Book III, Ch. 6, Sections 2, 3, 6, 8-10, 12, 15-20. Cf. Book II, Ch. 23, esp. Sections 1-6, 14. On the one hand, Locke appears to regard a substance as a collection of permanently associated accidents which somehow inhere in a substratum that is as unknowable, or unintelligible, as prime matter. There are indirect indications, in other portions of the *Essay*, that Locke has accepted a Newtonian, or more generally atomistic, conception of matter. His position would thus appear to be like that of the ancient materialists whom St. Thomas describes as holding that matter exists under only accidental determinations. (Vd. *Summa Theologica*, I, 76, 4.) But, on the other hand, Locke says (Book II, Ch. 23, Sections 7-11) that our distinction among different substances is determined chiefly by our knowledge of their diverse powers. Those who follow Locke in the modern tradition usually select only those passages which deny the doctrine of substantial forms, and emphasize what he has to say about nominal essences to the exclusion of the fact that he affirms, however inconsistently, the existence of real essences. Locke, and his followers even more so, illustrate how insoluble, philosophical riddles are the necessary consequence of trying to give an account of the nature of things in terms of psychology as the 'first philosophy,' the source of first principles. Cf. Gilson, *The Unity of Philosophical Experience*, New York, 1937.

ing questions: Are there many species which we do not know as we know the specific nature of man, supposing that we know only man quidditatively? Or are there only as many species as we know quidditatively, supposing that we know more than one in this way? The third and fourth position agree that we possess a real definition of man, but they otherwise disagree in answering these two questions: the third affirms (1) that we have only one real definition and (2) that there is an indefinitely large number of species for which we have only empiric descriptions; the second affirms (1) that we have several real definitions, at least five and (2) that there are only as many species as the number of real definitions we possess.[61]

The double affirmations in each case show the questions to be complex. We can separate, therefore, that part of the problem of species which belongs to the theory of knowledge, from that part which belongs to the philosophy of nature. Whether we *know* one or several species quidditatively is an epistemological question. Whether there *are* an indefinitely large number of species, or a definitely small number, such as five, is an ontological question. The latter question cannot be solved in terms of any principles proper to epistemology, and requires us to look to the philosophy of nature for the answer. The questions concerning the number of species among sensible substances can be answered, if at all, only in the context of ontological principles concerning the constitution of such species.

Furthermore, the ontological inquiry would appear to be logically prior, even though we have come to the ontological issue concerning species by way of an epistemological discussion. For if the philosophy of nature can tell us that there are only five species of composite substance, such as *man, brute animal, plant,* etc., then the position which affirms a number of real definitions (of species) is to be preferred; whereas if we learn from the philosophy of na-

[61] I am here neglecting the first and second positions as not bearing on the one fundamental issue stated in the text, because I cannot accept the grounds on which Rousselot denies the adequacy of our knowledge of human nature; nor do I think the extreme second position at all tenable. Even Locke, who refuted the preposterous claims concerning our knowledge of real essences, made by the decadent scholastics of his time and earlier, was favorably inclined toward the view that if we knew any real essence at all, it was our own nature. Vd. *Essay Concerning Human Understanding*, Bk. III, Ch. 6, Sections 26 ff. In all that follows, therefore, the proposition that man is a rational animal is being affirmed as a truth which contains a real definition of a natural species. It belongs among the principles which constitute the framework within which our discussion of the problem of species will take place.

ture that there are an indefinitely large number of species, such as *lion* and *mouse*, *pansy* and *potato*, then the position which insists that we possess only one real definition (of a species, i. e., of man) is to be preferred, since our definitions of *animal*, *plant*, though real, then become quidditative apprehensions of *generic formalities* and not *infima species*.

Unfortunately, the task which remains is complicated by two factors. In the first place, it is possible that we shall not be able to undertake the ontological inquiry in complete independence of epistemic considerations.[62] What is the case with respect to angels and artificial things may not be the case with respect to natural, sensible substances. As regards angels and *artificiata*, we can discuss the existence or non-existence of species among them,—and, in the case of angels, even the vastness of their number,—in terms of ontological principles alone, and without the intrusion of any epistemological points about the extent and validity of our knowledge, which are properly posterior. But in the case of natural, sensible substances, this ideal independence of ontology from epistemology may not be realized. The fear that it may not is forced on us by the course of the discussion so far. If, in this case, the ontological and epistemological dimensions of the problem turn out to be interdependent and reciprocal,—instead of being well-ordered as prior and posterior,—then the problem will be insoluble: because, as we have seen, the issue concerning our knowledge cannot be resolved unless there are extrinsic (ontological) criteria for judging whether what is known by a real or a nominal definition exists as an infima species. (There seems to be no doubt about this only in the case of man.) Hence, unless such extrinsic criteria can be found in the philosophy of nature, neither the ontological nor the epistemological problem concerning species can be solved. One thing is clear: except in the case of man as a species and as defined, the presence in us of either real or nominal definitions is no warrant for concluding about the number of existent species. The nature of our knowledge, its relative perfection or imperfection, is no basis for inferring anything about the nature of things, so far as specific distinctions go.

In the second place, we shall find that the philosophy of nature, according to the tradition of Aristotle and St. Thomas, appears to take two views concerning the number of species of sensible things, one corresponding to the position that there are only five, the other to the position that there are indefinitely many more. If there had

[62] Vd. (pp. 112) *supra*.

been only one traditional doctrine on this matter, our task would have been simplified. Perhaps it is more accurate to say we would have had no problem, for it is constituted by these two views in apparent opposition. Our task is precisely one of judging between them; or of showing that the opposition is *only apparent.* The problem will remain unsolved until such a judgment or showing can be made.

We shall proceed at once to an exposition of these apparently opposed views regarding the number of species. We shall make every effort to see that the exposition is entirely ontological, in the sense of belonging to the philosophy of nature; to see that every epistemic consideration is excluded. For once it becomes clear that the opposing views are merely reflections of the two sides of the issue in the theory of knowledge, and that this is unavoidable, we should be prepared to give the whole problem up as genuinely insoluble.

