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A THOMI$TIC ANALYSIS OF THE CONCEPT OF REPRESSION

A KEY idea in the theory of psychoanalysis is the idea of repression, the concept of a dynamic and unwitting expulsion of certain images, ideas and affects from the consciousness of the mind. From one point of view, repression is invoked to account for the existence of unconscious thoughts and motivations; from another, it is conceived as a primary agent of neurotic states and of behavior which is more or less pathological; and from still another, it it allotted an important role in normal psychological growth and development. From any of these points of view, it is a phenomenon worthy of close study. The evidence concerning repression is tqday so varied and extensive that its existence can no longer be reasonably doubted. Nevertheless, the concept has not been universally accepted by psychologists, outside of the psychoanalytic schools, and possibly to some extent because there are still problems to be solved in understanding precisely what repressiOn Is.

It is not likely that many descriptions of repression will be found in text books of scholastic psychology, and this is unfortunate. The psychoanalytic investigations and descriptions of repression are, after some years of refining and re-defining, worthy of serious attention. This present article will attempt to summarize the salient features of the theory of repression, and show how it might fit into a scholastic development of psychology, and, in particular, into the psychology of St. Thomas Aquinas.

I. DESCRIPTION OF REPRESSION FROM PSYCHOANALYTIC LITERATURE.

A. *The General Idea of Repression.*

Repression belongs generically to the category of psychological reactions which in psychoanalytic literature_ are called mechanisms of defence. The context in which mechanisms of defence are discussed is mental anguish, which is variously termed mental pain or psychological tension or anxiety. Given a state of mental distress, distinct from physical pain, the mind might adopt, or perhaps we should say, experience, a psychological response whose aim is to escape from the disagreeable situation. The various psychological respon!les (about ten are generally recognized) are the mechanisms of defence, among which repression holds a unique place.

There are many ordinary kinds of responses which people might employ to diminish mental distress. They might try to work it off, or to dist:.;act themselves with pleasures, or go to sleep, or talk it over with a friend-these are not mechanisms of defence. The term is restricted to largely spontaneous and indeliberate psychological reactions which work almost like reflexes (hence the term ' mechanism ') and which in fact succeed in one way or another in overcoming mental pain.

One of the more commonly recognized mechanisms of defence is projection. By this reaction, a person who is experiencing a disagreeable feeling of hatred for another, escapes the sense of guilt by attributing the hate *to* the other; he begins to believe

that he *is* hated. Another defence mechanism is reaction formation: a person overcomes disagreeable feelings of hate by overcompensating expressions. of kindness and benevolence, and vehement protestations (to himself and others) of his good will. A third mode of defending against an unwanted feeling of hate towards another is to turn it against oneself, to let it expend its force in self-recriminations. All of these mechanisms have one thing in common-they distort a feeling or attitude and make it unrecognizable to its possessor. Repression, which is like them in being an attempt to escape a disagreeable feeling, differs in its mode of operation. It does not distort 11 feeling, image or idea; it simply expels it from consciousness.

It is crucial to the concept of repression to understand that it does not annul or annihilate the feeling or idea that it expels. It simply removes it from the sphere of awareness. It is a negating action vis-a-vis internal perception, a blocking off or inhibiting of consciousness concerning some mental phenomenon. The phenomenon persists afterwards in a state of unconsciousness.

Among the mechanisms of defence, repression holds a unique place. It accomplishes more than the others, in terms of quantity, for it can master powerful instinctual impulses in the face of which the other mechanisms are ineffective. It acts once and for all, while the others have to be employed whenever the distressing situation recurs. It is the most dangerous, for, while the other mechanisms may distort or deform conscious activities, repression removes whole areas of life from any conscious surveillance. It produces gaps and blanks in psychic life which might impair personal integrity for good and alJ.1

Otto Fenichel makes an instructive comparison between repression and the phenomenon of fainting.[2] When an organism is overwhelmed by an intense influx of stimuli, he notes, it reacts by shutting off perception. When psychological excite-

[1] Cf. Anna Freud, *The Ego and the Mechanisms of Defence,* (London, The Hogarth Press, 1954), pp. 58-54.

[•] See *The Psychoanalytic TheOTy of Neurosis,* (New York, W. W. Norton & Co., 1945)' pp. 86-87; ll8-ll9.

ment reaches an intolerably painful degree of intensity, the mind defends itself by blocking off any further stimulation. This is fainting, a most primitive method of ego defence. Repression can be understood as a partial fainting, as a specific blocking off of the perceptions of particular instinctual demands.

B. *The Objeots of Repression.*

As Freud remarked, we do not escape *external* stimuli by repression; we try to escape them by flight or fight.[8] Repression properly falls on *internal* stimuli. These internal stimuli are the instinctual urges which have their roots in biological functions, and make themselves felt psychologically as needs to be satisfied by actions. Insofar as the satisfaction of these urges is simply pleasurable, there is no need for repression. Moreover, some internal needs can be satisfied only by their appropriate actions, for instance, hunger and thirst can eventually be quieted only by eating and drinking. For if the denial of an urge leads to the physical dissolution of the organism, it will not avail long to repress it.

Repression), therefore, strikes only at those instinctual urges which for some reason present themselves as simultaneously painful and pleasurable, and which are in themselves susceptible to being somehow banished from consciousness without direct organic injury.

In simple outline, the genesis of repression can be described as follows.[9] Instinctual drives or urges such as sexuality and aggressiveness are represented psychologically in the images and ideas of the actions which provide their satisfaction, and are accompanied by various affects or feelings. Such drives may be called the rem:ote objects of repression, provided they are. not, as has been noted, survival urges like hunger. They

[8] Sigmund Freud, *Reprfl81Jicm, Collected PapeTB,* Vol. 4, (London, The Hogarth Press, 1956), pp. s4 :ll.

[9] This description is an oversimplification of the nature of the case, as will be evident from the later discussion, but it is, worth presenting here as an introductory sketch.

become proximate objects of repression when their overt satisfaction leads not simply to pleasure but also to a noteworthy amount of psychological pain or distress, either in fact or in anticipation. It generally happens that early in life certain kinds of behavior aimed at pleasurable satisfaction meet in fact with strong disapproval, ·condemnation and punishment. This reaction comes from the parents, as a general rule, who view the behavior in question as wrong or unacceptable or irritating. After this has happened, the reaction to the drive, when it next presents itself to consciousness for satisfaction, will be mixed. It announces itself with its natural anticipation of pleasurable accomplishment but it also brings up the foretaste of the pain or punishment which will ensue. The stronger the thrust of the drive, the more inevitable is the threat of the pain. It would be natural, then, to hold back from carrying out the proposed instinctual activity, since this lies within anyone's ordinary power. Overt behavior, or, as psychoanalysts say, access to motor activity, is controlled consciously. But the very presence itself of the urge in the mind can be unpleasant and even intolerable. Not only is it a reminder of punishment and condemnation, but it also occasions a rising mental tension, for the essential thrust of an instinct is not responsive to denials on merely rational or practical grounds. The urge presses on, and sets up a disagreeable state of strain, complicated by uncertainty-whether to act or not to act-and this persists as long as the unaccomplished drive remains in consciOusness.

It is possible for a mature man to reduce the tensions produced by drives in a variety of reasonable ways. He can postpone satisfaction to more favorable times and circumstances, or deny the satisfaction for reasons weighty enough to make the denial seem worthwhile, or find substitute satisfactions, etc. It is hardly possible for a child to handle an urge in these ways. The reaction of infancy in such situations is an involuntary repression, expelling the urge and all its involvements out of consciousness and keeping It out. Unfortunately, this infantile habit can be retained even in adult

years, with no small impairment of mental maturity, as will be discussed further below.

C. *The Aim of Repression.*

Repression aims at eliminating mental tensions and distress by eliminating the mental irritant. The mind represses the instinctual drive and its representations and concomitant affects by effacing them from consciousness, and once they have been so effaced, repression operates to keep them permanently out of consciousness. From that point on, these particular images and the drives behind them are confined to the realm of buried memories, like rubbish swept under the rug. Like the rubbish, however, the imagery and ideas connected with the drive are not really removed; they are only hidden, and still cause trouble.

