Fordham Law Review

Volume 19 | Issue 1 Article 1

1950

An Approach to the Natural Law

Godfrey P. Schmidt

FORDHAM LAW REVIEW

VOLUME XIX
1950

302 BROADWAY
NEW YORK 7
1950

The Heffernan Press
Worcester, Mass., U. S. A.

TABLE OF LEADING ARTICLES—AUTHORS

TABLE OF LEADING ARTICLES—TITLES

TABLE OF BOOK REVIEWS—AUTHORS

INDEX—DIGEST

Page references in bold face type are to Leading Articles; in plain type to Comments, Recent Decisions and Book Reviews.

TABLE OF CASES

Page references in bold face type are to Leading Articles; in plain type to Comments, Recent Decisions and Book Reviews.

FORDHAM LAW REVIEW

VOLUME XIX MARCH, 1950 NUMBER 1

AN APPROACH TO THE NATURAL LAW

GODFREY P. SCHMIDT†

THE basic presupposition of the natural law[1] is also the basic presupposition of all science and, indeed, of all intelligibility. Reality and order exist and can be known to us. It matters not that we do not understand *how* reality is known. *That* it *is* and *can be known* is a direct datum of consciousness and an indispensible prerequisite to all science, theory, practice, and even consciousness. For consciousness implies affirmation and reality. It implies a revelation, an intuition, a clarity and evidence, a union of subject and object in a confrontation or communion that is *sui generis*. Shut the door on this initial realization and we cannot even think, for thought requires an object. The idealist and subjectivist necessarily assume the very thing they deny: the objective validity of the knowing process. They are satisfied that we know ideas, percepts, internal states. They deny we know or can know extramental reality; at least they claim to be agnostics in this respect. They could not even pose their problem unless they admitted at least by implication the validity of knowledge. Only in virtue of that validity can they say they know ideas, percepts, internal states. If the knowledge process is competent to assure them of the reality of these things, why not of other things?

Centuries ago Aristotle began his work on Physics with this language: "When the objects of an inquiry, in any department, have principles, conditions, or elements, it is through acquaintance with these that knowledge, that is to say scientific knowledge, is attained. For we do not think that we know a thing until we are acquainted with its primary conditions or first principles, and have carried our analysis as far as its simplest elements."[2]

† Lecturer in Law, Fordham University School of Law.

1. "In the beginning God, acting with Supreme Intelligence, created all things according to a Divine Plan. That Plan is the Eternal Law. Man, endowed by his Creator with an immortal soul, an intellect and a free will, can ascertain the primary dictates of the Eternal Law by his own reason, apart from direct Revelation. Such dictates thus made known, together with the inferences flowing rationally from them, constitute the Natural Law." *Prospectus*, THIRD NATURAL LAW INSTITUTE 1 (University of Notre Dame College of Law, December 9 and 10, 1949).

2. ARISTOTLE, PHYSICA I, i; ROSS, THE WORKS OF ARISTOTLE (1930).

Either there is a cosmos or everything is chaos. There could be no natural law and no science if there were no order.[3] On the assumption that things and human beings are all afflicted with a radical contingency so that they simply exist but can never be known even imperfectly, science would be meaningless.[4] If human morality is dependent upon some decree devoid of reason, excluding every sort of finality, the distinction between the good and the bad, the just and the unjust would be impenetrable.

Today natural law doctrine suffers assault from many quarters but especially from positivism,[5] pragmatism,[6] voluntarism[7] and existentialism.[8] To a certain extent both pragmatism and positivism have a

3. Order is the unity of many things arranged under a certain aspect or pattern. DONAT, S.J., ONTOLOGIA (1921); BROTHER BENIGNUS, NATURE, KNOWLEDGE AND GOD 497 (1947); COFFEY, ONTOLOGY 199 (1918).

4. Of course, such a position cannot be taken without self-contradiction. Why should I trust the deliverances of my knowing process, when it tells me that I or something exists and then immediately and inconsistently distrust the same knowing process when it tells me about the modalities of existing things; *e.g.*, this is larger than that; the elephant is different from the mouse. Bertrand Russell assumes certain positions which he summarizes as follows: "The most fundamental of my intellectual beliefs is that this (the reality of orderliness in the external world) is rubbish. I think the universe is all spots and jumps, without unity, without continuity, without coherence, or orderliness or any of the properties that governesses love." RUSSELL, SCIENTIFIC OUTLOOK 94 (1931). On this hypothesis of self-torment and futility there is no such a thing as *knowledge*. Russell's effusion is, of course, merely the counterattack made upon a straw man. As if it were possible to explain the meaning of "caprice" and "whim" without resort to the concept of *order* by contrast with which *caprice* and *whim* are alone definable. Russell does more than deny all evidence and reality. He provides us with skids for slipping into scepticism and despair. No wonder, in an earlier work, that he had written: "Brief and powerless is man's life. On him and all his race, the slow, sure doom falls pitiless and dark. Blind to good and evil, reckless of destruction, omnipotent matter rolls on its relentless way." RUSSELL, A FREE MAN'S WORSHIP 46 (1918). But on his own showing, how does Russell know anything about *matter*? How does he know that it is *omnipotent*? How does he know that it *rolls* on *any* way, to say nothing of a *relentless* way?

5. Positivism is the theory which reduces all scientific knowledge to a knowledge of facts in so far as they are obtainable and verifiable by the so-called "scientific method". See RUNES, DICTIONARY OF PHILOSOPHY 243 (1942).

6. Pragmatism is the idea that the true is only the expedient according to our way of thinking, and that the right is only the expedient in our way of behaving. JAMES, PRAGMATISM 53, 222 (1925); DRISCOLL, PRAGMATISM AND THE PROBLEM OF THE IDEA (1915).

7. Voluntarism is the doctrine which over-emphasizes or gives primacy to the role of the *will* in the acquisition of knowledge or certitude. Dore, *The Human Right and The Law*, 15 FORD. L. REV. 3 (1946).

8. Existentialism is speculation which pretends to arrive at a "phenomenology of existence". It seeks to concern itself with existence without *being* and *intellect*. It endeavors to derive conclusions from the *sensation of existence* cut off from intellect. It constitutes a denial of metaphysics and of the true value of such objects of thought as *being, equality, similarity*, etc. See Gilson, *Being and Some Philosophers*, PONTIFICAL INSTITUTE OF MEDIAEVAL STUDIES 152 (1949).

proper but limited contribution to make toward the development and understanding of natural law doctrine. Positivism with its emphasis upon what *is* and what *exists* furnishes the empirical starting point for natural law speculation. Pragmatism, by its preoccupation with the adage: "By their fruits you will know them," endows the natural law in its application to what St. Thomas Aquinas called "determinations",[9] with a wholesome humility and with a realization that men's moral judgments are often fallible.

But the most pernicious onslaught against natural law doctrine comes from voluntarism and existentialism. Indeed as Jacques Maritain has shown in the introduction to his recent book entitled, *Existence and the Existant*,[10] voluntarism and modern existentialism are related. They are related because modern existentialism is in a very real sense the offspring of the libertistic or voluntaristic metaphysical systems of men like Descartes[11] and Duns Scotus.[12] The God of these systems is an Existence devoid of any *nature*. In these systems essences and intelligibles are arbitrarily created.[13] They are free from every order of wisdom. In them eternal verities are really pure contingents. They are not dependent on God's immutable essence. They are contingent upon His Will. For such a God there is no order of finality.

"This is why he would have been able to create mountains without valleys, square circles, and contradictions, both of which were equally true."[14]

Some merely *verbal* exponents of the natural law have been rendering it a vast disservice. They have conceived of the natural law as if it were based upon a philosophy of mere essences or a dialectic of mere ideas or conceptualisms.[15] Actually the authentic philosophy behind the

9. ST. THOMAS AQUINAS, SUMMA THEOLOGICA I-II, 95, 2.

10. MARITAIN, COURT TRAITE DE L'EXISTENCE ET DE L'EXISTANT 4 (Galantier and Phelan transl. (1948)).

11. Descartes seems to have held that the truth of the principle of contradiction and the truth of the first principles of morality depend upon the divine freedom, so that God, had He so chosen, could have willed to make all that we now know as truth error and all error, as we recognize it now, truth *by a different kind of creation.* See COFFEY, *op. cit. supra* note 3, at 96.

12. 2 DEWULF, HISTORY OF MEDIAEVAL PHILOSOPHY 78 (1926).

13. See note 10 *supra.*

14. MARITAIN, COURT TRAITE DE L'EXISTENCE ET DE L'EXISTANT 5 (Galantier and Phelan transl. (1948)).

15. *"The idea is abstract,* that is, disengaged from the concrete spatio-temporal conditions that characterize every corporeal object. . . . If the idea were a concrete content of consciousness, determined . . . here and now . . . it could not be universal, that is, *capable of being shared by an indefinite series of objects.* The operation of abstraction consists essentially in seizing in a *datum* of experience either the value of being or reality, or some particular mode of this value, a mode of being, actuality, and essence. . . .

natural law doctrine is the philosophy of being, of existence and of existential realism.[16] The deepest well spring of true natural law doctrine is a docile willingness on the part of intellect to be confronted with the act of existing. In other words, the natural law is only to be found in the context of a veritable existentialism as distinguished from the modern, usually atheistic, type of existentialism.[17]

There is no avenue of escape for science, philosophy or indeed any kind of knowledge if man is imprisoned in a universe of existents which are unknowable, unthinkable, indefinable, inexplicable. In such a world the terrible responsibility for truth and for the values we live by constitutes a crushing burden under which man is agonized, helpless and hopeless. Despite all deluding appearances, such a world is unordered and chaotic.[18]

In such a disorder (it cannot be called a world), the relatively lucid realities and finalities of the natural law discoverable from man as a microcosm within the macrocosm do not exist. Instead we have the kind of depressing picture that Jean-Paul Sartre in *Being and Nothingness,* describes.[19] The sheer voluntarism and atheism of Sartre's position is

---

"The fact of abstraction characterizes our human knowledge. . . . On the side of experience it implies that the *datum* really possesses the values which the subject discovers in it. . . ." VAN STEENBERGHEN, EPISTEMOLOGY 136 (1949).

16. MARITAIN, COURT TRAITE DE L'EXISTENCE ET DE L'EXISTANT (Galantier and Phelan transl. (1948)). See also MARITAIN, DEGREES OF KNOWLEDGE (1938); Gilson, *Being and Some Philosophers,* PONTIFICAL INSTITUTE OF MEDIAEVAL STUDIES (1949).

17. MARITAIN, COURT TRAITE DE L'EXISTENCE ET DE L'EXISTANT 3 (Galantier and Phelan transl. (1948)).

18. "Accordingly, the first prerequisite of an unalterable, permanent, standard natural law is the possibility of a knowledge of being, of a knowledge of the essences of things; in other words, a realistic epistemology or theory of knowledge. . . ." ROMMEN, THE NATURAL LAW 163 (1947).

19. "The fact is, I am engaged in a world of values. The anguished apperception of value is sustained in being by my liberty. . . . I am writing, I am going to smoke, I have an appointment tonight. . . . All these small passive expectations of the real, all these trite and everyday values, draw their meaning in fact from a first projection of myself which is, as it were, my choice of myself in the world. But, to speak precisely, this projection of myself toward a first possibility, which brings it about that there are values, appeals, expectations, and in general, a world, does not appear except beyond the world as the abstract and logical sense and significance of my undertaking. For the rest there are, concretely, alarm clocks, sign boards, tax returns, policemen—so many barriers against dread. But as soon as the undertaking fails me, as soon as I am sent back to myself because I must await myself in the future, I suddenly find myself to be the one who gives its meaning to the alarm clock, who forbids himself, at the instance of a sign board, to walk on a flower bed or a lawn, who lends its urgency to the chief's order, who decides on the interest of the book he is writing, who brings it about, finally, that values exist to determine his actions by their exigency. I emerge alone and in dread in the face of the unique and first project which constitutes my being; all the barriers, all the railings,

manifest. Reality is what I in my freedom and liberty make it. Nothing more. There is no natural law. No pattern or rational situation to restrict my sheer liberty. Things simply exist. They have no determinate nature. It must follow that they lack finality. A chaos of existing things without essences cannot even be conceived. Without specific natures, things cannot exist; they cannot constitute an ordered universe.