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(To be continued)

EDITORS' NOTE: We append Dr. Adler's outline of the complete problem and its investigation. The foregoing installment (the first of three) carries the investigation up to division heading No. IV of the outline.

THE PROBLEM OF SPECIES

Outline

I. Introduction

1. The series of articles projected: nature of philosophical *problems*
2. Significance of problems *for Thomists*
3. The limited scope of the first article as dealing with the problem of species: its locus in the philosophy of nature, and its relation to other departments of philosophy
4. Outline of the article in its main divisions.

II. Antecedent Principles

5. Preliminary statement: why these principles must be stated to formulate the problem
6. } Three metaphysical principles, *directly* relevant
7. }
8. }
9. Transition to other principles relevant only *tangentially*
10. Logical and epistemological considerations: their discussion
11. Indicates why a separate section must be devoted to the theory of our knowledge of species.

III. Epistemological Dimension of the Problem

12. Exposition of 4 answers to the question: how many substantial species do we know adequately (by real definitions)?
    a. The position of Rousselot: none
    b. The position of Maritain and Garrigou-Lagrange: one
    c. The position of the decadent scholastics: a very large number
    d. The fourth position: five
13. Dialectical summary of the opposition of these four doctrines, which leads to the discovery that the epistemological issue cannot be resolved at all unless the ontological problem of species can be independently solved.

IV. Exposition of the Problem in the Philosophy of Nature

14. Preliminary statement of the issue as constituted by two positions, i.e., two answers to questions concerning the order and number of substantial species
15. Exposition of the first position
    1. Capital texts from Aristotle and St. Thomas
       a. Texts in re: the order of species
       b. Texts in re: the species of living things
       c. Texts in re: the species of non-living things
    2. Propositional summary and analytical explication of the doctrine contained in these texts
       a. Five propositions concerning the constitution and order of species
       b. Two propositions concerning the number of species
       c. One proposition concerning infra-specific distinctions
    3. Texts from contemporary writers in the tradition of Aristotle and St. Thomas, which *appear* to take this first position

16. Exposition of the second position
    1. Capital texts from Aristotle and St. Thomas
        a. Texts in re: the species of non-living things
        b. Texts in re: the species of living things
        c. Texts in re: the order of species
    2. Propositional summary and analytical explication of the doctrine contained in these texts
    3. Texts from contemporary writers in the tradition of Aristotle and St. Thomas, which *appear* to take this second position
17. Comparison of the two positions
    1. What is common to the two positions
    2. Wherein they differ principally
    3. Why no third position is possible
    4. The dialectical possibilities: either one doctrine is true and the other is false; or some reconciliation of the two is possible by an equivocal use of the word "species."

V. The Dialectic of the Issue

18. Preliminary statement of the dialectical procedure
19. Objections to the second position, with answers so far as possible
20. Objections to the first position, with answers so far as possible
21. Consequences of this dialectic for the epistemological dimension of the problem
22. Consequences of this dialectic for other problems in the philosophy of nature (e. g., evolution, continuity and hierarchy, etc.)
23. Indication of two possible reconciliations, and why we shall attempt one of these as a tentative resolution of the problem.

VI. Hypothetical Resolution of the Issue

24. The principle of the reconciliation: its formulation
25. Consequences of the reconciliation
    a. For the epistemological aspect of the problem
    b. For other problems in the philosophy of nature.

VII. Conclusion

26. Review of the entire argument with a view to determining whether the problem is genuine or false, if genuine whether a mystery or solvable, etc.
27. Transition to the second article on the problem of substantial change, with a note on how that problem is affected by this first one about species.

EDITORIAL NOTES

A newcomer to the ranks of American magazines edges his way into the crowd prudently only if he has a ready word of explanation on his lips. When he wears the strange robes of speculative theology and philosophy and his bags are marked for incredible destinations, the explanation becomes an apology. Why should there be another magazine at all? Why should it be speculative? Why treat of both theology and philosophy? Why should it come from these particular sources and at this particular time?

The indignant glances of the experienced magazines are justified. An apology is necessary. Not merely a mumbled word that vaguely expresses regret; rather let it be the clear, frank statement that is worthy of the philosopher, such a statement, for example, as Thomas made as he launched his *Summa Theologica* on its long voyage. That now famous "Prologue" was an analytical statement that forced its readers to use the evidence put into their hands and decide whether the work needed apology or merited congratulation.

For such a statement we must begin with the end, for it is the way of man to start with the end and reach it only after a long journey; but it is the end alone that will give significance to every step of the way. The audience to whom THE THOMIST speaks—*finis cui*—is made up not only of professional theologians and philosophers but also of the educated non-professional who has maintained an interest in the worth-while things of human life. Why should these latter be included in the aims of a speculative magazine? Perhaps because THE THOMIST is not a manual of methodology nor the organ of a vocational school. Surely because the ultimates of human thought and life were not meant to be the exclusive possession of a caste. And always there is the memory of Thomas writing his greatest book "for beginners."

How can such a diversified audience be reached by one magazine? Thomas' way seems as good as any. From the point of view of the professional THE THOMIST will be solidly scientific. By that is meant not an insistence on the apparatus of science so much as on that for which the apparatus exists. Its words will be sharp, clear blows on the solid rock from which truth is carved; though the work be laborious, dangerous, halting, it will have about it the freshness of that courage which is demanded by thought.

For the non-professional the material will be *vital*, i. e., possessed of a personal and fundamental pertinence. Or, to translate this statement still further, The Thomist will have significance for human living in the age in which this man lives. The presentation will be *clear*, which, to an energetic intellect, means that it will be appetizing. Thinking is hard enough work at any time, though it carry with it the rewards of man's highest labors well done. It has about it the fatigue which is the punishing effect of all labor. But there is no reason why the work of thought should be made odious; there is no need of sharpening the punishment of thought to the point where it becomes a lethal instrument killing the joy of it and so the appetite for it. Thought need not be obscure, dusty, imprisoned behind impenetrable terms; no need, except that the author might escape from some of the labor of his own thinking. As a last note of joy for the non-professional, the articles of The Thomist will be *in English*.