Two points ought to be emphasized here about repression. First, it is not a simple act of forgetting, which can be ac:-counted for by the mere passage of time and the uninteresting character of an experience. Repression concerns not uninteresting experiences, but precisely those experiences which have been intensely exciting. Repression then is not just a slipping out of memory; it is an active and positive denial of access to recall of highly charged emotional experiences. Second, repression is effected unconsciously. People do not realize that they are repressing ideas. As Freud puts it: "It happens silently; we receive no intelligence of it, but can only infer it from subsequent events." [5]

D. *Repression Primal and Proper.*

What happens ·to the unwanted instinctual urge and the imagery in which its satisfaction is clothed and represented, and the affects it stirs up, after it has been expelled from conscious awareness and appraisal? According to sound psychoanalytic theory, the act of repression does not change the drive in any

[5] *A Case of Paranoia, Collected Papers,* Vol. 8, (New York, Basic Books Inc., 1959)' p. 458.

essential way, and, in particular, it does not rob it of its dynamic character. The drive still presses for satisfaction, but now it presses from behind the barrier raised by repression. Moreover, as long as the drive was in consciousness, the form of satisfaction it was seeking might have been modified by the attractive possibilities of various objects and activities. It was not confined to one determined gratification. But after it has been repressed, it becomes fastened so to speak to the determinate ideas and fantasies by which it was represented and with which it was repressed.

The first repression of a drive is called " primal repression." Its continued attachment to specified ideation and fantasy is called "fixation." Now, since primal repression is an event of infantile mental life, a fixation· implies a psychological attachment, all unconscious, to an infantile mode of pleasure seeking. This is one of the deleterious effects of repression. It entails a breaking off of psychological development at an infantile stage, and a fixation there of attitudes and responses which might unconsciously persist for a lifetime.

Once primal repression and fixation have occurred, the stage is set for the subsequent development of what is called " repression proper."

Repressions proper are subsequent repressive acts, similarly involuntary and unconscious, which fall on other ideas and images in consciousness, removing them from the sphere of conscious perceptibility, and this happens precisely in virtue of some connection between them and the primally repressed materials. The connection is always established from the primally repressed and fixated material.

In the unconscious sphere, the repressed images and thoughts, with the pressure of the instinctual wishes behind them, associate among themselves, coalescing and dividing in all the variety of ways by which fantasies are known to establish connections. As a consequence, the originally repressed imagery and ideation become somehow hidden, distorted, and, in a sense, disguised. Moreover, the instinctual urgings can attach themselves now to one fantasy or aspect of a fantasy, now to

another (a process called "displacement"), always with the aim of finding a representation of some form of activity which will be acceptable to conscious scrutiny as a legitimate form of gratifying the old craving. Eventually a new idea presents itself to the consciousness, an idea derived somehow by unconscious processes from primally repressed experiences, but now, in virtue of having been re-worked unconsciously, quite different in appearance from them. This idea emerges into consciousness to associate with other conscious mental contents; perhaps its evocation is actually in virtue of its associability with some current ideas or experiences. Once an association has been made between conscious representations and the repressed material, and some of the wish strivings from the unconscious have become attached to the conscious ideas, the latter are called "derivatives" of the repressed materials.[6]

Now the critical moment arrives. If the originally unacceptable striving is sufficiently disguised in its new form of representation, its execution in the disguised form may be tolerated consciously. Thus the instinctual craving which is the dynamic force at the bottom of the whole affair obtains some kind of satisfaction. But if the original instinctual urge is not sufficiently disguised, if its originally reprehensible character still shows through, the newly emerged ideas along with all the other ideas with which they have become associated will be thrust into unconsciousness *in toto.* This is repression proper. Once unconscious, the amalgam of ideas again begins the process of associative change and development/

Thus more and more thoughts and images normal to conscious mental life may become associated with repressed

• Freud spoke of an attractive force exercised by repressed materials on conscious contents, and said that unless the conscious ideas were drawn from below, they would not be repressed. Cf. *A Case uf Paranoia, Coll. Papers,* Vol. 8, p. 454. Otto Fenichel interprets this as meaning that the repressed contents of the mind, by making derivatives out of conscious contents, make them susceptible to repression. See *The Paychoanalytic Theory of the Neuros.68,* p. 149.

., Cf. Sigmund Freud, *Repr68sion, Call. Papers,* Vol. 4, p. 86. Also *A Case uf Paranoia,* Vol. 8, pp. 458-454; *Analysis Terminable and Interminable,* Vol. 5, pp. 828-829.

contents of the mind and themselves suffer repression. The varieties of complexes formed in this way in the unconscious,. and their effects on psychological health and growth are one of the major studies of psychoanalysis.

The account of repression given in the seven preceding paragraphs attempts to describe its genesis and progress only in. a general way. An adequate understanding will require an additional and more detailed examination of the elements involved.

In the first place, Freud believed that primal repression always fell on an infantile sexual experience: The only condition is that the experience be intensely distressing, or traumatic. His experience in actual psychoanalyses repeatedly brought to his attention associations of ideas leading back to and centering on some childhood sexual experience. These experiences could occur as early as the second year of life and as late as the age of eight or ten. In the beginning, he thought that the experiences were actual assaults on the child, or at least overtures, or perhaps merely witnessing or being told about sexual acts.[8] Later he came to the conclusion that spontaneous sexual feeli:pgs in the child were sufficient to account for the situations he found, as long as they had been traumatic and repressed. Primal repression of an anxiety-generating experience was the decisive factor in fixating sexual attitudes, and hence in preparing the ground for later repressions.[9] And finally it seems that the traumatic aspect of the experience which evokes repressive reactions is always an unacceptable sense , of passivity or femininity in the experience, whether the subject is a boy or a girU[0] This apparently is what is intensely distressing, and later on, when re-stimulated by new sexual experiences, the critical object of repressive anxiety.

[8] Sigmund Freud, *Further Remarks on the Defence Nooro-paychosea,Coll. Papers,* Vol. 1, pp. 158-159.

• *Idem, My Views on the part played by Sexuality in the Neuroses, CoU. Papers,* Vol. 1, p. 272.

[10] *Idem, The Origins of Psychoanalysis,* (New York, Doubleday Anchor Book, 1957), p. 207. "**It** is to be suspected that the essential repressed element is always femininity." See also footnote 289, on the same page. Cf. pp. *245,* 885. Also *Further Rrmtarks on the Defence Neuro-paychoaes,Coll. Papers,* Vol. 1, p. 162.

It is not, however, simply the magnitude of distress or painfulness in an experience which is decisive in bringing about its repression. What is necessary for repression, according to Freud, is a memory trace which, when on the verge of being reactivated by a current experience, is capable of eliciting a more powerful anxiety than did the original experience itself. The reason he argued that this peculiarity in the situation was necessary to account for repression was that painful memories are not in fact invariably forgotten. Ordinarily, people leam to tolerate them, bracing themselves mentally, as it were, in the beginning, when they are fresher, and gradually growing accustomed to their recall as their vividness diminishes with the passage of time and the habit of self control. Why then are some memories repressed? Freud argued that if a recurring memory brings with it a fresh excitement, so that it is like a new occurrence of the original experience, its vividness does not fade and cannot be controlled. And this he argued further is uniquely the case with sexual memories. The reason for this is the variety of bodily changes which occur at the time of puberty and make a person not only physically more sensitive and excitable sexually, but also more easily aroused psychologically. Therefore, although the force of a repressed sexual memory from infancy might be diminished by the passage of time and the habit of control, it would also be powerfully reinforced and enlivened by the more highly developed sexual susceptibilities of adolescence. The re-awakening, then, of a memory trace from infancy would have the effect of releasing fresh emotional excitement, and if this excitement is associated with old anxieties, a fresh sense of distress. Hence repression must take place.[11] Thus a sexual experience after puberty, even

[11] In his own account of repression, Otto Fenichel (op. *cit.*, pp. 149-150) does not mention this physiological factor as crucial in accounting for repressions. He emphasizes rather the role of education. " Perhaps the fact that sexual impulses very often are repressed, whereas aggressive impluses are more often the subject of other defense mechanisms, is due to the circumstance that education frequently handles the subject of sex by simply not mentioning it, whereas the existence of aggressiveness is acknowledged but is designated as bad. The more consistently

in thought or fantasy' alone, might re-awaken the memory of the infantile trauma, and in virtue of this connection, suffer repressiOn.