Yet the natural law, like all science, presupposes an ordered universe. In an ordered universe things indeed exist. But they exist in a particular way. They have their own natures and their own finalities, by which they fit into the plan of that ordered universe and by which they are knowledgeable. Natural law speculation starts with the intuition that man does not stand lonely outside the plan of the ordered universe, wherein all things else tend to their ends according to their particular modalities of being. A scientist looks for causes and laws because at bottom he believes in the fundamental intelligibility of reality. He starts from the principle of sufficient reason.[20] He knows that an atom and a cat are different because each has a mode of being and acting peculiar to its nature. As Father Stanley Bertke put it, "To deny that man has a mode of action peculiar to his nature is to deny the principle of finality, the doctrine of specific differences, and ultimately, the principle of sufficient reason. Evidently, if man has no *action* proper to himself by which he tends toward the end his specific nature demands, no sufficient reason can be adduced for his *being*. In other words, man like all other creatures, must tend to his end according to laws bound up with his very nature. He must have a natural law."[21]

Benjamin Fletcher Wright, Jr. in the beginning of his *American Interpretations of Natural Law*, observed that, "although natural law is one of the oldest and one of the most frequently used political concepts, it is also one of the most difficult of analysis and definition."[22] Genuine natural law doctrine like all vital truths necessarily reflects inadequately (but not for that reason erroneously) the mystery of being and existence.[23] Because this doctrine is a statement made by intelligence con-

collapse, annihilated by the consciousness of my liberty; I have not, nor can I have, recourse to any value against the fact that it is I who maintain values in being; nothing can assure me against myself; cut off from the world and my essence by the nothing that I am, I have to realize the meaning of the world and of my essence: I decide it, alone, unjustifiable, and without excuse." SARTRE, BEING AND NOTHINGNESS 76 (1948).

20. This principle can be put in a number of ways all conveying the same meaning: *Whatever exists has a sufficient reason for existing. Anything which is, to the extent that it is, possesses a sufficient reason of its being. Whatever is, is intelligibly determined. Whatever is has that whereby it is.* MARITAIN, A PREFACE TO METAPHYSICS 99 (1939).

21. BERTKE, THE POSSIBILITY OF INVINCIBLE IGNORANCE OF THE NATURAL LAW 15 (1941).

22. WRIGHT, AMERICAN INTERPRETATIONS OF NATURAL LAW 3 (1931).

23. In this connection, the words "existing", "existence", "being" and "real" involve

fronting reality with its bottomless reaches of knowability there never will be a facile, final and definitive statement of the natural law doctrine. The realities out of which natural law knowledge emanates can always be plumbed more profoundly. But, if our knowledge of this law is always subject to greater and greater refinement, it does not follow that what we have already learned authentically must always be disestablished by what we shall learn hereafter. Truth is not rendered obsolete by the passage of time. It abides forever. Only what is improperly called truth can be refuted.

Moreover to the description of what they perceive in reality, some men bring greater insight than others. Some have greater perseverance and patience. Some are humbler and more docile before reality.

The far-reaching recurrence of the natural law tradition itself suggests that the establishment of the natural law is an implication from the creation of human nature. Human beings not only exist, they exist in a particular way, with a specific *nature*. A rudimentary knowledge of the law of that nature comes easily and universally to men. It is a knowledge by connaturality, sympathy or inclination. As a datum to be analyzed and known, as a nature, *man* can be known only in a particular way, by means of a specific essence. The nature and essence of man is discerned from living, throbbing, existing men. Man has a capacity for knowing himself as *structured*; as set in a *pattern* of being and acting. This is the same as saying that he has a capacity for reading the "law" by which he lives. That "law" is the message of the Law-giver. And the Law Giver is the Nature-Maker, God.

Today the most radical challenge to these intuitions and inductions is presented by the school of atheistic existentialism. It denies the natural law because it denies that *anything* can have a nature as the source of its acts and finalities or an essence as the reliable sign of our (limited) knowledge of nature.

What is the intellectual process by which a defensible notion of the natural law can be acquired? To my mind the best approach is by means of some relatively simple material existent.

Let us assume that we have before us a wooden toothpick. This *thing*, of definite form, color and dimensions, even a primitive from some benighted society would recognize as a "something". But he might wonder what it was and what it was for. Ontologically, it is the same *thing* or *existent* whether it be regarded by a barbarian, a philosopher or a scientist. Yet this simple and silent reality (a definite *something*,

---

the same essential meaning. They cannot be defined because nothing is simpler or clearer than "being". Whatever is defined must be defined in terms of "being" or "the real"; or in terms of a determination of being. In this sense, logical being, such as the abstract idea or the universal, is merely a modality of being.

to be contrasted with *nothing*), which can be clutched in the fist of any baby, yields messages of varying import to different inquisitive minds. To probing intelligences it, as it were, "says" things—many things—without using words or formal explanation of any kind. All of us are too intellectually limited to apprehend everything that this little wooden object "says" without words. But no sane person will be so obtuse as to be unable to catch some of these unworded sayings. Judgments and aperçus will depend upon the interest and the competence of the one who is confronted by the toothpick. For example, to the interested merchant or salesman, the toothpick suggests a more or less valuable ware. The connoisseur of woods, scrutinizing it, reads its telltale appearance in order to learn that it is made of pine. The chemist probes it for a message concerning its chemical nature as an organic compound made up of specific ultimate elements. The histologist who renders his ocular vision more acute by using a microscope, lets its cellular structure "talk" to him. A physicist might find in it an epiphany of the atomic constitution of matter. A geometer might study its form until it enunciates the mathematical laws of its shape. For an engineer it would exhibit a certain tensile strength. Each man from the background of his own knowledge and experience draws from it a different lesson. Yet for each specialist it is this simple toothpick, considered as an *existing reality,* which is pregnant with meanings and messages. Only by some sort of confrontation, that puts intellect in the presence of the existing thing, is that meaning or message made out. The toothpick is considered as something to be known in itself, as a *nature,* a core of knowability, an object of knowledge.

Indeed so many and so various are the messages which an ordinary toothpick exhibits, that not even the wisest and most informed savant or scientist of our century can read or understand all of them.[24] A yokel

24. "In the first place my explicit knowledge of the real is limited by my experience, and although I glimpse the possibility of indefinite progress in the enrichment of this experience, I have no grounds for thinking that a time will come when I shall have acquired an explicit knowledge of everything which exists. . . .

"In the second place the objectivity of my knowledge—the conscious possession of the real *as it is in itself*—is not perfect under every respect. Indeed, this possession is achieved in and by an act which is immanent to the subject, and therefore follows the 'mode' or 'capacity' proper to the subject (*cognitum est in cognoscente ad modum cognoscentis*).

"As a knowing subject, I manifest certain peculiar traits which endanger somewhat the perfect objectivity of my knowledge. These peculiar traits are my recourse to corporeal organs as instruments of knowledge and the abstract character of my synthetic representation. The first of these characteristics causes the essential relativity of sensible 'qualities', while the second introduces a 'conceptual dissection' and unavoidable inadequacy into my representation of concrete reality." VAN STEENBERGHEN, *op. cit. supra* note 14, at 246.

might consider that he had exhausted the knowability of a toothpick by referring merely to its usefulness as a means for dislodging food caught between the teeth. But a person whom education or experience had rendered more cautious and more humble knows that this little wisp of wood has undreamed-of potentialities and uses, depending upon ingenuity and necessity. So far as we know it is potentially a source of unlimited knowledge. It is also a potential tool or means proportioned to many practical purposes. It might serve as a needle or a peg; an applicator or a more or less fragile lever; etc. Apart from the primary use for which it was invented and manufactured it has many possible and incidental uses. These incidental uses are not limited by the possible meager knowledge or narrow intention of the maker or inventor of the toothpick. Rather they depend upon the constitution or nature of the thing made; its particular form, its properties, its notes and characteristics.

What is noteworthy in this connection is that it could not be put to *any possible use,* whether primary and intended or incidental and perhaps unintended, unless *it* conveyed a message of some kind to intelligence. It could never serve *any* purpose unless it were a *something,* a nature and an essence (apart from being, and in addition to being, an *existing* thing). *It* could not *exist* except as a *nature.* No man could use it unless it were knowable to some extent in addition to being in existence. The man who wishes to employ it for some end must know *it* and not only that it *exists.* He must be able to recognize it as a quiddity distinguishable by a constellation of particular attributes or properties. The annunciation it makes to particular persons might be scant or negative. For example that a toothpick can't be used to make a golden ring; that it can't serve the purpose of a G-string on a mandolin. In other words there are some uses of a toothpick which even a man who had never seen a toothpick before and who never understood its primary purpose would avoid. Why? *The thing itself* is an apocalypse—it exhibits and explains its own nature, its primary and other finalities to a greater or a less degree; *it* interdicts disproportioned uses and purposes according to the acumen and shrewdness of the person who studies it or handles it. The nature and purpose or purposes of a toothpick are nevertheless intimately related. That is why we say that a toothpick *"ought"* not be used for some purposes.

Let us take a second example to illustrate that you never really know what a thing *is* unless you know what it is *for.* A South American native from the headwaters of the Magdalena River might find a Stillson wrench and consider it a good weapon. I suppose even plumbers (who presumably know better) have used Stillson wrenches for weapons.

Nevertheless the primary purpose of the Stillson wrench is to grip and to turn (and thus tighten) round pipes or rods into sockets or elbows.

There is only one "proper" or "good" use of a Stillson wrench in the sense of the use intended by its maker. All other uses are incidental, somehow lacking propriety or suitability when compared with the use intended by the inventor of the wrench. I do not say that these other uses lack efficiency for other purposes. Obviously a wrench may by its very construction and form be efficient for many purposes not intended by an inventor who lacks omniscience. Maybe a Stillson wrench would be a better paper weight than many of the things that are sold as paper weights today.

The incidental uses of things like Stillson wrenches or toothpicks are a function of the ingenuity and imagination of the men who seek to put them to those uses. But here there is no question of imagination run riot. The imagination or ingenuity in question is guided by the *thing itself* considered as a disclosure. No one but a lunatic would think of using a Stillson wrench as a cornet. There are fantastically improbable and impossible "uses" for things. Those uses are not merely dependent upon an exercise of my freedom and liberty. Mere voluntarism makes no contribution here. Use means choice of means for an end. That is always a work of reason and intellect as well as of will. That is why sound intellectualism confronts itself with existing reality and is guided by the objective contours and characteristics of that reality. The latter as a form[25] or nature avows and divulges itself (to intellect) as suitable to this or that end.

What is it then which guides a man in putting a thing like a toothpick or a Stillson wrench to one or the other of its manifold possible, incidental uses, as distinguished from its primary use (*i.e.*, the one intended by its maker). Obviously it is *the thing itself*, its nature, its structure, its form, its qualities, its properties. If a Stillson wrench were as light as a feather it would never be thought of as having efficiency as a paper weight, even if it could still be used as an instrument for twisting pipes. Even where a toothpick substitutes for a peg, a person of intelligence

25. "When I see a tree, I am aware of a complex of shape and color. This complex is the character of the tree as I experience it. It is a nature, a thusness. But the very fact that I am compelled to think of it as the nature, character or thusness of an object, in this case a tree, proves that I am not and cannot be aware of a character by itself, a nature which is not the nature of a particular thing. . . . A nature or character must be the nature or character of something. . . . The form—the character, thusness—may actually belong to a host of concrete objects and is as such capable of an indefinite number of individual embodiments." WATKIN, A PHILOSOPHY OF FORM 3 (1935).

". . . As M. Meyerson has shown, we do not experience a chaotic multiplicity, simultaneous and successive, but objects possessing a definite character common to many others. . . . This character . . . is form." *Id.* at 84.

does not expect it to sustain the weight which a metal nail of comparable size might sustain.

Thus the *thing itself* in some way "speaks" to the inquiring mind and "tells" it of its uses and potentiality; and of the law of its internal and external structural capacities. It is the thing itself which by a kind of passive confession of itself dictates to our minds how that thing can be used, adapted, abused or destroyed. No man can know its possibilities without examining it or studying it. It is not enough to read its definition in a dictionary. Nor is it enough to have someone merely explain its primary use. There is no substitute for having the thing itself as an *existent* before you if you want to investigate some of its primary or incidental uses or functions. Having studied the *thing* in that way, without further formal education from any other source you have derived from *it* certain knowledge more or less accurate, more or less extensive.