By his very profession the peace-maker stirs up a great deal of trouble and sometimes accomplishes little more than a change in the direction of the shells of the opposing armies, drawing them all on himself. The magazine that would coax philosophy from her ivory towers and wheedle the business man from his desk must expect generous objections from both sides. The man who is a professional philosopher because he is teaching the subject might be offended at the exemplifications, contrasts and applications. These after all are the ordinary means of communication between minds, the subways and street-cars that always feel a bit self-conscious in transporting nobility. The Thomist will have many other items on its worrying list to be taken care of before this item is reached. The non-professional who is accustomed to taking even his meals in a hurry, might well become impatient and call for the frosting without the cake, the desert without the meal, the conclusion without the argument.

The answer to this is that the end of The Thomist—*finis cujus gratia*—is not to end things but to start them. It will not assure a man that his thinking is all done and he may now sit back and vegetate; on the contrary it will start him off on a thinking tour of his own or it will have failed. It will present to his mind the green fields, the warm sun and the coaxing breeze of an intellectual spring which demands that he come out of his own narrow house and roam the world. It is not that The Thomist never expects to solve any problem; a real solution is never a stopping place. Always it marks the start of a new expedition after truth. Concretely The Thomist hopes to learn more about principles and to push them out of snobbish isolation into the lives, labors, quarrels, and loves of men.

The *nature* of the magazine then is fairly clear. In the physical world it makes little difference whether a thing is examined from the aspect of its nature or of its end, for there the end determines the nature and the nature the end. But in human actions, proceeding as they do from an indetermined faculty, the nature is determined by the end of the action; that is, people do not have to publish magazines. When, regardless of the advice of friends, they have really made up their minds to publish, it is not by the inexorable laws of nature that this particular variety of magazine is thrust upon the public. There is some reason behind it all, a reason that explains the nature of the magazine; if there is no reason, or the reason does not explain the nature of the magazine, we are face to face with periodical insanity.

To accomplish the ends of THE THOMIST, then, its *matter* will be theological and philosophical. It is in this matter that the intellect makes its true progress, a progress that has aptly been called "vertical" in contrast to the "horizontal" progress of factual or mechanical knowledge. Here are found the last things, the ultimate solutions, the answers to the radical "why" which is at the root of man's intellectual activity. The matter will be both theological and philosophical and aptly so. Neither is this merely because of the extraordinary fruitfulness of philosophy springing from a soil rich in theology nor because of the indispensable role philosophy plays in scholastic theology. It is demanded by the fact that human wisdom is not enough for man; without divine wisdom he loses hold even of the human. To the professional, then, the matter has the allure of mystery; to the non-professional, the enticement of life.

The *form* of this matter, breathing into it the breath of life for the human mind, will be speculation. Only in this way can this matter be handled to this end. But the speculation must be complete. It cannot stop at the dusty stage which marks, not the ripe maturity of old wine, but the cobwebbed neglect of incomplete thinking. It must look not only to the headwaters of truth but also along the length of the valley of life through which truth winds its way. It is only by complete speculation, speculation that sees the implications and applications of the truths it uncovers, the principles with which it deals, that wisdom's appetizing vitality will influence an age and bring the men of that age hungry to wisdom's table.

The end of THE THOMIST really does explain its *existence*; this is not periodical insanity. THE THOMIST is necessary, for these things have to be done—and they are not being done. Speculative philosophical magazines in English are much too few; speculative theological magazines are nonexistent. An article here and there, and a good one, yes; but is this food

enough for the intellect and will of those "beginners" upon whose care Thomas used up his last bit of life? Must they subsist on the spiritually indigestible food that is heaped on their plates day after day, hot from the kitchens of materialism? THE THOMIST is hardly elbowing its way into a subway and demanding a seat; rather it is coming upon a parking space in the center of life, a space that has been passed by inexplicably for years.

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The *efficient causes*, the editors, publishers, contributors, yes they will need apology as does every human agency. But there is the long Dominican tradition of service to truth, service not monopoly. By profession they are in love with truth; with something of love's humility, they are prepared to undergo any service in its name. Even the service of editing.

' ' '

Sheed and Ward have become familiar with the discomforts, inconvenience and labors consequent on being in love with truth—and the paradoxical indignation against the loss of any of these things if it means slowing down the pursuit of truth. It seems even publishers can fall in love—with truth. The hound and the hind run well together; the pace is swift and the chase is long, so long as to be interminable if there were no eternity in which to finish it.

As for the contributors, well here lies the territory of prophecy and it has always been dangerous ground. However it can safely be said that they will be a strange lot: gathered from all the corners of the world, all the states of life, of all ages, all languages. But they will have some common characteristics. They will be fighters who have often been beaten but haven't as yet quit; men who have gone up many a blind alley, pleased to have its blindness uncovered that they might start over again. Many no doubt should have been worn out years ago by the unremitting pace their minds have set, men who have seen nights slip away while their dogged chase went on. They will be driven men, men who cannot stop, men aflame with an inner fire that consumes but doesn't destroy, men of unquenchable thirst drinking of an unfailing fountain. They will be a courageous lot, pioneers who go a step before their fellows testing the unknown. And they will be a humble lot, for love must ever be humble, and these are the lovers of truth; not anxious about a name, a reputation, a burst of applause—but terribly, desperately anxious about the truth that waits to be uncovered.

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Why should THE THOMIST be published *at this time*? That is a question whose only answer can be a sincere, a profound apology. It shouldn't be just appearing at this time; it should have appeared long ago. That it hadn't, causes us real regret. That you may recognize that regret as sincere, effective, concrete, we now offer you THE THOMIST.

BOOK REVIEWS

Thomas von Aquin. Sein System und seine geistesgeschichtliche Stellung. By Hans Meyer, o. Prof. der Philosophie an der Universität Würzburg. Bonn: Hanstein, 1938. Pp. xii, 641.