Actually the memory of the infantile experience does not become conscious. It only comes close enough to consciousness to give a forewarning of what is on the way, or, as Freud says, to liberate the affect of anxiety, and then the current experience which is evoking it is silently banished from consciousness.12

E. *The Consequences of Repression.*

From what has been said above, it is already evident that repression will have a profound influence on all aspects of psychological activity both conscious and unconscious. Perhaps its most characteristic effect is the production of gaps in conscious mental life. Memories of events which by all other reckoning ought to be revocable are in fact apparently completely obliterated. Striking examples of these are the amnesias that follow violent accidents and shocks, such as battle amnesia. Other data on repression come to light when some acquaintance can supply the details of an experience which the subject of the repression can in no way recall. Most examples, of course, emerge in psychoanalysis, when the repressed memory is released by overcoming the mental resistances which had hitherto

educators apply prohibitions by acting as if the objectionable things did not exist, the more repression proper is encouraged in children."

If indeed the cha.nges which occur at the time of puberty are important in accounting for the occurrence of repressions proper, perhaps changes other than sexual would be of interest in psychoanalysis. For instance, there is the spirit of independence and rebellion which fir-st showed itself when the child was three or four, and after subsiding for a number of years, reasserts itself during adolescence. Similarly, the demand for responsibility which is first imposed .on a child at the ages of four to six, comes again to the fore during adolescence. If these attitudes were handled harshly the first time they made their appearances, they could be the cause, it would seem, of repressions when adolescence has reinforced an individual's sensitivity to them.

12 Cf. S. Freud, *Further Remarks on the Defence Neuro-psychoses, CoU. Papers,* Vol. I, pp. 160-168. Also *The Interpretation of Dreams,* (New York; Random House, 1988), p. 587; *The Origins of Psychoanalysis,* p. 149, pp. 178-180.

blocked it. These resistances themselves are prime examples of repressions; according to psychoanalytic theory, the force of resistence is the same force which originally repressed the unwanted experience. Resistances take many forms. Sometimes in the course of free association, the subject simply goes blank, reporting that nothing at all came to his mind at a given point in the flow of thoughts. At other times, resistance shows itself 'as hostility towards the analyst and a strong disinclination to continue treatment. In still other cases, resistance shows up as a strongly felt objection to an elucidation the analyst is giving concerning some phase of the subject's early psychological development.

This last mentioned effect exemplifies a consequence of repression which is almost the opposite of the memory blanks. This is obsessional thinking, or, as Freud termed it early in his career, supervalent thinking.[13] When thoughts are excessively persistent or repeated, so that no amount of conscious or voluntary effort can change or dissipate them, the roots of the thought can generally be sought with profit in some unconscious and ·repressed materials. The exaggerated thoughts usually turn out to be the opposites of the repressed thoughts, deriving their abnormal reinforcement from the unconscious material, and perhaps in some way assisting the act of repression by their excessive and contrary character. But they can also be directly representative of the unconscious contents of the mind, drawing their force directly from them.

Although repression as we have been describing it above is a powerful agent for expelling memories of various experiences from the possibility of voluntary recall, and for keeping them unconscious, it would be wrong to give the impression that repression always affects an experience in its totality. Actually repression can affect only parts of various experiences, it can affect an experience for part of the time. This latter case is exemplified in instances in which a repressed content of the

[18] *Idem, Fragment of an Analysis of a Oase of Hysteria, Ooll. Papers,* Vol. 8, Pll· 66-67.

mind is allowed at times to emerge in fantasy, as daydream.;, from which some sort of gratification is possible, and then obliterated when the daydreams approach a dangerous point.u The former cases are evidenced in instances in which memories are retained, or ideas are consciously recognized, but their connections, or their significance or emotion& value is altogether lacking. Often it is the affective part of an experience which is repressed, if the affects generated are the intolerable aspects, while the representational aspect of the event is allowed to remain revocable. ·This is shown from the fact that some subjects in analysis, eventually briD.g up memories of events they say they had long forgotten, while in other cases, the crucial incident in a psychological difficulty had not been forgotten, ·but it had been completely divested of meaning and emotion until the analysis was effected.

Repression, whether of the whole or of a part of a mental event, is an energy consuming process. If, therefore, repression has become at all extensive in a subject's mental life, a further consequence of it will be a continual mental strain and fatigue. The general improverishment of mental energy which characterizes many neuroses, and the typical reports of nervous fatigue are well known. Some of the characteristic habitual reactions in neuroses also give signs of this metal debilitation-fears of new situation which might demand expenditure of energy or which might entail more strain on a psychic equilibrium already taxed.

These consequences, described in the four preceding paragraphs, are manifested in conscious evidences. Another consequence, which has been mentioned briefly above, is effected in the unconscious sphere. This is the proliferation of unconscious thought and fantasy so extreme and so bizarre that its reality is hard to appreciate. Actually, of course, as long as it is unconscious, it cannot be appreciated. But when it does become conscious, when repressed contents break out of the restraining bonds, either in dreams or in parapraxes, or in

"Cf. Otto Fenichel, *up. cit.*, p. 149.

neurotic symptoms of various kinds, or in psychoanalysis, the ramifications and grotesque quality of unconscious thinking processes become apparent, and are somewhat startling to the unsuspecting.

A description of all of the unconscious mental processes operating to form the bizarre end-products which eventually emerge would take this brief account of repression far afield. Two of the processes, however, are worth singling out for special mention. The first is condensation, a process by which many different aspects of many experiences and objects of experience are coalesced into one figure or image. The features of different persons, the forms and attitudes of animals, various kinds of analagous actions and attitudes, for example, can be merged into one new whole mental event, which can thereafter appear in dreams or psychoanalytic reports as such, and seem quite far· removed from any actual event in the subject's personal history, and equally removed from the possibility of reasonable interpretation. The second process worth mentioning is displacement. By displacement the instinctual drive or emotional values originally attaching to one object become transferred to similar or analagous objects. Condensation and displacement operating together produce the world of psychological symbolism, in which objects and activities far removed from the primary objects and aims of instinctual drives take on a substitutive character and role, and, in fact, function in the mind as the original objects and aims functioned. Once the fundamental psychology of these processes is elucidated, much of the peculiarity of concrete cases of symbolism becomes intelligible and even inevitable. Basically, symbol production is a psychological process which is inescapable, given the fact of repression and the unconscious working of the mind.

F. *The Value of Repression.*

All that has been said so far about repression and its consequences has perhaps unavoidably prompted the conclusion, at least implicitly, that repression is a *per se* psychological hazard.

It might seem to follow that avoiding repression ought to be the prime aim of good education of the young, and undoing whatever repressions have .been unwittingly established the major purpose of psychological therapy. In fact, many have caricaturized Freudian psychoanalysis in very much these terms. The truth, however, is quite different. Perhaps it was inevitable that Freudian ·psychoanalysis, born as a mode of mental and nervous therapy, and always geared consciously to the therapeutic situation, should have emphasized in its literature the injurious aspects of repression. It was the injurious repressions that absorbed so much of psychoanalysis' effort and ingenuity. However, even early in his career Freud noted the valuable role repressions play in normal psychological development, and, currently, when psychoanalysis is extending its concepts to embrace explanations of the whole man, the normal functioning of repression is being given more and more attention.

As early as 1905, Freud theorized that repression was necessary for normal sexual development. If the child starts out with instinctual urges ill-defined and chaotic, their channeling eventually into the forms and patterns consonant with their purposes in maturity will require the suppression of the many vagaries, and this Freud held to be one of the roles of repression. Normal sexual functioning develops, he wrote, through the repression of some of the components of the variegated constitutional disposition of the child.[15] If, for instance, a child is completely self-centered in his emotional life,
demanding, wholly dependent, impatient of any delays in satisfying his wants, fiercely jealous, and if all his emotions are settled principally on his mother, his affections will have to undergo considerable pruning and re-aligning before they will suit a mature affective life.