We often come upon realities which we have never seen before. For the moment I continue to confine my attention to *artifacts*. No matter how complicated the product of human art, if a man made it (even though he tried to keep its nature and purpose secret) *the thing itself* will eventually lay bare its own secret of construction and purpose to minds of adequate ingenuity and competence.[26]

Experts may be able to find all the meaning and significance which man has been able to hide or to insert in material things. But material things contain secrets and knowabilities which men did not put there.

---

26. During the war the Germans were the first to develop the so-called magnetic bomb. They sent no letter of instruction regarding its mechanism or purpose. On the contrary, they tried, so far as humanly possible, to keep its structure a secret. If this could be done, its explosion would always be something against which no effective counter-measures could be taken.

Structurally the magnetic bomb was a series of subordinate mechanical, electrical and chemical means directed to an ultimate end: the detonation of powerful explosives for the destruction of shipping. It was a complicated mechanism delicately adjusted: a maze of sub-assemblies all functionally related to a primary explosive function and purpose. In a relatively short time, however, Allied experts unraveled its secret. What was the method of discovery? The Allied experts read a "real" (the word comes from the Latin word *res*, thing) communique written into the very structure of the *thing itself*. Certainly this message was in no printed book or memorandum of instruction. It was in the ingenious internal and external complexity of the thing itself. The magnetic bomb exemplified a specific internal and external pattern or form. As an existent, it had to have a form or nature or pattern, by which it could be known and betrayed. Some very obvious and elementary messages will be carried even to incompetent people if they simply look at the magnetic bomb externally. They know for example that it cannot ("ought not") be used for a basketball because it is too heavy, and too large. But it took the right combination of docility training and insight to learn from the magnetic bomb itself its rationale. The bomb was the "teacher". It is the student who is always the principal and efficient cause of learning. The teacher is only the instrumental cause.

For the moment I am not concerned with how they came to be there at all. All I am trying to emphasize is that such secrets and knowabilities often defy human shrewdness more than the things that men, by their science and art, write into the materials they use when they make something. The things made by human art are always materialized ideas, embodied forms. We had a certain amount of security in our real or imagined exclusive possession of the atomic bomb. But such security in the long range is precarious precisely because ideas have a way of leaping out of material embodiments. What men have been clever enough to devise, other men may independently invent, discover or copy. Uranium 235, whether isolated by man or "made" by man (out of other materials which man did not make) conveys intelligible signals to all minds, but only some scientists have the learning and the genius to read them.

Likewise the facility or difficulty which men experience in reading the *legenda* embedded in the things made by men depends upon the industry and talent of the reader. The communication capable of discernment is always there behind a thicker or thinner corporeal veiling. Moreover, it is always there in the same way while the thing itself remains the same. That is another way of saying that the thing has a specific nature which is differentiable from other natures.

Everything made by human art and technology bears the imprint of some rudimentary or refined rational process. The clockmaker puts his particular brand of rationality, the hallmark of his intellectual calculations, into his clock. Most men look at a clock or even take it apart without fully understanding its calculus of rationality.

It is the mark of wide penetration of civilization and culture and the token of art and technology that the refractory raw materials of nature are extensively and ingenuously impressed with the mold and the pattern of intellect and reason. The very earth is scarred with these marks of designing men. The fields that lie fallow are contrasted with the fields that are evenly furrowed by the plowshare. Where man the engineer has left his signature, there are bridges across rivers and steel skeletons bearing the stony skin of skyscrapers. In athletics, we find flesh and blood formed to the "second nature" of skillful habit. Habituation means facility of intended and studied movement; mind dominating muscle: so that the racquet will drive the ball this side of a white line; so that coordinated motions of the foot can send the pigskin over the horizontal bar of the goalposts. In the fine arts the arrangement of form and color (working as it were against the grain of pigments or marble) creates this or that copy of nature. In steel production, the scrunching of the blooming mill or of the finishing mill which gives a desired intellectual form to the rebellious ingots from the "soaking pits".

No matter where one goes in modern or ancient civilization or culture one is constantly confronted with the things men have moulded according to the matrix of mind; with the material things poured, as it were, into the intellectual containers of ideas which confer upon those things their "form"; with things fitted to the pattern of man's rationalities. Every one of these man-made things is a specific nature, a concrete reality; an existent which carries from its maker its unique conception and confession of itself. For all art and all making constitutes the relatively commonplace process of putting the evangel of mind and thought into things which thereby become natures, substances with phenomenal clusters of notes and properties; quiddities which only as such can be discriminated from other things. As specific things they are not the mere toys of unrestrained human liberty and freedom. They are realities which internally and externally express the law of their production. For production always begins with ideas and the thing produced always bears the trade-mark of its genesis and of its original merely intentional being.

The method of proceeding from the existence of artifacts to a knowledge of their laws, causes, designs and purposes is analogous to the *scientific method,* where man deals with realities he has not made.

Let us understand the scientific method in order to appreciate its analogies with the "natural law" of artifacts. Again the foundation is epistemology or the theory of knowledge. "The method of science does not seek to impose the desires and hopes of men upon the flux of things in a capricious manner. It may indeed be employed to satisfy the desires of men. But its successful use depends upon seeking, in a deliberate manner, and irrespective of what men's desires are, to recognize as well as take advantage of the *structure* which the flux possesses.

"1. Consequently, scientific method aims to discover what the facts truly are, and the use of the method must be *guided by the discovered facts.* . . .

"2. . . . no inquiry can get under way unless some selection or sifting of the *subject matter* has taken place. . . .

"3. The ability to formulate problems whose solution may also help solve other problems is a rare gift, requiring extraordinary genius. . . .

"4. The 'facts' for which every inquiry reaches out are propositions for whose truth there is considerable *evidence.* . . ."[27]

Professors Lindsay and Margenau in their advanced textbook write: "We shall at once assume the possibility of experience and knowledge

27. COHEN AND NAGEL, INTRODUCTION TO LOGIC AND SCIENTIFIC METHODS 391 (1934) (italics supplied).

as the metaphysical basis upon which any science fundamentally rests. Moreover, we shall accept the genuineness of the sense-perceptions of normal people. . . . We must also grant the possibility of the exchange of knowledge. . . ."[28]

Professor W. R. Thompson is the last witness I cite in this connection: "The basis of science, or at least of the sciences of observation upon which the whole of the scientific structure reposes is, nevertheless, essentially realist. The sciences of observation assume the fundamental truthfulness of the view of nature presented by the senses. Furthermore, science takes for granted the intelligibility of things—what Meyerson calls 'the reasonableness of reality'."[29]

Thus the scientist confronted with the stars, the earth, the planetary system, the fact of motion, chemical elements, radio-active materials, etc., does nothing more than try to "read" (observe) these things. He is not satisfied to know that they exist. He wants to know *what* they are and what they *do*. In other words he wants to know their natures or at least the natures of their actions, properties or phenomena. He tries to take hold of Nature in so far as natures are intelligible. True, a certain unintelligible residue is ever left behind (to serve as the subject matter or the potentiality for further knowledge); especially since science deals with *proximate* causes.

Such considerations exhibit the fundamental similarity between the scientific method and the method of making artifacts speak by virtue of the imprint on them of intelligibility. Discard the notion that the things with which the scientist is concerned have a knowable content, whose apocalypse is the business of *mind* observing *those things*, and you take away the possibility of science.

The great questions of epistemology are no more nor less important for science than for ethics and the natural law. There can be no intelligible synthesis of natural phenomena as a science unless the realities known to science by these phenomena were specific natures, with determinate properties and attributes amenable to intellectual apprehension. Whitehead saw this when he wrote: ". . . there can be no living science unless there is a widespread instinctive conviction in the existence of an *Order of Things*, and, in particular, of an *Order of Nature*."[30] In another place, he uses the words "pattern" and "patterns of assemblage" to signify this order or Order.[31]

28. LINDSAY AND MARGENAU, FOUNDATIONS OF PHYSICS 1 (1936).

29. THOMPSON, SCIENCE AND COMMON SENSE 14 (1937).

30. WHITEHEAD, SCIENCE AND THE MODERN WORLD 5 (1926). See THOMPSON, SCIENCE AND COMMON SENSE (1937); NORTHROP, SCIENCE AND FIRST PRINCIPLES (1932); SHEEN, PHILOSOPHY OF SCIENCE 56 (1934).

31. WHITEHEAD, ESSAYS IN SCIENCE AND PHILOSOPHY 71, 81, 83 (1948).

St. Thomas Aquinas, in the beginning of his Commentary on Aristotle's *Nichomachaean Ethics* distinguishes four orders as follows:

1. The order *which reason by its deliberations effects in external things* (artifacts produced by purposeful human activity) pertains to the arts.

2. There is an order (and therefore a law) of things *which human reason merely discovers but does not create.* This is the order of science and the order of metaphysics.

3. The order (of logic) is a third kind of order *which reason by its deliberation achieves in its own proper act.*

4. Finally there is an (ethical) order *which reason by deliberation effects in the operations of the will.* Here, in some respects, is the most refractory material in the world: man's conduct. A man is civilized or uncivilized, good or bad, according to the manner in which he constrains to the pattern of reason this very refractory material.[32]

The cultured man, the good man, is precisely the man who has taken the refractory materials that well into consciousness (his desires, his ambitions, his aspirations, his untamed velleities) and has placed upon them the restraining discipline of rationality; just as a farmer takes the weed grown field and converts it into a crop of rye or corn; or the carpenter who takes the trunk of a tree and makes of it a mast or a beam. All civilization is implicit with an architectonic rationalism, the myriad fossils of reason, which man has buried in things and in himself. The process of becoming educated is merely the process of realizing, often against the grain, the potentialities (of nature) which constitute our substantial mystery. How does man come to know the order discoverable in reality?

With regard to artifacts, there are three obvious ways of learning what a thing is and what it is for.

(1) We may go to the *maker* of the thing and make inquiry of him.

(2) We may go to an *expert* other than the maker.

(3) We may go to the *thing itself* and by a careful study of the nature and properties of that thing, deduce the revelation inherent in it.

Modern science, which deals with Nature as an ensemble of natures not made by man, uses the second and third methods exclusively. Since it deals with *proximate causes* it takes only the first steps in the direction of the Maker; that is to say, in the direction of the First Cause.

Religion, by virtue of Revelation, is concerned primarily with the first of these three methods. But in the Church and in the Prophets, in the Apostles and their successors it concerns itself with the second meth-

32. ST. THOMAS AQUINAS, III, 4; STEWART, TEMPLES OF ETERNITY V (1931).

od, too. In using philosophy as its handmaiden,[33] religion also employs the third method. Philosophy is absorbed in the third method.

A fine craftsman and wise inventor or maker writes competently and lucidly into and with the very structure or nature of the things which he has made. By and with the *thing itself* he writes an "account" of the quiddity and purpose of that thing.

In the natural law tradition man himself is considered as a thing *made.* He has a Primary and secondary maker. The Primary Maker is God as Creator. The secondary maker is the man himself who "builds himself" (realizing or disappointing his potentialities) by his deliberate choices. Just as a man can build his body into a set of good or bad habits which will determine his "form" in playing golf, so a man, by habits of a specific kind, can build his will and intellect into a form which is deficient by evil or fulfilled by good.

Men like St. Thomas Aquinas have applied the elementary and homely truths, procedures and considerations set forth above to that strange creature called *homo sapiens* as well as to the things that man makes and to the things of Nature that man discovers. Obviously the scientist did not make the sun nor the stars. Yet from a study of them he gleans the rationality and order discoverable in their natures and operations. The physicist has neither made nor even seen an electron. But he has reasoned to the existence and nature of electrons because he has pieced together the puzzle of appearances. In some way or another things confront his intelligence so as to be comprehensible by him. The biologist and physiologist did not make the human nervous system nor the blood streams which extend throughout the human anatomy. The men who first learned about the nature and finality of these things,—the men who are learning more about them today—,are all men who use as their "book" the structure of the human body. It is the "natural law" of that body that they are writing down in their treatises on anatomy and physiology.