It is now three score years since Leo XIII issued his call to the world for the restoration of scholastic philosophy according to the mind of St. Thomas Aquinas and the continuation of his spirit of investigation. No one saw more clearly than he the urgent need for such a revival to remedy the prevailing philosophical evils, which owed their existence to the relegation of the scholasticism of the thirteenth century to the scrap-heap as an outworn and unworkable philosophy of life. If the following century witnessed the glory of that scholasticism dissipated and its energy weakened, and later to all practical purposes replaced by an adulterated Cartesianism, that was not the fault of the system. Scholasticism is the *philosophia perennis* of the Western world. What was truth in the time of the Greeks was truth in the time of the scholastics and has not ceased to be truth today. Truth is immune to the corroding and decomposing action of time. The ideal proposed by the Pope was a high one and the response was generous and enthusiastic. Its attainment implied an intensive and critical investigation of systems and methods; a re-creation and revitalization of the ideas of the makers of ancient and medieval philosophy by placing or thinking ourselves into the mentality of their age, for only in the terms of their own setting are they intelligible. It meant, moreover, a renewed and exhaustive study of the scholastic system as interpreted and expounded in the works of the Angelic Doctor. Pioneers like Denifle, Ehrle and Clemens Bäumker opened up new and definite perspectives in the field of medieval philosophy, and the lines of research laid down by them have been followed by their pupils and younger contemporaries, von Hertling, Mercier, Endres, Pelster, Grabmann, Mandonnet, Gilson and De Wulf, to mention only a few. The enormous literary output since the turn of the century is simply bewildering. New personalities, schools and systems have come to light; long lost and forgotten works have been recovered, studied and edited. The ideas of those who contributed towards the shaping and building of the scholasticism of St. Thomas are resuscitated and made to tell the story of the part they played in the construction of the system of philosophy that fashioned the culture and civilization of the modern Western world. The excellent results thus far achieved have placed the philosophy of St. Thomas in a new light, restored to it a large measure of its former prestige and have made it acceptable where it had been despised.

From these preliminary reflections it is a pleasure to turn to the consideration of the work here under review. Indeed, from the standpoint of interest it is always with a feeling of deep satisfaction that we welcome works that will contribute to the return of the world to a sane philosophy. Dr. Meyer is professor of philosophy in the University of Würzburg and those who have kept in touch with the philosophical literature of the three preceding decades, have made his acquaintance through his valuable contributions. The work before us, beyond question his *opus magnum*, is one of imposing dimensions and the mature product of a life devoted to historico-philosophical research in the field of ancient and medieval philosophy. As the title indicates, it can in no way be listed as a biography of the Angelic Doctor; the purpose of the work definitely excluded such a consideration. The author describes it as a historico-systematic work. "Historical, in that it considers the greatest philosophical system of the thirteenth century in the light of its historical antecedents, that is, in the light of the explanations of the principal intellectual tendencies of the past; systematic, in that the investigation has always in view the problems of the Thomistic system and aims to elucidate and clarify them in the light of their perennial value and import." In the accomplishment of his task the author has been eminently successful. As an unusually extraordinary contribution to the literature on St. Thomas and his system, it will long serve as a standard work that will be thumbed by student and professional alike. It is built up on the results of the preparatory and basic labors of the past fifty years or more, and may therefore be regarded as the keystone of an untiring and relentless historico-critical research in the field of ancient and medieval philosophy. In scholarship and comprehensiveness of content it must be classed with the profound and strictly Thomistic work of Manser, O. P., *Das Wesen des Thomismus* (1932, 1935), which is a masterly and systematic presentation and defense of the principles with the aid of which St. Thomas built up his system; and with that of Sertillanges, O. P., *S. Thomas d'Aquin* (1910), which however has this disadvantage that the results of the researches of the last three decades were at its appearance still things of the future and consequently it lacks the atmosphere and freshness of a new production. A new, reworked and augmented edition of this valuable work would be very welcome. In passing it might not be out of place to make mention here of that monumental work of Carl Werner, *Der hl. Thomas von Aquino*, three volumes (1858 f.) and covering more than 2500 pages. Though in great measure superseded by the foregoing, it is still, making allowance for differences of time and circumstances, in many respects an indispensable work for any literary-historical study of the system of St. Thomas.

Dr. Meyer has divided his book into two parts. The first (1-63), which might be termed the introductory part, considers the place of St. Thomas in the thirteenth century: the historical sources and their utilization, the

originality of his work, his inner personality and external conflicts. Analysis of the sources has proved again and again how much the content of Thomistic philosophy is dependent on tradition. There is scarcely a philosophical idea which cannot be shown to have belonged to the past. Thomas chose with a masterly and critical eye what was true and rejected what was false. From his predecessors and especially from such works as the *Summa* of Alexander of Hales he learned how much was susceptible of improvement. He was first and foremost a synthesist and in this respect he had no equal; but his was not the synthesis of an original and independent study and investigation of the field of knowledge, as was the case of Aristotle, but the synthesis of what had already been accomplished, the synthesis of the entire philosophical patrimony.