So Freud considered repression a normal part of psychological growth and maturation. He did not doubt at all, however, that it was something considerably less than the ideal instru-

[10] S. Freud, *Sexuality in the Neuroses, CoU. Papers*, Vol. 1, p. 280.

ment for self-control. Mature people, for instance, learn to delay the satisfaction of instinctual demands, or to re-form the undesirable aspects of their cravings in a different way. They recognize the facts of a given situation, appraise them realistically, try to make a sound judgment about the alternative modes of satisfaction open to them, and then take appropriate action. Freud calls this process 'condemnation.' But for children these steps are rather obviously out of the question. They do not have the capacities requisite to a process of condemnation. They do, however, experience and feel an insistent need for some device to control their feelings. When their emotional demands are vehement, and when these demands set up strong internal stresses, some device must be employed to achieve internal peace and security. In children, the device is often repression.

Repression generally succeeds in establishing an ample measure of internal peace, but sometimes the price paid for it is too high. If repression has been deep and extensive, and if the process of repression has become more or less habitual, development to a mature psychic state will almost inevitably be crippled. Somewhere along the line the unfolding of instinctual drives and emotional attitudes will be blocked. Often enough the blocked drives will assert themselves in the disturbing symptoms which mark mental pathology; at the very least, the personality will be burdened and constrained with infantile defensive reactions, over which it has no control and for which it no longer, when maturity is reached, has any real need.

In severe cases, when repression dominates the psychic picture of a patient's mentality, it is the task of psychoanalysis to undo the repressions as far as this is possible. The purpose is not merely to release the impounded instinctual demands for the sake of release itself. The ultimate purpose is to release the demands into consciousness, so that they can there be re-assessed, and subjected to the devices of reasonable control, for the sake of reconstructing a more normal personality, and at the same time, a stronger personality, more capable of self-

control to the degree that it is more capable of reasonable control. Ideally, a patient who has undergone therapy will be able to exercise normal and healthy instinctual demands, control reasonably those which are unacceptable, and allow the old pathological distortions to dissipate.[16] "Analysis replaces the process of repression, which is automatic and excessive, by a temperate and purposeful control on the part of the highest mental faculties. In a word, analysis replaces repression by condemnation."[17]

G. *The Failure of Repression.*

If repression is 'successful,' the drives it impedes are somehow barred from unacceptable modes of discharge, and diverted perhaps in some part to more acceptable modes of action, without any serious psychological maladjustments. But repres:-sion is not always successful. Sometimes, as has been indicated, it effects its purpose only at an exorbitant price. At other times, it precisely fails to effect its purpose. This failure is marked by the irruption or impingement of the repressed materials directly or indirectly into the conscious life of the mind. Hallucinations, delusions, obsessions, phobias, hysterical outbursts, psychasthenias and nervous weaknesses, hypochondrias, perversions, psychosomatic sicknesses, are all witnesses of some failure of the repressive process.

The reasons why a repression should give way are many. It could be due to an absolute increase in the intensity of the drives which have been repressed, as happens at the .time of puberty or the climacteric, or to some kind of change in the balance .of mental operations, as in temptations, disappointments and frustrations. Repressions could also fail if the repressing agents are weakened, as by fatigue or sickness, or if they have become temporarily relaxed, as by elation or intoxication.

When repression fails to repress, the mind often has recourse to other mechanisms of defence, to exaggerated rationalizations

[16] *ldtmt, Analysis Terminable and Interminable, CoU. Papers,* Vol. 5, pp.
[17] *Idem, Analysis of a Phobia in a Five-year-old Boy, CoU. Papers,* Vol. 8, p.

and soul-searchings, to obsessive speculations and rituals, to elaborate precautionary measures, to dreads of self-betrayal, to regressions to infantile ways of acting, to projections, self-condemnations, innervations, etc. These in tum can lead to and harden into abnormalities such as phobias, superstitious obsessions, delusions and the like, as distressing and debilitating as repression itself.

The real solution of psychological disorders which have their origin in repression is the undoing of the repression and the mastery of the released drives by reasonable methods of self-control. Until this is done, the root of the trouble remains untouched and still pathogenic. The re-mastery of the drive, however, presupposes its re-admittance into consciousness for a new evaluation, and acceptance on new terms into the integral personality structure. That re-admittance is the work of psychoanalysis.

II. ST. THOMAS ON PSYCHOLOGICAL MALFUNCTION.

A. *Introduction.*

Our purpose in the next few pages is to gather together and organize some of the widely scattered remarks in the writings of St. Thomas which have bearing on the question of psychological abnormality. More precisely, we are looking for points in his psychological doctrine at which a concept of repression can be interwoven without doing violence either to the concept or to the main fabric of Thomistic principles and conclusions. At best, we can hope to find something comparable to repression itself in these remarks; at least, we can hope to find something paralleling a description of the causes, and of the elements of process, and of the effects, of repressive mental action, into which the concept of repression itself might fit as a neat completion.

It would be unrealistic to expect to find the concept of repression in St. Thomas' writings as it is described currently in psychoanalytic literature. Since St. Thomas worked out his psychology seven hundred years ago, there have been vast

movements forward in many different facets of the science. On the point of repression itself, it could hardly be expected that any clear concept could have been formulated prior to the beginning of this century, when Freud worked out the methods of psychoanalytic investigation. Repression could, however, have been appreciated to some extent prior to Freud, and, in fact, he himself credits both Nietzsche and Schopenhauer with intuitive and philosophical insight into its nature.[18] Our present question is, how close did St. Thomas come to such an insight?

At the very least, we can determine how open St. Thomas' psychology is to this new development. In the histories of psychologies, we find some are open to enlargement, while others exclude further developments *a priori* in virtue of some specific affirmation or negation central to the whole system. In effect, some have been realistic enough to leave unfinished the areas in which contemporaneous research and speculation could not yet supply the final answers; others have misunderstood these points of incompletion and prematurely closed off the subject to further growth. The question then is twofold: how closely did St. Thomas approach to a concept of repression, and how is his psychology to further development on the basis of current psychoanalytic descriptions of this phenomenon.

The profit to be expected from such an investigation accrues from the doctrine of St. Thomas itself. It is not only that his formulations in psychology in general show great depth of insight into human nature, along with great balance and subtlety. It is of equal importance that they also integrate with a broader natural philosophy, metaphysics and· ethics, making one total philosophical system of singular breadth and. profundity. But even the best of philosophies cannot survive as an influential current of thought unless it is kept alive, continually proving its value by continually assimilating and

[18] S. Freud, *On the History of the Psycho-aruilytic Movement, CoU. Papers,* Vol. 1, p. 297.

illuminating new materials and solving newly perceived problems. Unless an old philosophy has something specific ;,md to offer in resolving contemporary questions, it cannot hope to be more than an honorable relic. My position is that St. Thomas' philosophy can vindicate more than this for itself; hence the question of a Thomistic approach to the concept of repression.

B. *A Psychology of Repression According to St. Thomas.*

We will proceed by offering a series of propositions based on St. Thomas' writings, which indicate his thought on mental abnormalities, and reflect something of his insight into the causes and effects of repressive mental activities. Some of the points will be familiar, some perhaps less familiar, all however are consistent with each other and with the total corpus of his psychological teachings.

1. *Violent psychological and physical experiences can disrupt mental balance, i. e., the normal functioning of reason, free will, imagination, memory, emotions and sensation.*

In describing various effects of the passions in *De Veritate,* St. Thomas summarizes many of the features of his doctrine of psychosomatic unity. He notes how intense emotional reactions can make the body feel hot or cold, and induce sickness, and sometimes even death, " for it can happen that someone should die from joy or sorrow or love." Consequently, of course, physical diseases arid injuries can lead to mental and emotional disturbances, and even to insanity. Somewhat less extreme within the appetitive order itself are the interactions of will and passion. Normally the sense appetites should respond to the governance of *deliberately* willed acts. But a vehement reaction in the will to some intellectually perceived object also redounds *indeliberately* into the passions, producing a parallel reaction at the sensual level. A good example of this is stage fright. Another example frequently described in current literature is existential anxiety.

Working in the other direction, a strong animal passion can overcome and coerce the act of the will. An intense desire, for instance, or anger, can overwhelm the balanced judgment of reason and to a greater or lesser degree cancel out the free exercise of the will. In some cases this can lead to a state of insanity.