All science starts with the cosmos as an objective, decipherable order. By a difficult and sometimes disappointing surgery the scientist lays bare, little by little, the sinews of a rationality that permeates this frame of things. The generalizations and laws of science are nothing more than statements of an order indicative of rationality. The Maker did not personally stand beside the scientist to explain. No expert, prophet or archangel demonstrated the scientific verities to those who blazed the trails. They had only one "document" to go by: the so-called "book of nature". Reality is fertile with many readings. That is why we try

33. OLGIATI-ZYBURA, THE KEY TO THE STUDY OF ST. THOMAS 157 (1929); DE RAEYMAEKER, INTRODUCTION TO PHILOSOPHY 21 (1948); GILSON, REASON AND REVELATION *passim* (1938); ZYBURA, PRESENT DAY THINKERS AND THE NEW SCHOLASTICISM 206 (1926).

to "read" nature in the first place. That is why we are able to make "reading" at all. If they can tell you about the properties of tungsten or steel or lucite, it is because dumb, silent, understandable things "spoke" to them.

Scientists found many enigmas. They still find them.[34] But riddles can only exist by contrast with the things that are not riddles. It never occurs to the scientist to conclude that there is no solution simply because for a time—perhaps for a lifetime—he is unable to solve a particular problem. He doesn't understand cancer or the vermiform appendix. That doesn't prevent him from looking patiently for an answer. If you want to put it that way, he has an unbounded "faith" in the availability of answers. But if he is to find answers he knows that he must find them buried in the natures of things. The evidence of the order, harmony and consistency of Nature is all around him. His vocation is to trace the lineaments of a rationality in the heart and flux of things. He recognizes ordination. He sees determination of things to definite effects. He knows that mind, by abstraction, is in contact with reality.

Abstraction is the act of intellect which selects certain aspects or inspects of a reality presented to it while leaving others out of consideration. This is not so much a question of a conscious act of exclusion but rather a concentration on some formalities while *prescinding* from others. There could be no such thing as science unless the confusing welter of individuating notes, contingent circumstances and accidental pecularities (with which concrete realities bristle) could be disregarded; thus permitting emphasis on some formal objects having universal or necessary characteristics. The laws and generalizations of science capture from reality not every note or phenomenon; but what inheres in reality by virtue of its form or nature. The inconsequential trivia of accident and circumstance are ignored. Universal aspects and inspects are the subjects of science and its generalizations. What is completely individualized and unique is not the subject of scientific law.

Ever since the time of Aristotle it has been common to subdivide knowledge into speculative and practical levels. The practical is itself divided between Art and Prudence. The speculative has been divided according to the three degrees[35] of abstraction into Natural Philosophy,

34. ". . . We may say that every scientific question presents a double aspect, the one a *Mystery*, the other a *Problem*. . . . A mystery in regard to the thing, the object as it exists outside the mind, a problem in regard to our formulae." MARITAIN, COURT TRAITE DE L'EXISTENCE ET DE L'EXISTANT 4 (Galantier and Phelan transl. (1948)).

35. ST. THOMAS AQUINAS, DE TRINITATE, V, 1 (translation by Sister Rose Brennan, S.H.N., under the title *The Trinity and The Unicity of The Intellect* at 135 and 136; Brother Benignus, *op. cit. supra* 409-410; PHILLIPS, MODERN THOMISTIC PHILOSOPHY II, 140-141 (1935).

Mathematics and Metaphysics. The vestibule to these three degrees of abstraction is provided by the experimental sciences. The realities perceived at each level of abstraction themselves imply intellect, order pattern and law in a sense which is analogous to the use of these words in connection with artifacts. That is the only rationally conceivable postulate to the existence of intelligibility, order, law and pattern in the material objects of physics, mathematics and metaphysics. Intellect is the Source of intelligibility, order, law and pattern in the material and formal objects of natural philosophy, mathematics and metaphysics, even though such Intellect is analogous to rather than univocal with human intellect. The process by which human intellect discerns law, order and pattern as they are appropriate to these three degrees of abstraction is obvious, if analogical to our process of knowing law and order in artifacts.

Like artifacts, the realities with which physics, mathematics and metaphysics are concerned manifest themselves by their objective aspects and inspects. Motion, sensible things, number, quantitative determinations, reality as reality, being as being—all these we learn to know in a manner analogous to our way of knowing artifacts, without help from maker or expert; *i.e.*, by the self-revelations (made to our minds) by the very things in question;—the things considered as universal, necessary, specific natures determined and constituted to be what they are and not other things.

All through history scientists and less acute observers have realized that every being is a specific nature. Every reality is of a determinate nature which constitutes it what it is. It has consistency. It has toughness. It is what it is. It is something definite. It is not nothing.[36]

It should not require the courage and the curiosity of the ancient Greek philosophers to use subjects and predicates. But it takes something of their acumen to analyze and appraise them. The flippant and superficial modern must use subjects and predicates in order to appear flippant and superficial. All our certitudes and opinions are adventures in predication. We are always trying to extricate the exigencies, laws, and discernabilities from the things around us by classifying, *i.e.*, by using predicates. We state the purposes of lampposts and television tubes; of the pituitary glands and of pine tree cones; of stonehenge and hieroglyphics. Why should they not state the purpose of man? The artist, the architect, the artisan and the engineer spend their time putting laws, exigencies and discernabilities into wood, stone and metal. Upon such things they grave the marks of reason. Thereafter, until these

36. MARITAIN, COURT TRAITE DE L'EXISTENCE ET DE L'EXISTANT 91-92 (Galantier and Phelan transl. (1948)).

things break or wear away or are corrupted, they are and they function as natures planned for certain finalities or exemplifying certain tendencies. The scientist and the natural philosopher discover inclinations, exigencies, laws and discernabilities in the natures which man does not make; which man often finds more baffling and intriguing. Wherever we turn, whether to the things made by man or not made by man, we recognize, if we are ingenious and patient enough to learn, laws, exigencies, discernabilities, formal messages which things are in themselves, in their tendencies, in their functioning. Each separate thing has its own nature and therefore its own natural law. Why then should one hesitate about trying to read the communications imprinted in the very nature of man? It is that nature that gives us the groundwork and the matrix of *the* Natural Law. There is a curiosity that lies at the bottom of the whole idea of the Natural Law. It is a curiosity about the nature of man. The method of satisfying that curiosity is like the method applicable to other types of intellectual wonder, in which Aristotle correctly saw the fecund beginning of all philosophizing. Man, precisely because he exists and is a unique thing, has a specific constitution or nature. Unless man were endowed with such a constitution or nature, it would be impossible to distinguish him from something else. We could not even talk intelligently about man, if he had no essence; any more than we can talk intelligently about a toothpick, a wrench or a magnetic bomb unless we know their natures to some degree. Like inanimate things, man has an ultimate principle of operation and activity. The system of communications which man's nature makes to man's mind is *the* Natural Law.

Whatever we are able to discern of the pattern, resources and mystery possessed by human nature, these are parts of the natural law.

The principle of sufficient reason[37] tells us, as a self-evident truth, that intelligibility goes hand in hand with reality. Unless it did, all science would be a futility and a superstition. This is not the same as saying that all things are perfectly transparent to the human intellect. It would be absurd to contend that human comprehension is never baffled or transcended. All about the things we know and can know there are penumbral and black reaches of mystery; even dark depths of infrarationality. No truth is better attested by experience or science. Only for a divine intellect are puzzles and mysteries impossible.[38]

37. See note 20 *supra.*

38. To quote Maritain, "If things are not God, they must comprise a certain measure of unintelligibility, inasmuch as they originate from nothingness. If in truth intelligibility accompanies being, it is obvious that insofar as anything is affected with nonentity it must possess a root of unintelligibility. Its relative nonentity is also a relative unintelligibility." MARITAIN, COURT TRAITE DE L'EXISTENCE ET DE L'EXISTANT 102 (Galantier and Phelan transl. (1948)).

But the fact of mystery does not convert our lucidities into opacities. We could not know what a mystery meant, as an intelligible and differentiated essence, except against the background of that which is knowable. Our truths may be partial, incomplete and inadequate. They are not therefore untruths. We may never be able to know down to the deepest root of its intelligibility the nature of man. That simply means that we can never know fully the Natural Law of man. (Only one Man "needed not that anyone should tell him what was in man.") It means that there are orders and coherences which will always escape our relative and often myopic vision.

Nevertheless, nature and its inferable law are always related, whether in mathematical study (geometry) or in experimental sciences (chemistry or physics) or in philosophy (the analogical character, *e.g.*, of being). Each thing is a knowable order of part to whole; of functions to finality; of properties and attributes to substance; of means to end; of inclination to object; etc. That is why the nature of each thing exemplifies that thing's law; its design for existing; its code of use or abuse. Indeed the nature or internal construction of anything which is well made by man is dominated by and proportioned to an objective finality. It is an efficient agent. Regardless of mere subjective, psychological motivation of the maker of that thing, a particular purpose is objectively embodied in the very nature of the thing. Of course if it is well made and well designed by a wise maker it achieves the maker's *primary* purpose efficiently. If it is poorly made it either fails to achieve the primary purpose of its maker or it achieves that purpose inefficiently. Whatever is wisely made has for its basic law of internal and external structure a wise purpose ordained by its maker. If it is capable of intended or unanticipated secondary purposes, those purposes are not permitted to interfere with or thwart this primary purpose. In other words its nature is never made futile by obstriction of its primary end. The end of the maker is regulative of his action in making the thing and of the thing's operations. The end, then, is the law of making. The thing itself is constructed according to an order required by or consonant with the maker's finality, if the maker is not a fool.

Now order always implies a relationship of means to end or of part to whole. Certainly everything that man makes exhibits such a relationship. That is the very meaning of order. It is also the characteristic of intellect to impose order: *i.e.*, to dispose means to ends or parts to wholes. *Sapientis est ordinaire.*[39] Only *intellect* can establish or recognize order. Therefore, to the extent that it exists or is possible, order presupposes *mind, intellect, thought.*

39. ARISTOTLE, METAPHYSICS II, 3; ST. THOMAS AQUINAS, SUMMA CONTRA GENTILES I.

What is here involved is a question of using words correctly and as usage warrants to signify the intended referent. There can be no doubt that mind, intellect, thought are involved when human art produces a work of art or an artifact. It does not matter whether these words are differently *defined* and *explained* by different people. What runs through all respectable definitions of mind and intellect is this: the processes of *imposition of form or order* on raw materials by human art or of *detection of form or order* in things;—both of these processes have been ascribed uniformly and only to mind, intellect, thought. That is why, to borrow a thought from Chesterton, when we dig down into deep geologic strata and find the tooth of a board graven with images of elks and man, we say that such art is the signature of *man* (rational animals) and not of brutes. We never pretend that we have dug down deep enough to find the tooth of a man graven by a monkey or a fish.

Whether the process leads *down* from the prior artist to the subsequent artifact, or *up* from the artifact to the human observer, it is a unique process which realism and a right use of words ascribe to *intellect* or *thought,* whatever else the process involves on analysis.

The basic act of intelligence is to seize and to conceive, in its own peculiar, immaterial manner, *being* and *the real* in the particular sensitive and concrete experience; to apprehend, as a mode of being, every particular and unique experience. True, the act of knowledge is an immanent activity of a knowing subject. But the object known is not a mere subjective state nor only an idea. What is known directly is the objectively real. Ideas have "automatic" objective references. The subjective state and the idea are only known reflectively. The primary, proximate and proper finality of knowing is the conscious possession of the *real* as real. The indirect and incidental finality of knowing is the perfection of the knower by that *sui generis* superabundance of the person which growth in knowledge implies. (That is why education is good for man.) This is true regardless of the level or order of knowledge. Indeed, the very notion of "order of knowledge" signifies not only *orderliness* as an objective characteristic of being, but also a *something* in which order inheres and which must be contrasted with nothingness. On the level of commonplace experience there is the extramental order which comprises both artifacts and the realities and events of nature. On the level of the idea, as an internal word, we have conceptual order. The latter subdivides in a twofold manner. The ideas which signify *beings of nature* and those which signify *beings of reason.*[40] The latter exist only in the mind. The former have a foundation which exists in nature extramentally. Thus, the knowing process not only grasps the complex and

40. ST. THOMAS AQUINAS, IV METAPHYSICA 4, 574 and DE ENTE ET ESSENTIA I.

diverse real as perceived in concrete experience. It gathers out of the mystery, fertility and scatter of the *real manifold* that unity of being and of real order which, as it were, constitute the framework of the manifold.