The second part is divided into four sections and under the title "Constituents of Reality" gives a comprehensive presentation of world reality at St. Thomas saw and developed it. The first section (64-164) deals with the composition or structure of individual entity: matter and form (potency and act), their relation and their import in the problems of being and becoming, matter as the principle of individuation and divergent theories, essence and existence, the problem of universals, substance and accident, the categories, the notion of being and its characteristics, analogy, the transcendentals. The author does not seem inclined to accept the position of Manser who sees in potency and act the basis or essence of the Thomistic system. Interesting and instructive is his treatment of matter as the principle of individuation. The historical development of the problem is traced briefly from Plato and Neo-Platonism through Augustine to the scholastics. Thomas is under Aristotelian-Arabian influence. His wavering attitude regarding the problem in seeking its solution is emphasized by frequent reference to his earlier works. After this the historical development is carried into the sixteenth century. In the much controverted question regarding the distinction between essence and existence, the author attributes to Thomas the real distinction while he himself rejects it as irreconcilable with the Aristotelian basis of the Thomistic system. Under the title, "Various Grades of Forms of Being and their Connection," the second section (164-273) deals with corporeal things (elements and composite bodies), living beings on the earth, life and the soul, the unity of the soul, the principle and faculties of the soul, the vegetative principle of life and its functions, the principle of animal life, the functions of the sensitive soul, unity of the substantial form in man, subsistence of the soul, individuality of the human soul, the bodily, sensitive and intellectual endowments of man, the human person, its substantial unity and dissimilarity, celestial bodies, the world of pure spirits, the existence and nature of pure spirits, proofs of the existence of God, the teaching of St. Thomas concerning God in the two *Summae*. The third section (273-319) is a fine and profound disquisition

on becoming and change, generation and corruption, covering the question of causality. With regard to God's action on the free will of man, Dr. Meyer maintains that Aquinas teaches not only that God invests free secondary causes with powers and maintains them, but also that He in addition initiates motion in them and is immediately active in their operations. This teaching, he continues, harmonizes well with the Thomistic conception that God is intrinsically active in the operations of those causes and that the Thomists are justified in claiming that their master teaches a *praemotio physica*. The fourth section (319-570), headed by the title, "The World an Order," considers the idea of order as the central idea of the entire Thomistic system. Subtitles are: St. Thomas and the idea of order, the order-idea in the Thomistic world-view, God the author of order, order in the universe, man and order, order of knowledge, order in the sciences, morality and order, man and the social order, the individual and the community, law, justice and order. In a concluding chapter (571-605) the author gives a scholarly and elaborate appreciation of the philosophy of St. Thomas, followed by an appendix listing the works of the Angelic Doctor, an extensive bibliography and complete indexes of proper names and matter.

This brief outline of the contents gives some idea of the scope of the work and the nature of the problems treated. In the study of each problem the author gives first as briefly as the subject-matter will permit, the teachings of the Greek and Arabian philosophers and of the Fathers of the Church and the early scholastics, which is followed by the views, interpretations and teachings of Aquinas and supported by numerous references to his works. In this he is not a mere recording historian, but a philosopher who succeeded in thinking himself into St. Thomas's way of thinking and thus follows him step by step in the construction of his vast system. We learn where and from whom the master obtained his material, the use he made of it, his own intellectual contributions, and in all this we are brought face to face with his wonderful powers of synthesis. In controverted questions the author's position is always clearly stated and is invariably the result of long and mature deliberation, which however does not mean that he has in every case spoken the last word. Many of the problems treated will, because of the constitutional limitations of the human mind, always defy solution. Throughout he reveals himself as an ardent admirer and profound student of the Angelic Doctor, and his numerous references in the footnotes to parallel passages show that he is perfectly at home in his works.

In glancing over the arrangement of the material one wonders whether it would not have been better to begin the work with what is now section four, that is, present the whole system under this aspect. The present arrangement brings the theory of knowledge, the philosophy of ethics, justice

etc. in the fourth section under the idea of order, while the theory of being, which likewise presupposes order, is given in the first three sections and recapitulated in the fourth section under the heading, "Order in the Universe."

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La méthode psychanalytique et la doctrine Freudienne. Vol. I. *Exposé* Vol. II. *Discussion.* By Roland Dalbiez. Paris, Desclée de Brouwer, 1936. Pp. 656 & 528.

Dr. Dalbiez—*Docteur ès lettres et Agrégé de Philosophie*—announces his main thesis by distinguishing in the title of his book between method and doctrine. He contends in fact that both have to be kept apart; one may, one even has to, accept the method as useful and well founded, but one cannot accept the doctrine or at least large parts of it. The author reproaches the critics of psychoanalysis as well as its followers for having neglected this distinction. It remains to be seen how he proves his thesis.

Before entering into a discussion of Dr. Dalbiez's arguments it seems advisable to make some preliminary remarks. The author is apparently neither a physician nor a psychologist. The reader indeed gets the impression that the author sometimes misses the point because of his not being sufficiently acquainted with the matter. He lays great stress, for instance, on certain similarities that he—and others, for that matter—discovers between psychoanalytical conceptions and the theory of "conditioned reflexes" as elaborated by Pawlow and his school. But Dr. Dalbiez, feeling that the facts observed in animals do not allow of immediate application to human cases, reports an observation published by some psychiatrists which, according to them and to him, proves the role of conditioned reflexes in neurosis. This observation, however, does nothing of the kind; it is in truth open to most serious objections as every unprejudiced psychiatrist or physiologist will concede. Basing his conclusion on such a doubtful case history would not have occurred to an author really acquainted with the knowledge needed for judging on the value of the facts of medicine.

Dr. Dalbiez sees no difficulty in siding with certain statements of the psychoanalysts referring to the origin and nature of pleasure. Psychoanalysis knows but one kind of pleasure, satisfaction, as it is conditioned by the fulfilment of instinctive cravings. But modern psychology has shown this view to be a quite undue simplification; in fact there are at least three, probably four, kinds of pleasure, each of them possessing pecularities of its own and being irreducible to another. There are other points too where the lack of sufficient acquaintance with psychology other than the one ap-

proved by the psychoanalytical school becomes evident and definitely disturbing. Because of these defects one cannot consider the treatise of Dr. Dalbiez as an objective presentation of the case. The author is very much prejudiced in favor of psychoanalysis—as a method, as he says; but his approval goes farther than he is perhaps himself aware. This partiality becomes visible also in his avoiding all mention of adverse statements. He ignores absolutely—consciously or not—all that has been written against psychoanalysis. Everyone who knows the facts will readily concede that much of this critical literature is beside the point; that many of the critics were incompetent, and that they failed to grasp the essential problems. But there are some works which deserve being considered. A work which intends to " sell " psychoanalysis to readers as yet unacquainted with this method ought, for the sake of objectivity, to have taken account also of the opposition.