Neither the redounding effect of the will nor the coercion of the will by passion are freely elected events. They are both natural and inevitable consequences of intense psychological reactions. [19]

Similarly, the several levels of cognitive operations which normally intermesh smoothly and conjointly can be disassociated by physical and psychological violence. Normally a man exercises a scope of knowledges which develop simultaneously in three spheres. He is conscious, at the surface, of external sensations, and these are continually informed with perceptions drawn from imagination and memory, 'while in the innermost sphere, his mind is interpreting the meanings of his experiences. Normally too there is a shifting of emphasis from one sphere to another, as an absorbing event in the environment draws attention away from internal awareness of judgments and perceptions, or concentration on a purely mental problem effects some withdrawal of attention from external events. Physical injury or disease affecting the organs at any level of these operations can disrupt the normal interplay, hut a purely cognitive act, if it is intense enough at any one level, can also impede operations at other levels even if a physical injury is not sustained. In extreme cases, when the mind or the imagination or memory is intensely moved by some perception; a complete alienation from the senses can occur.[20] For St. Thomas, this alienation from the sense is not only a distortion of external perceptions, but also a disruption of the normal exercise of reason and imagination. He exemplifies the experience with madness and insanity. This

[19] Cf. *De Vm-itate*, q. 26, a. 10; *Summa Theol.*, I-II, q. 28, a. 5; q. 77, aa. 1, 2 & 7.

[20] Cf. *Summa Theol.*, II-II, q. 173, a. 3, ad 2; *De Vmt.*, q. 12, a:'9; q. 13, a. 3, ad 5 & ad 10.

is also not a freely willed experience. In his own terminology, it is being ' rapt out of oneself,' a kind of mental violence.[21]

Such violent mental experiences are usually the effect of the arousal of an intense passion. The passion aroused operates sometimes to fix the mind directly on the mental event itself, constraining it from considering anything else. This forces the mind to accede to the impulse of the passion, and sometimes disables the body's vital functions. At other times such a passion operates in a contrary way, preventing the mind from focusing on the experience, especially if it has an anguishing quality. In either state, a man can say or do things over which he has no control and of which he is not conscious. If such a state persists, it is insanity. [22]

The reasons St. Thomas alleges for the mutual interdependence of various faculties or levels of psychological operations, and hence for the possibility of one impeding the operations of another, are usually twofold. On the one hand, he held that man had only a limited capacity of attention, on the other, a limited supply of mental energy. Normally, the fields of cognitive activity open to inspection are broader than his capacity for simultaneous attention; if he concentrates at one level, his attention necessarily goes out of focus at another. If he becomes totally immersed or overwhelmed at one point, he becomes totally abstracted from the others, leaving them a blank as far as awareness goes. Similarly, his energies are normally distributed through the different levels of psychological operation, but if at one level the intensity of reaction rises to an excessive degree, the energies available for the other levels seem to be necessarily absorbed. [23] Fundamentally it is all a matter of psychosomatic unity. [24]

2. *Fear, despair and sorrmv are the most injurious passions.* Any passion carried to excess can disrupt the smooth coordi-

[21] *Summui Tkeol.,* I-II, q. 28, a. 8; *De Verit.,* q. 12, a. 4.
[22] *SWT111TTta Tkeol.,* I-II, q. 77, a. 2 & ad *5;* aa. 6, 7 & 8.
[23] *Ibid.,* II-II, 178, a. 8, ad 2; Suppl., q. 82, a. 8, ad 4; *I Cont. Gent.,* c. *55.*
[24] Cf. *De Verit.,* q. 12, a. 9; q. 26, a. 10; Q. D. *de Anima,* a. 4, ad 1.

nation of mind and body, producing psychic disturbances and physical sickness. Even the passions like love, joy and desire, which naturally stimulate the body's vitality and animate the mind and imagination, can eventuate in the last resort in mental and physical injury if they become too intense. But the passions whose direct effect is to depress the vitality of mind and body are even more harmful, and among these St. Thomas lists fear, despair and especially sorrow. These passions operate with a cumulative effect, so that fear, in the first instance, produces a certain depression and disturbance of mind and body, but not a complete one, as long as some hope still stirs. But if the threat which is inducing the fear becomes stronger or more imminent or more persistent, so that the hope of evading it is eliminated, both mind and body suffer a deeper depression, becoming, as it were, stifled under the influence of fear and despair. If this proceeds far enough, even the interest and energy for every day activities-eating, speaking, daily work, etc.-are suppressed and a man becomes "as if stupefied within himself."

The cumulative effect of ali the passions, besides their de-energizing aspect, is to make the sufferer recoil from whatever is inspiring them; by fear he :first withdraws from the threatening evil, by despair he relinquishes other hopes and desires whose pursuit exposes him to the danger feared, and by sorrow, when hope has been removed, he subsides into an anguished state approaching torpor, becoming more or less indifferent to any stimulation. [25]

3. *Fear and sorrow inhibit and suppress the imagination, mind and appetitive movements like love and hope.*

The faculties of memory, imagination and cogitation, and therefore also the intellect which depends on them, are the ones most powerfully affected by the movements of passion and will. There is a natural, functional interdependence among these faculties which makes any one of them immediately

•• *Sumtma Theol.,* I-ll, q. 87, aa. fl & 4; q. 68, a. 7, ad 1; q. 69, a. 8, ad 8.

responsive to a reaction of another. Under a mild movement of fear or sorrow, attention is drawn to and fixed on the objects arousing the passion, but if the movement becomes vehement, the cognitive operations become shaken and disturbed, and then disordered, while the vitality of all the cognitive powers is lowered and even completely inhibited. The sum effect of strong passions of fear and sorrow is to block off attention from the objects arousing them.[26]

4. *Fear is inspired not only by external dangers but also by internal or p81Jchological threats, in partioular, by the passions of fear itself, of sorrow and of concupiscence.*

Fear is the passion responding to a threatening evil which for some reason shows itself as difficult to overcome, either because the force of the evil threatened is really great or because the resources which can be mustered against it seem inadequate. Under this broad definition, St. Thomas subsumes both external dangers and internal difficulties, especially the threat to mental peace and balance posed by a strong passion. Fear itself can be feared, as well as sorrow and concupiscence. The specific fear aroused by the passion of concupiscence he calls shame.[27]

5. *The sudden, the uncontrollable, and that which will overcome reason are particular objects of fear, and these qualities all belong in a special way to sexual concupiscence or libido.*

For St. Thomas, concupiscence is a general term for sensual desires; sometimes he uses it also to signify the principal or strongest sensual desire, namely, the sexual, to which he sometimes also refers as libido. In its roots, all concupiscence is unruly, chaotic, resistant to the governance of reason and uncontrollable by the will or the impress of virtue. While the sense appetites in tlieir full expression are subject to the will's dominion and the formation of virtuous habits, in their deepest parts they never become completely susceptible to control by

•• *De Malo,* q. 16, a. 11, ad 4; *Summa Tkeol.,* 1-11, q. 45; q. 77, aa. 1 & 8; q. 80, a. 2; *De Verit.,* q. 12, a. 4, ad 8.

""*Summa Tkeol.,* 1-11, q. 41, a. 8; q. 42, a. 4; 11-11, q. 141, a. 1, ad 8.

higher faculties. This is especially trlie of the sexual element or libido, which is so independent that St. Thomas speaks of the generative organs as similar to separate animals in man. Libido is also the mainspring of the *fomes peccati*, and the most frequently experienced of the *actus primo primi* of the moral theologians. Because the libido is aroused· suddenly, and because there is always an element of the uncontrollable, and because it threatens man's highest perfection, namely, his free and rational mastery of himself, concupiscence can be a special object of fear.[28]

6. *Since the passions can become habitual, the repressive fear of libido can become a permanent disposition of the mind and feelings.*

Because libido has a special sense of shame attached to it, and because it can threaten man's most characteristic excellence, his free and rational self-mastery, libido can evoke a profound fear.[29] Since the libido's power is internal and to that degree inescapable, and to a degree continuous, the fear of it can easily become habitual. Once the fear is established as an habitual disposition, its repressive and inhibitory influence imposes a more or less permanent distortion on mental activity. **If** despair and sorrow add their influences, serious dislocations of normal balance are almost inevitable.[80]

7. *The effects of fear, sorrow and despair can be exercised automatically and indeliberately throughout the various levels of thought, fantasy and appetite.*

This is, of course, a critical consideration in any discussion of repression. The deliberate and freely elected suppression of

•• *Ibid.*, I-ll. q. 4!!, aa. !!, 4 & 6; *II Sent.*, d. M, q. !!, a. I, ad 8; I-11, q. 17, a. 9, ad 8.