Thus, wherever there is order, pattern, or arrangement, intellect (or mind or thought) is involved either as a cause or as a faculty of recognition. The physical reality of the thing existing outside of its causes is the source of our knowledge of its order (of part to whole and of means to end). That order is the law of its own structure, at all times at least potentially apprehensible to intellect or reason.

The basic definition of law in its most general sense is a rule or order of mind or reason. Law (whether man-made or God-made) is always a work of intellect or reason seeking to impose order. There can be no order, whether made, created or merely recognized, which does not involve *intellect* or *reason*. If this were not so, we have no right to use such words as *mind, thought, intellect, reason*. Some kind of *order* is always the end and result of effective *law*. The two cannot be dissociated. From this the essentially rational character of every kind of law is patent. It is a work of reason even when it is morally bad. Law is a norm measure, design or plan of being, action or passion.[41] It implies a perception and definition of order and relationship. Such perception and definition are only possible to rationality.

All of this and more is concisely and profoundly stated in two self-evident propositions which the Scholastics use to express the metaphysical principles of the Natural Law. Actually these statements are two facets of the same underlying truth: *Omne agens agit propter finem; Operatio sequitur esse.* (Every agent acts in view of an end; action is in conformity with essence or nature.) The Natural Law is derived from the application of these self-evident truths to the reality we call a human person.

There could be no agent (*agens*) which did not possess a particular determination and perfection constituting it what it is. This is another way of saying there could be no agent without a particular nature or actuality of being. Nor could there be an agent which did not have a characteristic act or operation (*operatio*).[42] This latter is a being, an

41. *Passion* is here used as a contrast to *action* in the sense of Aristotle's Categories. *Cf.* ARISTOTLE, CATEGORIAE 9.

42. Gustafson uses a pregnant text from St. Thomas Aquinas (SUMMA CONTRA GENTILES, III, 2) to explain this:

"The whole case for final causality might really be put into a very few words. . . . 'If an agent did not tend to some determined effect, all effects would be indifferent to it. But that which is indifferent to many things would not do any one of them rather than another. Hence no effect would follow from a contingent agent unless it were determined

actuality, too. It does not matter for present purposes whether action (*operatio*) is transitive (passing from the agent to something outside the agent) or immanent (remaining within the agent, and perfecting the agent).

Moreover being, as agent, necessitates determination to an *end* or a *good*. It is not *any* kind of act or an *indefinite* kind of act of which the agent is capable. It is a particular operation and a specific end or good toward which the agent tends. Indeed operation has no capacity for being recognized and has no reason for existence except in terms of some specific end (*finis*). This end is the *good* of the agent, considered as its self-realization. In this sense, the agent's *good* is the same as the *end* of the agent. Residing in the nature of the agent there is a natural appetency, an affinity, a tendency, an appetite, an inclination, a love,[43] a desire, an urge, a nisus, a hankering[44] after one or more *definite* ends or good. In this broad sense, every created nature implies an appetite for some end or some good. It is ordered to something not itself. *Qua* being, it has an inherent thrust or inclination to its own proper object. "Being is love of good. . . . And this love is the very ground of its action."[45]

Only because an agent has a particular determination and inclination (which Maritain following St. Thomas calls "love") can we say that its nature and the operations flowing from it are stable. That is why caterpillars never act like butterflies nor nightingales like elephants. This determination of being or nature to a particular end is just as obvious a reality as the being or nature itself. As a determination it is prior to the agent's act or effect. Nature is presupposed by operation. There could be no operation without a nature, as its source. Nor could there be a nature without an operation. The nightingale first *is* as a thing or

---

by something which is itself determined to one effect. It would be impossible, therefore, for it to act. Therefore every agent tends to some determined effect which is called its end.' The end or final cause is, therefore, that to which the agent tends, as to a definite and determined effect. If it did not have that tendency, its action would be inexplicable—it would lack sufficient reason; it would be unintelligible." Gustafson, *Theory of Natural Appetency*, THE PHILOSOPHY OF ST. THOMAS 62 (1944).

43. ST. THOMAS AQUINAS, SUMMA THEOLOGICA I, 60 and I-II, 26, 1.

44. All of these renderings of what St. Thomas meant by *appetitus naturalis*.

". . . *Appetitus naturalis*. . . . St. Thomas defines it most generally as nothing but an inclination on the part of any being towards that to which it is ordained. . . .

"It is rooted, then, in the imperfection of created things. All such desire is a mark of imperfection, but at the same time a promise and a hope. . . . It is a desire of something which is missing. At the same time, it is an effort towards its acquisition . . . striving for further actualization. . . ." Gustafson, *op. cit. supra* note 42 at 68.

45. MARITAIN, COURT TRAITE DE L'EXISTENCE ET DE L'EXISTANT 113 (Galantier and Phelan transl. (1948)).

nature of determined potencies before it sings. It sings as it does precisely because it is what it is and not something else. Its nature is ordained to its type of song. Natural appetency is the proportion and inclination of nature to its object and operation as implanted and recognized by *mind.*

The principle of finality (every agent acts for an end) is true of *all* reality. Created being confesses its dependence on thought because of its dependence on a First Cause. Here "thought" is *analogous* not univocal nor ambiguous in its predication.[46] "But we do at least know implicitly, as soon as we have stated the principle of finality, that natural existence depends upon an existence of knowledge, that the action of objects would be unintelligible if they did not depend upon a thought, therefore, that at the beginning, at the root of things, in a fashion which as yet we cannot clearly determine, there is thought. The agent's essence and its action must be present in a thought on which that essence depends and which conceives it as an ordination or determination to that action, an ontological inclination to the action, an ontological love of it. *The dynamism of being presupposes knowledge and thought, the forming Word.* We see, then, that at the original formation of things, as it were their metaphysical womb, there is something analogous to what we call intellect, though at the outset we cannot determine its nature more accurately. . . ."[47]

Truth for the scientist and for the speculative philosopher is a conformity of mind to the object or thing which measures mind and therefore truth. The function of intellect is to know an object by jealously respecting it as it is. Human knowledge is measured by reality or there is no knowledge. Existents insofar as intelligible (as natures) are the criterion for truth.

But in human art, where the practical intellect is involved, this relationship is inverted. The achievable and realizable end, the operable object, is measured by the practical intellect. The latter directs the realization of the end. That realization depends upon the end as it is conceived by mind. Thus in art it is not an external thing which directly and completely measures mind (it may do this partially and indirectly:

46. On the meaning of analogy see ANDERSON, THE BOND OF BEING (1949); PHELAN, ST. THOMAS AND ANALOGY (1941). Thought which is divine and thought which is human possess only an analogical unity. There is a common essence possessed differently. Here thought is not ambiguously used so that it means utterly different and unrelated things when applied to God or to man. Nor does it mean precisely the *same* thing when applied in these two ways. Actually it means something partly the same and partly different; but in such a way that the difference lies within the essence of thought itself instead of being added to that essence from without.

47. MARITAIN, A PREFACE TO METAPHYSICS 118 (1949).

in representative art). Rather it is mind which measures the thing to be made. Truth here will depend upon the conformity of the thing made with the purpose or end of the artist.

To confine natural law to an exposition of the inferences and implications discoverable in artifacts would indeed be anthropomorphism. But is it not anthropomorphism to transfer this heuristic process to things which man has not made and to generalize this process? Can it be argued that the principle of finality is also true of natural agents like planets and plants and anthropoid apes? Since man did not make man are we not illicitly transferring to this unique natural agent (man) a deduction appropriate only to the things man can make? Unless we see in all agents, whether natural or artificial, a source of determination to activity or to effect we can have neither science nor philosophy nor indeed any knowledge. We not only know things exist. We know the world of nature as an ensemble of existents. But we know more of these things than that they exist. We know them as agents; as realities which act in determinate ways and which are subject to specific passions. When we do this, we already recognize, no matter in how rudimentary a fashion, the *natures* of these things. Also, when we do this we necessarily, if implicitly, recognize the reality and universality of the principle of finality. A tree is determined to grow. The bird is determined to flight and to song. This conception of natures as agents with particular and limited acts and potencies does not involve the slightest anthropomorphism. It is the foundation for all knowledge and science. That is why principles like *"Operatio sequitur esse; omne agens agit propter finem; potentia dicitur ad actum"*[48] are universally true. They are self-evident. They are foundations of rationality and intelligibility. They apply to the things men make and to the things that men do not or cannot make. If these truths are anthropomorphism, all science is anthropomorphism. Unless these principles were universally true, knowledge would be impossible. Thought itself would be unthinkable. It would have no finality.

If agents were not determined to ends, the actions of those agents would have no sufficient reason. Denial of the principle of finality really means denial of the principle of sufficient reason.

Through the gateways of the senses we learn of the kind of reality which is capable of change. Now capacity for change or develpoment presupposes an end or *terminus ad quem* of change or development. Every created substance, being in potency to become something other than it is at present, finds in that "something other" the term of its

48. Operation follows (is conformable to) the being of a thing; every agent acts for the sake of some end; potency is for the sake of (or is related to) act.

actual or possible natural action or receptivity. Everything has its own operation. If it does not exist for its operation, it exists for itself-in-operation. Nothing can attain its ultimate destiny or actuality except insofar as it is in act.[49]

Man as scientist discovers order in the things of exterior natures. He also discovers order within his own body. The implantation of that order in the things of nature and in man's body is certainly not man's work. It is merely discovered by man. But it is the work of *intellect*, however, (regardless of the *kind* of intellect, for the moment) precisely because it is the work of an ordering. It is the characteristic of intellect to arrange things in order. The Intellect Whose ordering is observable in nature is God. He is the Law-giver, the Designer, the Architect, the Planner Who created and Whose Providence provides for nature and its activities.

The genuine natural law tradition is essentially theistic. Creation is the result of Intellect. That is why our limited intellects can descry some of the rationalities (order or pattern) which God's Thought, (Which is identical with Himself) has implanted in Nature (the physical universe which He created). In the last analysis it is His Intelligence which makes reality intelligible. Nothing gives what it does not have; out of nothing nothing comes. Nature has an intelligible content: such a content can have no explanation outside of intelligent ordering. Such a content must come from "intelligence". We correctly apply the word, "intelligence", or the word, "intellect", to the analysis and the establishment of order (*e.g.* means to ends; parts to wholes; accidents to substances; matter to form; conclusions to principles; effects to causes; analysis to synthesis; activity to agent; property to nature). No matter how we have to correct or adjust the crudities and simplicity of our notion of *intelligence* by recourse to the doctrine of analogy, there is no abuse of language, or of the referents behind language and ideas, in the attribution of "intelligence" to God as the cause of the intelligent ordering of nature which we perceive in the cosmos.

The principles and reasoning upon which theism is based are beyond the scope of this essay. The natural law doctrine is no stronger and no weaker than the arguments for the existence of God. That is another way of saying it is no stronger and no weaker than the principles and the reasoning which underlie all knowledge, being, intelligibility and Nature.

This God in whom Essence is identical with Existence, Who is pure Being and pure Act without limitation and without potentiality is recognized by philosophy as well as by religion in the phrase, "I am who am"

49. See ST. THOMAS AQUINAS, SUMMA THEOLOGICA I-II, I, 2.

or "I am he who is." Theodicy does not so much justify the idea and reality of a Creator as it justifies the being and intelligibility of creatures. Creatures need an adequate and sufficient reason.

We can only have sound notions of the Natural Law if the concept of "nature" has objective validity. It is for epistemology and metaphysics to demonstrate that the concept of nature does have objective validity. Ideas like those of *essence* and *nature* are accessible only to reason, which abstracts from experience the necessary and the universal content of experience. If, with the nominalists, we repudiate human nature, nothing else is left of a *natural law*. We have so fundamentally tainted the source of all intelligibility and rationality about man that we cannot consistently set forth even the nominalist's position. We have infected all knowledge with a fundamental skepticism. All science and communication between men fails because the very word science, on the nominalist's hypothesis, cannot symbolize any real referent.

In a metaphysics which gives universal and necessary validity to the idea of nature, the idea of a natural law is implicit in the very idea of a nature. The nature of something is the principle of that something's activity. Whatever has a nature has its act, direction and law from its nature. The ideas of law and good and nature imply each other.