A reader knowing nothing of medical psychology will get the impression that there is but one way of dealing with certain mental troubles and but one theory giving a satisfactory account of their nature and origin. This impression, however, is wrong. Dr. Dalbiez mentions but one non-psychoanalytical author, P. Janet. The reader is not told that there are many others. Nor is he told that cures of neurotic troubles have been achieved by other methods. The author knows perfectly well that good results are not a real proof for a theory being true or a method being the ideal one. In medicine there are often several ways of dealing with some trouble; these ways may be of more or less the same value, but there may be one which is better than the rest; the student has to be told about all of them. The contention of the psychoanalysts that their method is the only reliable and sure one is not based on facts, but on their preconceived ideas of their system. They make, accordingly, sometimes quite unaccountable statements; they pretend, e. g., that compulsory neurosis can be cured only by psychoanalysis; but every medical psychologist of some experience knows of cases in which another treatment has proved to be quite successful.

As an introduction into psychoanaylsis this work will hardly do, unless the reader is either willing to believe without having heard any objections, or is already sufficiently acquainted with the matter to form an independent opinion.

The main argument is, as remarked before, the separability of method and doctrine. The method is said to be ahead of average psychology, the latter being, according to Dr. Dalbiez, under the fateful influence of idealistic philosophy, whereas psychoanalysis rests on a philosophy of a realistic pattern. The discussion on this and several other points of general interest is contained in the second volume, the first bringing but the exposition of psychoanalytical ideas.

In defending the method, Dr. Dalbiez adopts a position which has been

taken over and over again by the psychoanalysts; one cannot judge, he says, of the method without having used it. Most of the critics have passed judgment on psychoanalysis though they have not applied the method themselves, and this the author considers to be a grave defect. His reproach, however, is not as founded as it appears at first sight. A chemist becoming aware that the statements of another are based on researches done by a method he knows to be inadequate is not bound to repeat these experiments; it is enough if he can, by an analysis of the method, prove that the results cannot be but unreliable. It may be that someone hits on a true result though he uses a bad method; but then he discovered a truth not by, but in spite of, his method. It may be that this is the case with psychoanalysis, if it has indeed discovered new truths.

According to Dr. Dalbiez it has. One of the great merits of psychoanalysis is, he says, the recognition of the unconscious. He starts from the assertion that an " external sensation " and an " intellection " are, as such, unconscious and become conscious only by an act of reflection. " In a first act we conceive—perceive is probably more correct—color; afterwards, in a second act, we become conscious of this conception." According to this view we would have first but " color there," and only by reflection become aware that it is we who see color. It is doubtful whether this description covers the real mental process. This second act does not become the object of a third, there is no *regressus in infinitum*. Because the second act is not grasped (*saisi*) by a third, it may be called unconscious. But there is the possibility of an act knowing itself; this view is not even mentioned by the author, in whose many pages, in fact, not one allusion to scholastic philosophy and not one mention of Aquinas may be found. It seems, moreover, that the author does not distinguish with the clarity indispensable in such matters between the " unconscious " as a property of the substance of the soul and its faculties on one hand, and the operations he believes to be unconscious. Nor does it become quite clear why a " realistic " view forces the philosopher to suppose the existence of unconscious mental states. This view necessitates a conception of the soul which avoids identifying it with consciousness; but this does not as yet amount to the assertion of unconscious mental states or processes. It is also to be regretted that the relations obtaining between the notion of the unconscious and the old idea of *habitus* have escaped the attention of the author. There is doubtless a certain lack of clarity in the pages dealing with the unconscious. Consciousness is defined as: an act by which the subject knows itself. The author's ideas contradict flatly not only those of the " idealists " he has in mind, but of authors who wrote long before there was any idealistic philosophy of the type Cartesius-Kant. " For certain philosophers," we read in Vol. II, p. 33, " every mental phenomenon is endowed with spontaneous consciousness. For them, in an exteroceptive sensation, e. g. the vision of a

tree, we would know *at the same time* [author's italics] the material object and our own vision. This they call concomitant or direct consciousness. We deny most categorically this concomitant consciousness." The reader would like to ask Dr. Dalbiez how he then interpretes the famous saying of St. Augustine: *Scio me scire*, and, of course, *videre, sentire, velle, etc.* The concomitant consciousness is, first of all, a fact; it is secondly perfectly compatible with a realistic philosophy; and the whole argument based on the alleged " unconsciousness " of the ego in regard to the operations of the mind does not advance us one step towards the recognition of the unconscious as imagined by Freud and his pupils. This chapter contains many startling statements, as, e. g., the one that " certain acts appear to us as ours only by inference." The whole argument becomes however intelligible when we perceive that to the author the experiences he had with the psychoanalytical method are definitely convincing. In his discussion he does not even try to analyse or to prove as adequate descriptions of real facts the notions of repression and suchlike terms. He accepts them as irrefutable facts, whereas in truth they are but terms which have a meaning only within the system of psychoanalysis. Or, in other words, Dr. Dalbiez is a victim of the very same *petitio principii* which has been pointed out by several writers (whom he indeed ignores) as characteristic of the psychoanalytical theory. The author's lack of knowledge in psychology becomes very apparent in his statement that a causal influence of the mind on the body had to be rediscovered by Freud; no one really acquainted with the discussions on the psychophysical problem would go so far. It is very characteristic that the one psychologist Dr. Dalbiez quotes as a representative of modern psychology is Watson, the founder of behaviorism; as if this view were shared by all.