•• Anna Freud, in " The Ego and the Mechanisms of Defense," p. 68, quotes from her father's "The Ego and the Id ": "What it is that the ego fears either from an external or from a libidinal danger cannot be specified; we know that it is in the nature of an overthrow or of extinction, but it is not determined by analysis." Then she adds the opinion that this danger is the destruction or submersion of the ego's whole organization, i.e., in St. Thomas' terms, man's rationality.

[80] *Summa Tkeol.*, I-ll, q. 85, a. 8.

thoughts, feelings and urges (which Freud called condemnation) is a common psychological phenomenon, and one which does not lead to the psychic disturbances characteristic of repression. It is only when the of mental contents is indeliberate and irreversible, rendering them unavailable for reasonable assimilation into a total personality structure, that rejection can have deleterious effects. The quality of the repressive act is one of its key properties. St. Thomas' psychology allows for this automatic quality from several sources. First of all, and perhaps most important, is the redounding of strong acts of the will into the sense appetites. An intense intellectual love engenders all the sensual and bodily reactions of love at the sense level; a violent intellectual fear overflows into the sense order to produce the characteristic effects of physical fear. The force with which these sensual effects are felt and the repercussions they have on the body are not necessarily of reasonable proportions since they are not the *per se* objects of reasoned judgments. They are unwilled repercussions whose intensity is determined more by the natural force of the voluntary act and the receptivity or responsiveness of the sense powers than by the fact that the voluntary act may be in the beginning free and deliberate. Even a freely elected action can have natural and indeliberate side effects.[81]

From the other side of the spirit-animal tension, conflict can also arise, for example,.from the thrust of strong passions which

[81] In her discussion of the origin of neuroses, Dr. A. A. A. Terruwe allows for psychological repressions which originate within the order of the sense appetites, i. e., between the concupiscible and irascible appetites, but holds that no such conflict can arise between the sense appetites and the will. (See: " *The Neuroais in. the Light of Rational Psychology,* (New York, P. J. Kennedy & Sons, 1960) pp. S5 & 87.) This, I believe, overlooks the phenomenon of the natural redounding of the will, which was an explicit part of St. Thomas' psychology. According to Dr. Terruwe, repression can only occur when the concupiscible and irascible appetites come into conflict. This opinion seems to miss what the scholastics thought of as the essence of insanity, i.e., the conflict between the rational and sensual spheres. In actual application of her thesis, Dr. Terruwe remarks instances of repression and neurosis which are in fact caused by exaggerated acts of intellect and will. (pp. 88, 106) These instances seem to be more in accord with effects of redounding of the will, which have been described above.

can cloud and hinder the power of reason and coerce the action of the will, even to the point, as St. Thomas says several times, of causing insanity. The more closely these appetites are related to the fundamental natural needs, such as self-preservation and procreation, the stronger they are. The more they are repressed by fear or sorrow, if they should be repressed, the more fundamental the conflict which ensues and the more serious the psychological repercussions.

The passions, moreover, work on each other within their own level. The repressive appetites like fear and sorrow can interfere with the workings of desire and the attainment of satisfactions, as is evident from everyday experience. In more extreme cases, the repressive appetites can operate to eliminate the natural and spontaneous movements of the more vital appetites almost completely, suppressing at the same time the thoughts and imagery they normally evoke. These repressive effects can become habitual through repetition, so that loves and desires end up by being completely or almost completely suppressed or distorted. If this suppression itself becomes unconscious through habituation, many natural and normal psychological developments are also impeded, and the structure of personality becomes unconsciously warped.[32]

8. *Mental activity-thought, fantasy, appetite-can be carried on unconsciously.*

This is, of course, another crucial point in the psychology of repression. If repressed mental contents are rendered inactive by being eliminated from consciousness, they would not produce psychic disturbances. If mental life is equated with conscious mental life, repressed contents wo.uld necessarily be inactive; they would have a status like that of ordinary habits which are not effective until they are brought into active use more or less deliberately. This point was one of the major bones of contention between psychoanalysis and modern psychology in the early years of the movement. The question before us

•• *Summa Theol.,* I-ll, q. 77, aa. 1, *ft,* 8 & 6; *De Verit.,* q. *ft6,* aa. 6 & 10.

now is: did St. Thomas so construct 'his psychology that he would have to insist on a state of consciousness as a condition for imagining, desiring, willing etc.

St. Thomas did not know any more than the rest of his contemporaries about the luxuriant growth of repressed mental contents. He did, however, remark that the mad and the insane say and do things of which they are not conscious, and he also remarked that men unconsciously perform many gestures in everyday life of which they are not conscious. These latter, the acts ' of man ' as opposed to human acts, he attributed to an imaginatively represented end of which the man is not conscious at the time. He also saw that men can become habituated to highly complex.activities in a way that enables them to be performed unconsciously, i. e. without conscious awareness of the complex pattern of imagery, thought and will that they necessarily presuppose.

More pertinent perhaps are his remarks on dream activity. He defined dreams as mental activities taking place when consciousness of external reality is suspended in whole or in part. He did not think of dreams, however, as entirely meaningless meanderings of the imagination. He noted that they often express symbolically the physical conditions of the body because we can sometimes perceive these conditions interiorly more acutely when we are asleep than when we are awake, and imaginatively represent them to ourselves, and " that is why doctors are interested in them/' Again, dreams might represent psychological tendencies and dispositions of the dreamer even in regard to matters of which he is not conscious when awake. Moreover, in the dreams we dream, the intellect might begin to work, judging and syllogizing, and sometimes better than in our waking hours! Dreams are not only aroused by the appetites, but in tum will stir them up. The will itself responds with a natural response to the objects in the dream world, although, of course, its freedom is not exercised in <keams.

All this dream activity is likened, finally, to the mental activity of the insane.

All this adds up to fairly vigorous mental activity in all spheres during the time when, or in the areas in which, conscious awareness is suspended. The discoveries of psychoanalysis concerning the mental developments of repressed contents are not so much a completely new departure in psychology as a further insight into the extent of these particular phenomena.[88]

9. *Insanity is the disruption of the normal balance of psychological operations, especiaUy of the sense-reason balance.*

The opinion is still occasionally expressed that even learned men in the middle ages attributed insanity entirely to diabolical or other preternatural causes. It might therefore be worthwhile as a corrective to indicate some of the ideas St. Thomas expressed on this point, for, although he wrote no *professo* tract on mental and emotional illness, he on many occasions expressed opinions which suggest a somewhat more realistic understanding of the psychology of insanity.

In general, he believed that insanity was a form of conflict between the fantasy and sense appetites on the one hand, and the reasoned and deliberate judgments of the mind on the other. The conflict could arise from several sources, and take various forms. There could be a violent surging of imaginative activity which impedes rational thought simply by its chaotic movement, or which prevents the mind from validating its judgments by reference to factual data. The normal method for verifying a judgment is to compare it with the data of sense experience. Since a chaotic imagination produces a confusion of fantasy and reality, it cuts the mind off from its bases in fact.

The imagination suffers this violence under the impetus of strong passions. These passions could be impulsive ones, like rage and desire, and then the result is madness or 'fury.' Or they could be depressive ones, like sadness and fear, and then the result is mania or melancholy. Sometimes congenital physi-

[88] *Su/11111UJ Tkeol.,* I, q. 84, a. 8, ad!; I-ll, q. 17, a. 9, adS; q. 80, a. !!; ll-ll, q. 95, a 6; q. 178, aa.!! & 8; *I Cont. Gent.,* c. U; *Ill Cont. Gent.,* c. 99; De *Verit.,* q. 1!!, a. 8, ad 1 & ad !!; q. !!8, a. 8, ad 6 & ad 7.

cal defects make men prone to mental instability, and sometimes mental instability comes from a physical injury accidentally sustained. Some mental ills are of purely psychological origin.

There is no reason to think that St. Thomas saw a connection between the repression of appetites and their subsequent virulence. He did note that the diseases characterized by depressive states, such as mania and melancholy, were also marked by a certain violence in the pleasure-seeking appetites, but this he attributed to the intense need for relief felt by this type of sufferer.