There will of course always be an element of obscurity in every theory of knowledge no matter how true it might be. But then there is an element of obscurity in all knowledge, no matter how many truths stand revealed by science. Metaphysical ideas like *nature* and *essence* are primary. As such their certitude and their ontological validity are prior to any theory by which a psychologist or philosopher seeks to explain how this certitude is attained; or how intellect comprehends or fails to comprehend being; or how intellect is determined and measured by reality. Unless the ideas of *nature* and *essence* have objective reality, the principle of non-contradiction would mean nothing.

Centuries ago Aristotle undermined nominalism by giving eight reasons[50] for defending the necessity and real validity of the principle of non-contradiction: (1) To deny the necessity and validity of this principle deprives words of their fixed meaning and renders speech futile; (2) The ideas of *nature* and of *essence* would lose all reality and there would be only an endless process of becoming (which, by way of contradiction, is itself an essence or a nature or it is nonsense) without anything constituting the subject of this process of becoming, like flight without birds or a dream without a dreamer; (3) It would be impossible to distinguish between things without knowing something of the *natures* and *essences* of those things. Thus there would be no reason for dis-

50. ARISTOTLE, METAPHYSICA, III, 3-6.

criminating between a toothpick and a fence, a penguin and aluminum; (4) Necessarily there would follow the complete destruction of all truth and scientific law; (5) Affirmation could not be distinguished from negation, if we could not understand the natures of these things and all thought and opinion (which must be by affirmation or negation) would be destroyed; (6) An indefinite and undefinable absolute indifference would replace all love and all hatred, all good and all evil. Desire could not be differentiated from aversion; (7) If the distinction between truth and error is wiped out it is obvious it would also be impossible to distinguish between *degrees* of error. Everything could be both true and false at the same time; (8) The very notion of *becoming* as a process would be impossible. If becoming is conceived as a *something* then it could be equivalent, at one and the same time to something and to nothing.

In summary, the mere attempt to deny the principle of non-contradiction is implicit with its affirmation. And that principle together with the very *raison d'etre* of every process of becoming implicates an efficient cause and a final cause.[51]

The seat of tendencies and the proximate source of ordinations are the natures of things. Just as there are different natures created by God, so there are different natural laws, each appropriately expressing a separate and identifiable created nature. In much the same way it is possible to conceive of different *times*. It would, for example, be possible to calculate time upon the basis of other movements than those of the earth around the sun or those of the stars. Though we follow astronomers in speaking of solar time or sidereal time, anything that moves in a regular or repetitive fashion could be employed as the basis for computing time. Similarly, each nature made by God or by man exhibits an order and law of that nature. It flaunts its own natural law.

Natural Law in jurisprudence refers primarily and uniquely to a man's nature. That nature is the proximate source and norm of man's activity; of what is good and bad for men in human conduct. Natural Law is nothing but the law of man's nature integrally considered, insofar as it is transparent, translucent or opaque to human intelligence and reason. The structure or essence of man considered as a whole and as exemplifying an internal and external order perceivable by our minds is implicit with a natural law.

Thus the Natural Law reflects human nature considered as a revelation of function and purpose. Although this revelation is divinely diffused in that *nature* itself, as a divine design; it is purely natural and not supernatural. It is not Revelation considered as a supernaturally

51. See GARRIGOU-LAGRANGE, GOD: HIS EXISTENCE AND HIS NATURE, I, 199, *et seq.*

announced message to man from man's Maker. The source of the revelation with which the natural law is concerned is man's nature, not his supernature by grace. Nor is the origin of the natural law a matter of dogmas defined by the Church. It is a matter of first principles intuitively grasped by the unaided human intellect from the nature of a created reality. One can attain to a knowledge of it (fumblingly, at least, and with difficulty) without supernatural enlightenment or education.

Man studies man *as a nature,* to discern the law constituting that nature as a design of the Supreme Reason, the First Principle of the universal, cosmic order. It is a question of making the world and man himself humanly intelligible. God "intrudes" here as He "intrudes" into every problem. For the problem of God is the ultimate basis of every problem confronting the human mind. In the final analysis the problem of man becomes the problem of God. If you take away God you take away the world because the world was produced by God. Of course we cannot by reason know what God is *in Himself*; but only what He is in relation to us; or more exactly what we are in relation to Him. "Take away God, and life and the world are left unfinished, are not defined, but offer only something relative and insufficient, without ultimate reason for existence: what may be called *a system of nothings.* . . .

"Since all causality implies an ultimate principle, we postulate one, and call it *God.* When we say *God is,* we consecrate this postulate to Him alone, but we do not, properly speaking, qualify its possessor. Our God is not *such* a one; were he *such,* he would be limited. . . ."[52]

The Natural Law then means the *law,* that is to say the divine order and decree structuring the nature of man.

In creating man, God ordained him for a purpose, a finality. He would be less than God if he ordained man for any purpose less than Himself. In other words God ordained man for a divine finality.[53]

Even from the point of view of purely natural knowledge, it is appropriate to ask of man not only what is his nature but what is his end. Nature necessarily implies act and act implies end. If we do not take our answer to the question of man's purpose from God himself (through Revelation or through the authority which he designated, namely, the Church) there remain only two alternatives: (1) We can study man as Socrates recommended: "Know thyself." (2) We can refuse (because of indifference, despair, neglect or dogmatic prejudice) the quest of man's purpose.

Certainly it is not in the tradition of culture, civilization and science

52. SERTILLANGES, FOUNDATIONS OF THOMISTIC PHILOSOPHY 53-55 *passim* (1931).

53. ST. THOMAS AQUINAS, SUMMA CONTRA GENTILES III, 2, 3, 16-20, 25-26, 37-40, 47-48, 51-54 and 61; BUCKLEY, MAN'S LAST END 13 (1949).

to neglect such an inquiry. To be merely indifferent about it or to shy away from it because of its difficulty or because of prejudice is indefensible.

Natural Law designates the law of the use and abuse of man as known by the light of *natural* reason, deriving from and at the same time manifesting the *natures* of man, and of things in relation to men. More particularly the nature of human beings as *persons* (who proceed as determinately constituted from the creative act of God) discloses the pattern or order called Natural Law. God has instilled in man's nature a capacity for activities directed to his last end and therefore to the *good* of the person as a reality designed by God in a unique manner. In this view, the Natural Law can be defined simply as a participation by reasonable creatures (persons) in the *eternal law* of God. Actually this is the definition of which St. Thomas Aquinas seems most fond: "The eternal law is nothing other than the order of divine wisdom according as it is directive of act and of motion."[54] "The eternal law is the order (*ratio*) of divine government."[55] "The eternal law is the highest order."[56]

The Natural Law and the creation and conservation of the universe thus appear as aspects or phases of the temporal realization of an *eternal plan* wherein all reality is perfectly encompassed and ordered without violation of human freedom. This *eternal plan,* whose mysterious scope and deepest roots are shrouded from us because of our ignorance and the limitations of our intellect, is known as the Eternal Law.[57]

Thus the Natural Law is nothing else than the eternal law insofar as the latter regulates human activity *in a manner consistent with man's nature endowed with free will.* In respect to material things and inanimate beings, the regulations of the eternal law are the physical laws of science. In physics the relations between ends and means are purely

54. ST. THOMAS AQUINAS, SUMMA THEOLOGICA, I-II, 93, 1.

55. *Id.* at 4.

56. *Id.* at 5.

57. "Just as in every artificer there pre-exists a type of things which are made by his art, so too in every governor there must pre-exist the type of the order of those things that are to be done by those who are subject to his government. And just as the type of the things yet to be made by an art is called the art or exemplar of the products of that art, so too the type in him who governs the acts of his subject, bears the character of a law. . . . Now God, by His wisdom, is the Creator of all things, in relation to which He stands as the artificer to the product of his art. . . . Moreover He governs all the acts and movements that are to be found in each single creature. . . . Wherefore as the type of the Divine Wisdom, inasmuch as by It all things are created, has the character of art, exemplar or idea; so the type of Divine Wisdom, as moving all things to their due end, bears the character of law. Accordingly the eternal law is nothing else than the type of Divine Wisdom, as directing all actions and movements." *Id.* at 1.

mechanical or physical. In respect of brute animals the eternal law characteristically manifests itself by the internal necessity which we call instinct. But the direction of man to his final end is *moral.* It is not exclusively mechanical, biological nor instinctive. It does not determine, it merely obliges the will. But it permits *free choice* between what is genuinely good or good in the long run and what is and is recognized as only apparently good or transiently good.

The nature of a thing conceived according to the maker's plan and purpose constitutes necessarily and metaphysically the norm of that thing's functioning. Assuming, as a postulate taken from theodicy, that the Maker of human nature is good, allwise and omnipotent, the human person has a nature which achieves its destiny (attains its end) by being true to the ordered inclinations of that nature. This means giving each inclination its proper value, scope and due respect, according to the Maker's plan of integrated and actualized personalty. A wise maker wants the thing he makes to function as he made it and so as to fulfill its potentialities. To abuse the thing, to obstruct its functioning or to develop inordinately one potentiality to the neglect of others amounts to a repudiation of the maker's plan. A mechanical pencil is to be used in accordance with the gift of structure, nature and purpose with which it was endowed by its maker. To use it as a chisel to carve granite would be to spoil it, to abuse it. Wood will not serve as human food; nor can a golden calf be divinized. The nature of things forbids such abuse.

Whenever man desires an intelligent explanation of any action whatsoever he looks for purpose or ends. Every form of making requires final causes as much as efficient causes. If a nature did not by some internal dynamism (whether explainable or not) tend toward its particular type of action or effect; if it did not have at least a natural inclination toward that specific action or effect; there would be no sufficient reason why it would produce one action or effect rather than another. Unless things directed their functioning by some finality or tendency there would be universal disorder. One would never know when to expect attraction rather than repulsion, respiration rather than digestion, vision rather than audition. There would never be any sufficient reason to account for any effect or activity. The nature, endowed as it is with its own proper, specific finality, presents the basic proximate reason why its act is determinate; otherwise, acting indeterminately, it might produce a dozen other effects rather than the one toward which it has finality. All experience, science and sound philosophy recognize that every existent, because it has a specific nature, has a particular orientation of elements or activities engineered to achieve a particular end or set of ends. The ordination of elements to end is the manifestation of an internal law locked up within the nature of the thing by the intelligence which de-

signed that thing. Rationality opens natures and looks inside to find the latent law, drawn therein by Intellect. Like so many shells of different shapes and sizes, natures echo to our minds the resonances of Mind.

The nature and finality of many parts of the body and of many bodily functions are readily and directly cognizable. We need no dictionary in order to discover the function of the mouth or nose. Realization of the purpose and nature of our sense organs is not acquired as we might acquire knowledge of differential equations. But as to endocrine glands and hormones much research and discursive reasoning are necessary. One and the same nature is nevertheless the well-spring of all our knowledge of man under differing formalities.

The same Natural Law that teaches us the use of organs of sense teaches us obvious examples of their abuse. Eyes, for example, are destroyed by plunging knives into them. The body is hurt or fatally wounded by penetrating it with the bullets of a shotgun. There are rudimentary precepts of bodily safety and personal hygiene that the most primitive peoples have acquired.

But the mandate implicated in and readable from the nature of man is not exhausted by a set of rules of bodily integrity and health. Considered integrally man is more than body. He is a person.[58] He has potentialities, tendencies and finalities which exceed merely animal functions. The quest of mind and soul for the good, the true and the beautiful is as real as his tendencies toward sensual gratifications. Man has capacities for the communications of knowledge and love. In the throes of sensual pleasure, he has the potentiality for self-restraint. On the one hand obvious limitation; on the other aspiration for the illimitable; the quest for repose and, in repose, the boredom; the yawning absence of self-sufficiency and yet the hankering after self-sufficiency; the conflict between human mercy and human justice; the tension between selfishness and charity. In this panorama of flux and counter-flux there is a unique and characteristic purpose and destiny for man.[59]

This panorama itself reveals the *nature of man,* as the immediate source of our knowledge of man's act and destiny. Each element or reality in the microcosmos has its proper place. Each has an end or purpose which it is determined to realize in one way or another, as part of a total picture, and in accordance with the virtualities and properties of man's integral nature. Man is a unity. His partial ends and scattered finalities demand superior unification. Similarly, each element of the cosmos, having its own peculiar destiny, is ordained to a universal end which is God Himself. In this view creation appears as the realization

58. MARITAIN, THE PERSON AND THE COMMON GOOD (1949).

59. See the magnificent passage in D'ARCY, S.J., THE NATURE OF BELIEF 289-91 (1931).

of an eternal plan by which all reality is well ordained toward Goodness itself. This one unifying law implicit in the laws inscribed in the natures of the elements of the universe is the eternal law. It is eternal because the Divine Thought, immutable as the Divine Wisdom, is its type and exemplar. God presides over the universe which He created and which He conserves. He has traced the paths of things so that each being has an end *required by its own nature.* Free things act freely; determined things necessarily. Therefore moral law or the Natural Law is nothing other than the eternal law insofar as it regulates the activity of men, consistently with freedom.