Making use of certain suggestions contained in the writings of the " objective psychologists " or the " psychoreflexologists " on the one hand, and of some psychoanalysts on the other, the author proceeds to demonstrate by a lengthy discussion that the ideas of Freud are corroborated by the discoveries of Russian physiology, especially by Pawlow, on conditioned reflexes. Nobody, of course, will deny that these researches are very interesting and that they enlarged our knowledge of the activity of the nervous system, and of animal, partly even of human, behavior. But it is always dangerous to draw inferences regarding the nature of the human mind from observations made on animals. There is no proof at all that the disturbances of behavior one observes in animals under certain conditions—interference of sensations or of habits, etc.—have anything in common with neurosis, even though Pawlow calls this trouble of behavior in dogs a " neurosis " and though there are certain resemblances. But resemblance does not prove identity, not even analogy. Dr. Dalbiez acknowledges that psychology cannot be reduced to physiology; but he forgets that an analogy,

insofar as there is one, implies dissimilarity as well as similarity and that we have to consider the former at least as carefully as the latter.

A long chapter deals with the method of association, the fundamental technique of psychoanalysis, and of interpretation. In introducing the notion of interpretation the author tries to develop a classification and an analysis of signs; here too he could have profited very much if he had cared to study the literature and the works of many of his predecessors. It is, at least we feel so, not permissible to discuss a theory of signs without taking account of the enormous amount of work done in this field since antiquity, and especially the many modern studies referring to this topic. There are also several studies dévoted to the critique of Freudian interpretation and containing valuable allusions to the general theory of interpretation and of signs.

Dr. Dalbiez points out that there is a special case, in which the sign and the signified are both of a mental order, and he proposes for this fact the name of " mental expression " (*expression psychique*). The name is new, but the idea is not. In the author's ensuing discussion, one notes again a lack of precision, due partly to the deplorable neglect with which he treats all that has been said on these things before. He would have profited definitely if he had sought more complete information.

It is not necessary to go on with this criticism of details. One would have to make remarks of the same kind also on the chapter dealing with sexuality and the one dealing with morbid states.

Before turning to the basic thesis, namely, the separability of method and doctrine, two things have to be pointed out. First, that the critical analysis of the philosophical, moral, and religious ideas of Freud, contained in the last part, is mostly correct, though here too a greater precision and a more extensive knowledge would have strengthened the position of the author. Secondly, the author apparently believes that the opposition to psychoanalysis is due to its exaggeration of the importance of sexuality to what has been called " Freudian pansexualism." There are of course quite a few who feel shocked by the stress laid on sexuality; but this opposition is emotional and unscientific. The opposition which has really to be considered rests on quite different motives. The objections against psychoanalysis may be summarized as follows: It is essentially materialistic in its conception of human nature, and absolutely hedonistic in the morals it implies. It is based on the idea of instincts being the only " material " of mental life, all other mental phenomena being derived from instincts; accordingly all goals of human actions are ultimately related to instinctive urges. Its conception of mind is atomistic, since single mental states are conceived of as charged with a definite amount of energy, a notion which evidently presupposes separated and circumscript mental entities. Mental processes are conceived according to the model of physics; the differences of mind and matter dis-

appear. These objections deal with the philosophical background. It is true that Freud does not aspire at building a philosophy, but his assertions are nevertheless based on one. Besides these objections, there are others which refer to the methodological principles. Psychoanalysis supposes that the chain of associations which starts from some mental phenomenon—a part of a dream, a neurotic symptom, or something similar—will end by revealing the original mental fact which caused the first one to arise. Psychoanalysis is, accordingly, strictly deterministic. There is, however, no convincing proof of this alleged causal relation. The only proofs existing are either the statement of the analyzed person who declares that he is sure of such a causal relation, or the disappearance of a symptom even without the patient being aware of the causation. Psychoanalysts, however, make many statements on normal psychology. In normal cases the criterion of disappearance is missing. Dr. Dalbiez mentions five criteria by which he believes one may make sure of an interpretation being correct. But these criteria have value only if the principle of interpretation, as used by psychoanalysis, is recognized as valid. If indeed the method can be separated from the doctrine, a justification of the former may be attempted. The whole question therefore turns on this problem.

It is perhaps but a coincidence, but nevertheless one which is quite noteworthy, that the name of the theory is one of method. Psychoanalysis is indeed primarily a method; but it has come to signify a definite conception of the human mind, of personality, and not only of the abnormal, but of the normal too. This circumstance seems to indicate that method and doctrine are essentially one and inseparable. One may readily concede to the author that a dynamic conception of mental life is to be preferred to a merely static one; but this does not as yet amount to conceiving this dynamism according to the Freudian pattern. Dr. Dalbiez seems to believe that one has either to go on holding the obsolete views of a too static psychology, or to believe in psychoanalysis—as a method. In truth he retains much more than the mere method. The method consists in free association and in interpretation. The very moment, however, such terms are used as " repression, unconscious, libido," etc. a great deal of doctrine has been surreptitiously introduced.

In defending certain of the psychoanalytic interpretations, Dr. Dalbiez refers to ethnological observations quoted by Freud and his followers. He has not taken the trouble to find out what the ethnologists think of the facts Freud mentions. If he had, he would have found that many of the assertions of Freud are unreliable. Freud's ideas on totemism have been shown to be quite mistaken; his statement that the " Oedipus-complex " is a mental fact common to all men and expressed in the corresponding myth, is wrong; in truth there is, besides the Greek myth, but one case known in ethnology of such a story of incestuous marriage of the son and the mother. The remarks

of Freud on primitive culture, especially those referring to primitive sexual life, are misleading and onesided. The legends, myths, and customs of primitive people, and their social life become an argument in favor of psychoanalysis only when the theory is previously accepted. Many of the demonstrations of psychoanalysis rest on a perfect *petitio principii*. So does the thesis of Dr. Dalbiez. The truth of the psychoanalytical findings exists only as long as the doctrine—or at least a great part of it—is implicitly granted as true.