Among the other effects of mental disorder, besides the loss of reasoning power and freedom of will, he noted anesthetic conditions, loss and confusion of memory, hallucinations and delusions, loss of control of behavior and speech, loss of motor capacity, total loss of all capacities, etc. He attributed impotence and frigidity, as well as vehement incontinence, to psychological causes, but he thought that impotence in regard to a particular individual would have a preternatural cause. He distinguished epilepsy from other kinds of mental disorders, and attributed it to a physical defect.

The terminology in his time was apparently loose, although some distinctions emerge. To be mindless, alienated in mind, alienated from the senses, mentally seized and mentally carried away seem to be general terms for insanity.[84] To be phrenetic or furious is to be carried away by the violence of fantasy, to say and do 'things wildly and without balance.[85] To be melancholy or manic, or to be stupefied, is to be depressed by fear or sorrow, with cumulative deprivation of senae and motility.[86] To be lethargic is to suffer loss or confusion of memory.[37] So much can be gleaned from many sources, all of them in the form of *obiter dicta.* If it is true that by the

•• Amens, alienatus a mente, alienatus a sensibus, captus mentis, abreptitus, insania.

[86] Phreneticus, furiosus.

[80] Melancholia, mania.

•• Lethargicus. ·

fifteenth century insanity had come to be generally regarded as a preternatural phenomenon, it can only be the more regretted that St. Thomas or some. one of his contemporaries had not left an *ez professo* tract on mental disorders.[88]

m. CoNCLUSION.

The conclusions which may be drawn from the preceding paragraphs should not be overly ambitious. We would not be justified, for instance, in saying that St. Thomas had clear and accurate ideas on the psychology of mental disorders. Too many crucial factors were unknown to him, and were not to become known for another six centuries. Many indeed are not yet clearly understood. But what does emerge, I hope, from this survey of his psychological appraisals is an appreciation of what he was aware of, and of the degree to which his psychology is amenable to enlargement in the light of modern research without changing its basic character. He did appreciate profoundly the nature of ' id ' impulses, the operation of indeliberately repressive elements in the psychism, the possibility of unconscious mental activity and motivation, the varieties of conflicts arising between the rational and sensitive levels, and within the sensitive level, and the varieties of forms which mental disorders can assume, and the fact that different natural causes lie behind these different effects. He did not draw these elements together into a definite and clearly defined thesis, nor are they susceptible to such definition without the addition of more data more precisely analysed. But, given this additional data, they respond to it, and perhaps add to it the illumination which a comprehensive and profoundly realized philosophy is capable of confemng. This, at least, is one of the reasons such a confrontation of ideas seems valuable.

From another point of view, the study of psychoanalytic

[88] *S'l.lllnma Tkeol.,* I, q. 54, a.. 5, in contr.; q. 84, a.. 7; q. Ill, a.. S; 1-11, q. 10, a. S, a.d 2; q. 28, a.. S; q. 82, a.. 7, a.d 2; q. 87, a.. 2 & 4, a.d 8; q. 77, a. I; 11-ll, q. 46, a. I, a.d 4, & a.. 2; q. I54o, a.. 5; q. I56, a. I, a.d 2; q. I7S, aa. 2 & 8; ill, q. 68, a.l2, & a.d 2; Suppl., q. 58, a. I; *II Ccmt. Gent.,* c. 78; *De Vent.,* q. I8, a.. 8; *Q. D. de An.,* q. 19, a.. 8; *CO'm;m. de An.,* ## 669-670; *Comm. De Mem.,* ## 847, 401.

concepts seems to offer something of value to the perennially developing stream of Catholic doctrine. This broad and deep current has traditionally been open to enlargement from every conceivable source; even: from sources which at first sight seemed wholly incompatible and hostile. But the merging of streams of thought entails the delicate business of translating the concepts and conclusions of one into the categories of the other. Some say that this is an impossible undertaking. The premiss underlying this paper is that it is not only possible hut eminently worthwhile, that the categories of Thomistic thought are quite capable of the challenge of interpreting, organizing and assimilating the contributions of psychoanalysis. If something of the challenge of this possibility has been conveyed, the paper has achieved its purpose.

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BEHAVIORAL SEMIOTIC: A CRITIQUE

PORPHYRIDS has said that" the knower of many things, the true philosopher, is an observer of signs." [1] We know that from the time· of the Greek philosophers to that of the " hidden persuaders " of modern advertising, the sign has been the subject of detailed and painstaking investigation. The universal character of the sign requires this. Our personal experience is adequate testimony that our life is dependent on signs, and that any existence devoid of signs would indeed be a shallow one. The *quinque viae* rest on the theory of signs. The sacraments as *signa rerum sac.rarum* cannot be fully appreciated without a grasp of the nature of signs. Religiously, intellectually, socially and artistically, man is linked to signs; the range of his knowledge corresponds to the extension of signs. It was with all this in mind that Jacques Maritain wrote:

> There are no more complex problems, no problems of wider bearing on psychology and on culture than those pertaining to the sign. The sign involves the whole extent of moral and human life; it is in the human world a universal instrument, just as is movement in the physical world.[2]

Semiotic,[8] the science of signs, must be considered in any evaluation of the last two decades of modern philosophy. While post-war interest in existentialism and phenomenology

[1] Porphyrins. *De Abstirnmtia* IT.

[•] J. Maritain, *Redell'flling the Timll8,* translated by H. C. Binsse (London: Geoftrey Bles: The Centenary Press, 1946), 191.

[8] Semiotic comes from the Greek word *1T7Jp.e"\o11* which means a sign, an omen, a flag or a boundary. Galen used the word *'ll t17Jp.e,.,T,tc1,* or TO *IT7JP.""""T'K611 as* the science of symptons, diagnosis. *(Claudii Galtmi Opera Omnia,* Ed. C. G. Kuhn [Lipsiae: Cnoblochii, 1827], Tom. 14, 189). It is in this medical sense that the word has been most frequently used. John Locke gave the term a distinct philosophical meaning. Cf. J. Locke, *An Essay Concerning Human Unde-rstanding,* Edition of A. Fraser (Oxford: Clarendon Press, 1894), Bk. IV, Ch. XXI, 4, 461. There Locke defines it *as* " the doctrine of signs, the most usual thereof being words, it is aptly enough termed also logic."

has been more widely publicized, semiotic is, nevertheless, deserving of careful investigation. The numberless articles, reviews and heated discussions on extremely subtle semiotical problems indicate that it is a provocative and important field of study. It is our intention, therefore, in this article, to examine modern semiotic in the light of Thomistic philosophy, and to discover the value of its principles. We feel that such a discussion is both useful and timely.

We have chosen Dr. C. W. Morris as the subject of our investigation, because he is the leading representative and most exponent of a theory of signs which is called " behavioral semiotic." At present research professor at the University of Florida and associate editor of the *International Encyclopedia of Unified Science,* his influence on American philosophers is evident. The author of many books,[4] he is best known for *Signs, Language and Behavior* which Max Black, himself an eminent " linguistic philosopher," called " one of the most stimulating discussions of topics in the philosophy of language to have appeared in years." [5] Morris holds a significant place among American philosophers for the original work he has done in semiotic, as well as for the value his work has had in encouraging further study of semiotical problems. A glance at philosophical periodicals even now, sixteen years after his most important work, will reveal that he has not been forgotten.

This article will be divided into two parts: the first ·will be an exposition of the main tenets of Morris' theory; the second will be devoted to a critical.evaluation of it.

• Morris has written the following books: *Six Theories of Mind,* 1982; *Logical Positivism, Pragmatism and Scientific Empiricism,* 1987; *Foundations of tke Theo1'1J of Signs,* 1988; *Paths of Life,* 1942; *Signs, Language and Behavior,* 1946; *The Open Self,* 1948; *Varieties of Human Value,* 1956.

[5] M. Black, *The Philosophical Review,* LVI, !'l, (March, 1947), 208. Another contemporary, Hans Reichenback, who was associated with the original Vienna Circle, holds that Morris' book " will be a stimulus to all later research in the field; Morris has done pioneer work on a little explored ground, and his results will be of the greatest value for further investigations." *Tke Nation,* 162, 25, (June 22, 1946), 760.