Human freedom is one of the data discoverable in human nature. The mere fact that man has the ability to choose freely does not imply that any kind of choice is good, in a sense of benefiting or befitting his nature or subserving his ultimate purpose. Man can choose to eat or not to eat. But some kinds of eating and some kinds of fasting are good, others are bad. If man has freedom of choice (and he has), there is a wrong and a right use of that freedom. A free man who is impeccable is a contradiction, like a square circle. The proximate norm or test of rightness or wrongness is the human nature integrally conceived as an order of unified and subservient finalities under a principal finality. Wisdom and knowledge are not constituted by any kind of knowing. Only the knowledge which perfect man's nature viewed as a whole is said to be good for a man. Only the kind of willing which consorts with man's rational nature and end is good for man. Unless there is a right and a wrong way of exercising freedom of choice we would never be able to distinguish reasonably between the choices of St. Francis of Assisi and those of a Hitler. The Natural Law says that choices are to be appraised by comparison with the mandate of man's nature viewed as a whole; by reference to man's highest purpose or destiny in life.

If man were a creature naturally determined to a specific end in the manner of chemical elements or plants; or if man were determined to a definite end in the instinctual manner of mere animals; he would fulfill his nature and the laws of the finality of that nature without free choice. But since free-will is a datum of his nature, man alone in the visible universe has (within limits) the perilous choice of complying with or refusing to comply with the law of his nature.

Only a little introspection and a little experience with other men warrants the conclusion that in man a number of purposes or ends seem to vie for dominance. "I see another law in my members fighting against the law of my mind" wrote St. Paul. Is man, like other realities (whether natural or those produced by human art) endowed with a primary purpose but susceptible of secondary or incidental purposes? Indeed men have sacrificed themselves to violent and unnatural ends. In this criss-

crossing of sometimes inconsistent ends and purposes is there any overmastering destiny to which all other purposes should be subordinated? Sound Natural Law doctrine answers in the affirmative.

Aristotle reached this conclusion early in his Nichomichean Ethics, while discussing the objective of moral science. Here, as in most cases, it is easier to understand the Greek Philosopher in St. Thomas commentary. Let me translate paragraphs 19, 20, 21 and 22 from the Angelic Doctor's *In Decem Libros Ethicorum Aristotelis ad Nichomichum Expositio*: "19. . . . Here the Philosopher approaches the task of demonstrating what principally is the objective of this science. . . . First, he shows from the premises that there is some optimum end in human affairs. All ends are of such a character that we wish other things (means) on account of those ends and we wish the ends for their own sakes and not on account of something else. The end we are seeking is not only good, but it is the best of all ends. And this appears from the fact that the end for whose sake all other ends are sought is always more important. . . . But in human affairs it is necessary that there should be some such end. Therefore, in human affairs there must be some end which is not only good, but best. 20. . . . Now, we either arrive at some end which is not desired because of another end or we do not. If we do, we have established our proposition. If, on the other hand, we do not find some such end, it follows that *every* end must be desired on account of another end. And thus it would be necessary to proceed *ad infinitum*. But this is impossible. . . . Therefore, it necessarily follows that there must be some end which is desirable for itself alone and not on account of another end. 21. That it is impossible to proceed *ad infinitum* with ends is proved . . . in this way: if we proceed *ad infinitum* in desire for ends, so that one end is always desired on account of another, endlessly: we would never arrive at the point where man would achieve desired ends. We would, indeed, desire, frustratedly and in vain, what we could not possibly attain. Therefore, the end of desires would be frustrated and in vain. But this desire is *natural*: for . . . the good is what all things *naturally* desire. Therefore it follows that natural desire is pointless and empty. But this is impossible. Because natural desire is nothing else than the inclination inherent in things from the very ordination of the first mover (God). Such an inclination cannot be frustrated. Therefore it is impossible that in ends one must proceed *ad infinitum*. 22. And thus it is necessary that there should be some ultimate end on account of which all other things are desired and which itself is not desired on account of any other things. And so also it is necessary that there should be some *best* (perfect) end for human affairs."[60]

60. Lectio II, *passim*.

Natural theology tells us that God necessarily understands Himself as the Perfect Good. Such a good if adequately apprehended is necessarily loved. Love operates through the will. Consequently God must have volition. In this attribution we must, by the doctrine of analogy, strip our human categories of all their imperfections and limitations. But the concept of "volition" attributable to God is not erroneous because analogous.

In God there is no distinction between mover and moved. God is not act commingled with potency; perfection with perfectability. The divine intellect, the divine will and the divine essence are identical. God's Will is not distinct from His Intellect.

While God has brought things into existence by creation, this creation was not a necessity of His Nature. God truly produced all things by His Will. Creation was not the result of an impulse of necessity in God's Nature. God is omnipotent. Therefore He is not *determined* to this or that effect. He is undetermined with regard to all effects. For this reason effects proceed from God according to the determination of His Will. God as the agent of creation (like every other agent) acted for an end. That an agent acts for an end is a law of thought and being. The end is the principle of all functioning and acting. Moreover it is obviously better for a thing to have been made for an end than to be made without the intention of achieving any end. Whatever goodness things have derives only from the fact that they are made for an end and achieve that end to a greater or a less degree. Therefore God, Who does everything in the most perfect way, must have made things for an end.[61]

Obviously if man does have an ultimate and perfect end, all his capacities and natural desires would be fulfilled in the possession of that ultimate end. From this it is clear that man's last end cannot consist in mere sense perception. For no matter how much we advance in sense cognition there still remains a natural desire to know other objects yet in a rational universe, a natural desire cannot be doomed to frustration; because the natures of things in that kind of a universe are made for and are proportioned to ends and finalities which are achievable. A nature functioning for an impossible purpose might betray the limitation and the ineptitude of its maker. It could never be the work of an omniscient Maker.[62]

61. See ST. THOMAS AQUINAS, COMPENDIUM OF THEOLOGY, 104-109 *passim*, (Vollert transl. (1947)).

62. For these reasons St. Thomas concludes this argument as follows: "Accordingly we reach our last end when our intellect is actualized by some higher agent than an agent connatural to us, that is, by an agent capable of gratifying our natural, inborn craving for knowledge. So great is our innate desire for knowledge that, once we apprehend an effect,

The thesis that God made man for Himself finds corroboration not only in revealed religion but also in whatever real knowledge we have of the process of making and of the relationship between maker and thing made.[63]

The story of Frankenstein's monster or of the Golem has fascination for us precisely because it represents the unnatural and horrible event of the thing made which refuses to serve its maker. Obviously whatever man makes he makes in some way for himself. It would be both impossible and irrational for man to set about a process of making which consciously and deliberately aims at a production disobedient to his will as maker. The whole process of making consists in the act of implanting into the refractory materials out of which things are made a form or mechanism of tendency to act in a given, determinate, intended way. Otherwise the process of making would be irrational and self-contradictory. It would be a wanting and not wanting at the same time and in the same respect. Making would be frighteningly unforseeable in its result. I am not suggesting that man considered as *homo faber* cannot make things clumsily and inefficiently so that they disappoint him. But this clumsiness, inefficiency and disappointment are not intended. It is simply impossible for a maker to be rational and to intend production of an artifice planned to defeat his own wishes. In fact and in sound philosophy, no artifact can say, *"Non serviam"*.

Only rational creatures, gifted with free will, have been endowed by their Creator with power to enact rebellion. In all God's visible creation only man has the frightful capacity to thwart his own nature's destiny and therefore his Maker's Will by corrupting his acts with the privation called evil. Out of respect for His own gift of free will to the nature of man God permits this. Evil conduct in free man is not interdicted by inviolable laws of natural necessity. Why?[64]

---

we wish to know its cause. Moreover, after we have gained some knowledge of the circumstances investing a thing, our thirst is not assuaged until we penetrate to its essence. Therefore our natural craving for knowledge cannot be satisfied until we know the first cause, and that not in any fashion, but in its very essence. This first cause is God. Consequently, the ultimate end of an intellectual creature is the vision of God in his essence." ST. THOMAS AQUINAS, COMPENDIUM OF THEOLOGY 110 (Vollert transl. (1947)).

63. "The last end of every maker, as such, is himself, for what we make we use for our own sake; and if at any time a man make a thing for the sake of something else, it is referred to his own good, whether his use, his pleasure or his virtue. Now God is the producing cause of all things. . . . Therefore He is the end of all things." ST. THOMAS AQUINAS, SUMMA CONTRA GENTILES III, XVII.

64. ". . . The perfection of the universe requires there should be inequality in things, so that every grade of goodness may be realized. Now, one grade of goodness is that of the good which cannot fail. Another grade of goodness is that of the good which can fail in goodness, and this grade is to be found in existence itself; for some things . . .

Unless there were adverse circumstances, fortitude would have no meaning. Unless there were things to fear, bravery would signify nothing. Unless men were free (and were persons), there could be no friendship. And that means that by free choice there *may* and *will* be (not *must* be) enemies. Moral integrity is only possible and laudable because by free "acts" we, as persons, nihilate,[65] *i.e.*, we posit acts which *lack* rectitude or reality which ought to be present. Evil is a privation of what is due and not a mere negation. A person free but impeccable is as metaphysically impossible as an empty pail full of water. Without free persons the universe would lack much being and good: *viz.*, virtue, friendship, art and all the notable *achievements* of men. For all genuine achievement is defeasible. In the line of man's chiefest end man is subject to failure because of freedom.

In this philosophy, then, man has a primary purpose, a purpose for which above all others he was made. Man cannot naturally learn of that purpose directly from his Maker. That would require supernatural illumination. If man refuses to learn it or cannot learn it from sound

---

cannot lose their existence as incorruptible things, while some . . . can lose it, as corruptible things.

". . . The perfection of the universe requires that there should be not only beings incorruptible, but also corruptible beings; so the perfection of the universe requires that there should be some which can fail in goodness and thence it follows that sometimes they do fail. Now it is in this that evil consists, namely, in the fact that a thing fails in goodness." ST. THOMAS AQUINAS, SUMMA THEOLOGICA I, 48, 2.

65. MARITAIN, ST. THOMAS AND THE PROBLEM OF EVIL 21 (1942); MARITAIN, EXISTENCE AND THE EXISTENT 85 (1948). ". . . If there are in the universe creatures free and intelligent, therefore fallible, it is doubtless because, from the point of view of nature as a work of divine art. The perfection of the universe as a whole composed of diverse parts, required that every degree in the scale of being should be filled.

"But if such a universe has been created, having in its bosom intelligent creatures, free and subject to failure, let us not forget that the end of its creation lies in the universe of grace. . . .

"Sin therefore, taken as a disaster of that whole which we call the person, and as an offense against God . . . sin and the suffering and sorrow which form its retinue are not permitted for the greater perfection of the machine of the world, but for the consummation of a work of love which transcends the whole order of the world; they are themselves connected to the manifestation of divine goodness as transcending the very universe of creation and expressing itself in the universe of grace and of the transfiguration of love of created persons become God through participation." MARITAIN, ST. THOMAS AND THE PROBLEM OF EVIL 17-18 (1942). In this area as in others, philosophy will always limp. Ethics and the Natural Law will never be quite enough. They need completion in Theology. "Restless is the heart of man until it rest in thee" wrote St. Augustine. A supernatural destiny beckons to man. Supernature calls to nature filling it with a divine unrest. Even Aristotle recognized that when, in the beginning of the Nichomachean Ethics, having finished his delineation of true happiness, he had before him a thing not of this earth. The impulse and the aspiration to perfection are themselves a kind of natural desire for God, as Highest Good.

philosophy or from religion then his only and very precarious source of knowledge will be his own nature regarded in its totality. I say "precarious" because few men are willing or able to undertake tasks of such magnitude. A little such knowledge takes long to acquire, if one uses as "reference book" only human nature often so poorly refracted by our minds. What man does learn naturally in this area is often tainted with admixtures of error.