There is of course the argument that the method leads to the discovery of facts long forgotten. Some of the examples quoted by Dr. Dalbiez are quite striking. One misses however a statement on the number of observations that proved unsatisfatcory. But the fact that association or even interpretation resulted in the remembrance of forgotten things is no proof of a causal connection. And without this proof the whole edifice falls. As a matter of fact there is no way of proving this alleged causal relation. There is, however, one way of disproving it. One wonders why the *experimentum crucis* has not been made as yet, so far as we know. This experiment consists simply in taking some material which does not belong to the person being analysed and treating it as if it were a dream, or like a dream. If by an " analysis " of such material, which does not belong to the mental life of the subject, similar memories and " unconscious " facts turn up, the correctness of the psychoanalytic method of interpretation and the existence of a real causal relation become very doubtful. It is not for these pages to report on such experiments, which in fact give the results mentioned. In the face of such facts all the criteria that are believed to assure the reliability of the psychoanalytic method vanishes. This reliability indeed does not rest—not even with Dr. Dalbiez—on the empirical results, but on the implied theoretical assumptions. Method and doctrine are in truth inseparable. It is one of the peculiarities of psychoanalysis that its doctrine is not the *post factum* explanation of findings, but the very reason why these things are found.

Notwithstanding these severe criticisms, which the conscientious reader must make against many of the statements of Dr. Dalbiez, his book is worth studying. It is not, to repeat this once more, an objective exposition; it is more in the style of an apology than of a scientific examination. Dr. Dalbiez's training prevents him from siding with the extreme and preposterous ideas that psychoanalysis is so full of. But he is still unduly enthusiastic. In analysing the work of an analyst an attempt at psychological interpretation seems permissible. Dr. Dalbiez seemingly has been struck by the fact that official psychiatry cares but little for its patients and seldom tries to devise a real treatment unless it be by physical means. He came across psychoanalysis and saw that there existed a method which promised some help. No wonder he became interested and even enthusi-

astic. It is indeed the historical merit of psychoanalysis that it was one of the very first schools to attempt a treatment of troubles that till then had proved refractory to the usual cures. But such an historical merit does not constitute once and for all the first method ever devised as the only or the best one. And a psychology whose basic ideas are at variance with all sound philosophy can not be approved by anyone who is anxious to help suffering people, not only by freeing them from certain symptoms, but by starting them on the way to truth.

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Études Plotiniennes I, Les États du texte de Plotin. (Museum Lessianum, Sect. Phil. No. 20.) By PAUL HENRY, S. J. Paris: Desclée de Brouwer et Cie., 1938. Pp. xxx, 427.

The learned author who has made Plotinus and his influence on occidental thought the task of his life has already given to the scholarly world three important studies on this topic. In 1934 he published a book: *Plotin et l'Occident*, dealing with the influence of the pagan philosopher on Firmicus Maternus, Marius Victorinus, St. Augustine, Macrobius and others. In 1935 followed a study on the " Evangelic Preparation " of Eusebius and the lost edition of Plotinus' works which had been published by Eustochius. The Bulletin of the Royal Academy at Brussels of 1937 contains an article: *Vers la reconstruction de l'enseignement oral de Plotin.* His new work, of which the first volume has just come out, attempts a thorough reconstruction of the Plotinian texts. A second volume will contain an analysis of the available manuscripts and editions (what the author calls " the history of the Plotinian texts "), while the third and last volume will give a complete and critical edition of these texts.

In perusing the pages of this first volume the reader feels amazed at the amount of work done. We get some idea of the pains needed for preparing this work, when we note that the printing and correcting alone took five years.

The term *états* is taken from the technique of engraving. The various *états* correspond to the successive states of the plate; the engraver makes a first print and adds some lines, or changes some on the plate, makes a second print, and so on. The same word is used for the successive states of a soul. Texts live, says Père Henry, and they develop. Thus one is entitled to use this term. To establish the original text of an old author one has not, as is generally done, to turn to the best or the oldest manuscript; one has to take account of the whole manuscript tradition, of printed editions, and of quotations in the works of other authors. It is quite possible that a newer and even a bad manuscript has some passage better preserved than

a very good one. A more recent edition may eventually become very important if it has been copied from an older and lost text. The quotations too may reveal prior forms of the text or help to elucidate certain obscure and corrupt passages. The Plotinian quotations, contained literally or in a somewhat modified form in the Latin Fathers and Scholastics, have been surveyed in the work on Plotinus and the Occident. In the present book the following authors are considered: Basil, Cyril of Alexandria, Damascene, Enneas of Gaza, Eusebius of Caesarea, Hermias, Pseudo-Lydus, Marinus of Neapolis, Nicephoras Gregorias, Philiponus, Proclus, Simplicius, Suidas, Synesius, Syrianus, Theodoretus.

The first part of the book deals with the titles of the single Plotinian treatises (pp. 2-29). The second part is by far the largest (pp. 29-311). The first chapter shows that there is a twofold tradition, which becomes especially apparent in a passage Enn. IV. 2, placed in the editions before the first treatise (*De essentia animae*), and forming also the last part of Enn. III. In the original text however these two *états* of the same text did not follow each other, but were separated by a treatise περὶ οὐσίας τῆς ψυχῆς πρῶτον.

The following chapters contain in parallels the original text and the quotations or allusions to be found in the works of the authors Père Henry investigated. The wide influence of Plotinian thought on Christian theologians has always been recognized. One is nevertheless astonished to see how closely some of them followed the ideas of Plotinus and how they were able to adapt them to their own ends. An especially interesting instance is the one of Basil, who has found means of combining Scriptural quotations with others taken from Plotinus; the result is often rather astonishing. Père Henry, incidentally, makes it very probable, to say the least, that the treatise *De Spiritu*, whose author has been a matter of dispute, is truly Basilian. An analysis of the style and of the way the Scriptures and Plotinus are quoted show exactly the peculiarities observed in the authentic writings of Basil.

The third part reports on various marginal notes found in the Mss., first on the intermittent numeration, on ancient scholia, which are published for the first time, and on the reading signs.

There are several very useful indexes: of the critical notes; of quotations; of the extracts from the Enneades: a list of the conventional signs closes the book.

Even this short and incomplete review will give some idea of the importance and the usefulness of this work. It is to be hoped that the other two volumes will be published soon. The complete work will be for the future an indispensable instrument for the study of the philosophy of Neo-Platonism and its influence on late Pagan and early Christian thought.

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