No approach to the Natural Law would be complete without presentation of what St. Thomas Aquinas has to say on the subject in his *Summa Contra Gentiles*. "Whatsoever has a determinate nature must have determinate actions becoming to that nature: since the proper operation of a thing is consequent upon its nature. Now, it is clear that man has a determinate nature. Therefore there must needs be certain actions that are in themselves becoming to man.

"Besides. If a thing is natural to a man, that also must be natural to him without which he cannot have that thing: for *nature is not wanting in necessaries*. Now, it is natural to man to be a *social animal*, and this is proved by the fact that one man alone does not suffice to procure all the necessities of human life. Consequently whatever is necessary for the maintenance of human society, is naturally becoming to man: such as to observe the rights of others, and to refrain from doing them any harm. Therefore in human acts some things are naturally right.

"Also . . . it is natural for a man to use things beneath him for the needs of his life. Now, there is a certain measure according to which the use of the aforesaid thing is expedient for human life, and if that measure be ignored, a wrong is done to man, as in the inordinate consumption of food. Therefore, certain human acts are naturally right and some are naturally wrong.

"Again. According to the natural order, the body is on account of the soul, and the lower powers of the soul are on account of the reason. Even as in other things matter is for the form, and instruments for the sake of the principal agents. Now, if a thing be ordered to another, it should be a help to it and not a hindrance. Therefore it is naturally right that man should so care for his body and the lower powers of the soul that they be not a hindrance but a help to the act of reason and to his own good. If it happens otherwise it will be evil by nature. Therefore wine-bibbing and feasting; inordinate use of venery which hinders the use of reason; and submission to the passions which thwart the free judgment of reason, are all evil by nature.

"Moreover. Those things are natural to every man whereby he tends to his natural end: while those which are of a contrary nature, are naturally unbecoming to him. Now . . . man is by nature directed to God as his end. Consequently those things whereby man is brought to

the knowledge and love of God are naturally right: and whatever things have a contrary result are naturally bad for man.

"It is therefore clear that good and evil in human acts result not only from the prescription of the law, but also from the order of nature."[66]

That "order of nature" is the materialization or realization of the eternal law. It is the tracing that must be read for whatever glimmering knowledge we have of the natural law.

Thus the theocentric character of the moral law as explained above is evident not only from the fact that God Himself is the Author of that "order of nature" (which confesses the Natural Law) but also from the fact that God Himself is the *Summum Bonum,* the good and the destiny, the end and the purpose of man. God Who is all perfect and all wise could act only because of a perfect reason. Anything less would imply, in Him, imperfection. God Himself is the only adequate explanation for the destiny of man and indeed of all things. God's Will which chose freely to create us is identical with God Himself. No ordinary maker is this God choosing freely to make us. Precisely because he unerringly writes His Will in the things He makes, the Natural Law has an inviolability which is alien to anything made by man.

The majestic proportions of the great Summas of St. Thomas Aquinas never appear more magnificent than in the stages of argumentation by which he establishes that all things are directed to one End which is God.

According to St. Thomas, if God were to act on account of some finite good, rather than on account of His Own Goodness (as the supreme end of creation) he would be acting on account of a good different from Himself. This would imply a good unworthy of Him, a lack in Him. Precisely because God is infinite and perfect this is impossible. Therefore in creating man and the cosmos, God acted *ad extra* in order to communicate His Own Goodness. Of course the Goodness of God cannot be communicated to creatures actually or by identity or even by a specific similitude (God infinitely exceeds His most perfect creature). It can only be communicated by intimations: by those "vestiges" or "images" of the Creator which can be found in all creatures. Therefore God ordained His creatures to the acquisition of His Goodness by a *finite* communication, in a manner conformable to the natures of the things to which that Goodness is communicated. This limited communication which St. Thomas calls an "assimilation to the divine goodness" is the true end of every creature as well as the ultimate end in the order of finite and created ends.

66. ST. THOMAS AQUINAS, SUMMA CONTRA GENTILES III, 129.

But St. Thomas is careful to caution against considering this "assimilation" as if it were some kind of acquisition by God (Who can acquire nothing, having everything) rather than a communication.[67]

So mind laboriously follows the tracings of God's writing in man's nature wherever they lead: to the obvious and the apparent about man's body; through difficult reasonings to the cold heights of wisdom revealing, in the obscurities of His blinding Light, man's Uncaused Cause; along the devious and dark by-ways of man's soul and interiority (where man is not a part but a whole; not a means, but an end) to a center of initiative which holds itself in hand by the mastery and the mystery of the *person*; and from this center (which is ineffable) we go in all directions to the contexts and circumstances, where man is not a whole but a part of that total picture called creation.

Why does mind, restless and often discouraged, undertake this lifetime Odyssey? So that we can know the use and abuse of man: the right and the wrong of his deliberate choices. That is the price[68] we must pay for eating the fruit "of the tree of the knowledge of good and evil."[69] Man pursues, restlessly and tirelessly, the good, the true and the beautiful. He experiences existence and attains to a knowledge of being as being because he confronts himself with Transcendant Reality in its infinite varieties and refractions. As a person, man controls himself. He dominates himself. If his nature manifests certain inclinations of mind and body, many of them are subject to his discretion. He can kick against the goad. He has liberty and free-will. He has election and choice. If his body exemplifies such functions as sleeping and eating, he can decide at least (within limits) what and when he shall eat and where and when he shall sleep. If his nature beckons alluringly in one

67. "An effect must tend toward the end in the way in which the agent acts on account of the end. But God, Who is the first efficient cause of all things, does not so act that by His action He acquires something: for He solely is in perfect act. . . . Creatures, therefore, are not ordered into God as unto an end for Whom something is acquired, but, so that from Him they may attain Him, since He is the end." ST. THOMAS AQUINAS, SUMMA CONTRA GENTILES III, 18 *ad finem*.

68. "The creature's liability to sin is thus the price paid for the outpouring of creative Goodness, which in order to *give itself personally* to the extent that it transforms into itself something other than itself, must be *freely loved with friendship's love and communion*, and which to be freeely loved with friendship's love and communion must create *free* creatures, and which in order to create them free must create them *fallibly* free. Without fallible freedom there can be no created freedom; without created freedom there can be no love in mutual friendship between God and creature; without love in mutual friendship between God and creature, there can be no supernatural transformation of the creature into God, no entering of the creature into the joy of his Lord. Sin,—evil,—is the price of glory." MARITAIN, ST. THOMAS AND THE PROBLEM OF EVIL 18-19 (1942).

69. ST. THOMAS AQUINAS, SUMMA CONTRA GENTILES II, 17.

direction he can refuse the invitation by self-discipline. He can select the occasions and opportunities for study. If he is enamored with the good which is real he is sometimes foolishly fascinated with the good which is only apparent. If he is the apprentice of truth he can also be the slave of error. In the things of choice he is not determined to oneness by ineluctable, instinctual drives or impulsions. He is under no physical necessity to fail or achieve. He can decide for himself with greater or less facility, painfully or pleasantly. In view of this point and counterpoint, this invitation and repulse, this exacting indeterminacy, what does it mean to be told to "Act according to your essential nature"; "Be yourself"; "Do good and avoid evil"; "Love God above all things and your neighbor as yourself"; "Actualize your potentialities"? *These are the injunctions which best subsume the whole Natural Law.* Philosophically they all mean the same thing.

Certainly they mean more than that we should be true to a nature devoid of finality or freedom. A man cannot avoid being a man. He cannot escape his nature. If he could, he could not be classified. He would be like the imaginings of fairy tales: the pumpkin that became a mouse or the giant that became a lion. When a man, who has made some moral or intellectual mistake, is told "Be yourself", it is quite obvious that he is not being advised to be his existential self, spoiled and marred by mistakes, failures or sins. On the contrary, the man who advises, "Be yourself" means this: "If you had genuinely realized the veritable potentialities of your nature you would have made no mistake, you would have committed no sin." The very fact that other men (who have your nature) have avoided these same mistakes or sins is an indication that it is within your reach; it is one of the capacities of human nature to avoid mistakes and sins of deliberate choice. You do not say "Be yourself" to a man who evinces any kind of ignorance, failing or imperfection. There are some failings that are simply unavoidable, the human condition being what it is. If a man says he cannot lift ten thousand pounds he is not scolded for it. He is being precisely himself when he admits he cannot lift ten thousand pounds. A derisive "Be yourself" is not hurled at the ordinary citizen who is unable to understand the complicated formulae constituting Einstein's attempt at a unified field theory. Since the just man falls seven times a day, the piccadilloes of good men can be overlooked in the total picture of human nature and conduct. But the man who is a traitor to his family and his friends is told to be true to himself precisely because he is in potency to the kind of action which is loyalty, considered as a finality (included in the supreme finality bending us to God) perfective of human nature. If human nature had no end, it could not be perfected. If it had no

destiny or purpose it could not be considered good nor could any good be done to it, nor any evil.

Considerations like these lead to the realization that the most obvious thing which can be read from human nature is its perfectability and its need for perfection. It is not sheer actuality. It is a strange mixture of potentiality and actuality. It has talents, capacities, potencies. It exists for the sake of realizing those talents, capacities and potentialities according to the order of reason. That is only another way of saying that human nature has its own distinctive good toward which it ought always be directed. This good is not any merely apparent rather than real good. The good in question must be genuine; the most genuine of all goods: God.

Potentialities are not sheer indeterminations. They are directed toward specific acts. Those acts are related to one another in an order and hierarchy. Thus acts or realization of ends (development of human potentialities), in order to be good for man, must take place in an order of reason, of rational design: God's design ultimately. Proximately man's reason, by a right conscience, must dictate this design. Good design is dictated by good conscience; bad designs by evil conscience. Man, like other realities does have a primary purpose as dictated by an all-wise Creator, and secondary and incidental purposes. The latter must always be subordinated to the former. The former is an *absolute,* because God in His Wisdom is an Absolute. The secondary or incidental purposes are not absolutes. They can and should be sacrificed for the sake of the primary purpose.

The principle: *Do good and avoid evil,* is universal. It cannot be denied or defied when given a *metaphysical,* as distinguished from a *moral,* reading. It is exemplified in every deliberate choice, whether good or bad. The most evil man in the world does what he does under the aspect of good, no matter how spurious the good, no matter how transient or how merely apparent. It is simply impossible to do anything under the aspect of evil. An accurate reading of human nature as betrayed by human conduct discloses that man does everything that he does under the aspect of good. Evil is not a thing, or a principle, or an essence.

This is not to deny the existency of *moral* evil in the world. Nor is it the same as saying that knowledge is equal to virtue and ignorance to vice. Evil men, insofar as they are evil morally, are always preferring secondary and incidental purposes to primary purposes, short-range goods to long-range goods, apparent good to real good. If they are sinfully ignorant they have picked a comfortable indolence and laziness as a "good" to be preferred over the arduousness and self-conquest which are implied in real achievement. If they are beguiled by their emotions and passions, because many men live by passion rather than by reason,

they choose some sensual pleasure as a good to be preferred over the sometimes painful and always difficult effort of the will at self-restraint. If they give themselves over to hatreds, malevolence and ill-will (*e.g.* genocide) they did these things only in terms of some inordinate love of self or myth or party or race or blood.

When St. Thomas wrote, "This therefore is the first principle of the natural law that the good is to be done . . . and evil to be avoided,"[70] he was merely stating the self-evident principle of the practical intellect. If you understand the subject and the predicate of this principle its truth is an intuition which is inescapable. It is impossible to know the meaning of such words as "good" and "evil" without recognizing the truth of this principle.

The explicitation of this first principle (and of the various other formulae which are semantically its equivalent) by way of conclusions and "determinations" I must leave to a subsequent paper. Such explication is not included under the title of this essay.

70. ST. THOMAS AQUINAS, SUMMA THEOLOGICA I-II, 94, 2.