A. EXPOSITION

1. Definition of a sign:

Couched in a positivistic framework Morris' sign theory shows the influence of the pragmatism of C. S. Peirce. The latter, who was the first to use the word pragmatism [6] and the first to give a clear formulation of the pragmatic principle,[7] believed that " the meaning of a sign is the sign it has to be translated into." [8] In other words, we know or validate something in terms of its effects. This is the root of Morris' theory, and he states clearly in the Preface to *Signs, Language and Behavior* that his book " is written from the point of view expressed by Charles Peirce, that to determine the meaning of any sign, ' we have ... simply to determine what habits it produces.' " [9]

With this in mind, Morris believes that the best way to establish any science of signs is by a " biological orientation which places signs within the context of behavior." [10] While refusing to commit " semiotic to any existing system of behavioristics," [11] he does use a general unspecified behavior theory that is grounded on the axiom that only empirical and observable data can be used in establishing a science in which to talk about signs and their relations. Only then can a real positive science be formed.

Morris arrives at his definition of a sign by taking two instances of signs in action: one from animal behavior; the other from human behavior. The first example concerns a dog

[6] C. S. Peirce, "Pragmatic and Pragmatism," *Dictionary of Philosophy and Psychology,* J. M. Baldwin, Ed. (New York: The Macmillan Co., 1901), 821. Later however, Peirce was displeased with the way pragmatism was being interpreted, and so he called his version " pragmaticism," a word he claimed was " ugly enough to be safe from kidnappers." Cf. *Collected Pape:rs of Charles Sande:rs Peirce,* Edited by H. Hartshorne and P. Weiss (Cambridge: Harvard University Press, 1981-85), Vol. *5,* 414.

• C. S. Peirce, "How to Make Our Ideas Clem·," *Popular Science l'tfonthly,* Vol. 12 (Jan., 1878), 287.

[8] *Collected Papers,* Vol. 4, 182.

• C. W. Morris, *Signs, Language, and Behavior* (New York: Prentice-Hall, Inc., 1946)' v.

[10] *Ibid., 5.* [11] *Ibid., 56.*

that is trained to go to a designated place for food at the sound of a buzzer, even though he does not see or smell the food. The second example shows a man who is stopped as he drives along a highway and warned of an obstacle ahead. This information prompts the driver to make a detour. In these examples, both receivers (dog and man) behave in a way in order to satisfy a need; both signs (buzzer and words of warning) are substitutes, and control behavior; both signs are identified with goal-seeking behavior. The following definition combines these elements:

> If anything, A, is a preparatory-stimulus which, in the absence of stimulus-objects initiating response-sequences of a certain behavior-family, causes a disposition in some organism to respond under certain conditions by response-sequences of this behavior family, then A is a sign.[12]

It is not required that the organism respond to the sign in the same way it would respond to that which the sign denotes (the dog does not try to eat the buzzer). *A denotatum* is anything which allows the response-sequence to which the interpreter is disposed to be completed. Food is the denotatum of the dog, since it permits completion of his response-sequences. Every sign must signify, but every sign may not *de faoto* denote. The *significatum* is defined as that condition which is such that whatever fulfills it is a denotatum. " The condition of being an edible object in a given place is the significatum of the buzzer and is what the buzzer signifies." [18]

[10] *Ibid.*, 10. We use the term "definition " in the sense of a descriptive definition. Morris prefers to use the term "formulation," since he does not intend to the necessary ·and sufficient conditions for something to be a sign. It might be 'well to define here the terms used in the formulation. All the references are from *Signa, Language and Behaviur.* A *preparatory* stimulus is " any stimulus which influences a response to some other situation." (8) A *response* is any action of & muscle or gland, and a *stimulua* would be any physical energy which operates on an organism. A *diaposition to respond* is " the state of an organism at a given time such that under certain additional conditions the given response in question takes place." (9) Finally, "a *reapO'Me-Bsquence*iS any sequence of consecutive responses whose first member is initiated by & stimulus-object, and whose last member is a response to this stimulus-object as a goal object." · (9)

[18] *Ibid.*, 18. ,

Morris, then, defines a sign in terms of the disposition that is caused in the organism to respond if certain conditions are fulfilled, rather than in terms of the actual overt behavior that it causes. By using the disposition to respond, Morris fulfills the condition of latency of response which most, seinioticians say is required for a sign. This disposition *in* an interpreter to respond because of a sign, is called an *interpretant.* It is not the same as a response, a motor activity, yet it is a readiness, a tendency to move the muscles and glands if appropriate conditions are present. The problem is just what evidence do we have that there is a disposition to respond, thus indicating the presence of a sign, when there are not behavioral symptoms?

Morris realizes the problem and suggests that perhaps some state of the organism, such as its brain waves, would indicate if something were acting as a sign for this particular organism. This criterion is somewhat vague and not experimentally feasible at the present. Morris has made no attempt to describe what the interpretant is as an organic state. This omission, he. says, is deliberate, for he does not know the answer. "The problem," he writes, "is an empirical one and its solution awaits the development of semiotic as an empirical science." [14] In. another attempt to show how evidence can be obtained to determine the presence of an interpretant he quotes from Peirce who says that a habit must be described by regarding " the kind of action to which it gives rise, with the specification of the conditions and of the motives." [15] With this kind of evidence Morris claims that " we can begin to study the state of the organism which does act under such circumstances," and so we have a new type of evidence " for the. presence of habits even when no overt behavior is performed." [16] However, this criterion can be used only with a specific organism about which we already have some evidence to begin with. It cannot have

"Morris, "Signs about Signs about Signs," *Philosophy and Phenomeoologicol Research,* Vol. IX, 1 (Aug. 1948), 128.

[15] Quoted in .the above, p. 1!!9. *Collected Papers of C. S. Peirce,* Vol. v, 491.

[16] Morris, *Signa, Language and Behavior,* 9.

universal application and cannot apply to sign phenomena without the corresponding behavioral symptoms.

Applications:

The various ways in which signs function are divided by Morris into three categories or dimensions. Each of the three, while capable of separate study, does belong and is dependent on the wider science of semiotic. The three dimensions of semiotic are: semantics, syntactics and pragmatics. These three are arrived at by taking into consideration the four factors in the sign process: 1. the interpreter. what acts as a sign. 3. what the sign refers to. 4. what effect sign has on the interpreter.

Semantics is defined as that branch of semiotic that " deals with ... designata." [17] Pure semantics or formal semantics, according to Carnap, deals with " the construction and analysis of semantical systems .... It is entirely analytic and without factual content." [18] Descriptive semantics works with an actual historical language and studies its meaning. Grammarians, linguists and philosophers all contribute to this dimension.

Syntactics, as the second dimension, deals with the relations between signs. It is necessary, since every sign, at least potentially, has a relation to other signs. Sign combinations of any kind would be studied in this dimension and would include practical, perceptual and aesthetic signs. Logical syntax, as has been best described by Carnap/ [9] applies only to the formal analysis of declarative sentences, and hence does not consider questions, commands, etc. Logical syntax has a place in Morris' syntactics, but is not equated with it. Rather, it is simply a part of syntactics.

Pragmatics is the third dimension of semiotic. Here the

[17] Morris, *Foundations of the Theory of Signs, International Encyclopedia of Unified Science,* Vol. 1, No. 2 (Chicago: University of Chicago Press, 1988), 21.

[18] R. Carnap, *Introduction to Semantics,* (Cambridge: Harvard University Press, 1946)' 12.

[19] Cf. Carnap, *The Logical Syntax of Language* (New York: Harcourt, Brace and Company, 1987) .

emphasis is on the *user* of the sign. It treats the origin, the use and effect of signs related to the interpreter. It has been pointed out that one of the oldest forms of pragmatics was the use of rhetoric by lawyers.[20] Pragmatics would investigate the psychological, biological, and sociological backgrounds of a sign in relation to its user.

One of the most difficult parts of Morris' behavioral semiotic is the division of the sign. The main difficulty arises from the terminology used. Morris' use of numerous newly coined words tend to overpower and confuse the reader. One critic, David Rynin, writing on this point, bemoans the fact that Morris uses " scores of new and unfamiliar terms, which make this stimulating and significant work undoubtedly the most difficult reading for the uninitiated *since Whitehead's Process and Reality."* [21] Unfortunately, we cannot this drawback completely, but we can in this study limit ourselves only to those words that are essential.

While admitting several types. of signs,[22] Morris emphasizes the division based on signification and the division based on use. The former stems from the relationship of signs to the interpreter, and the resulting types of signs are called modes of signifying. The modes of signifying are distinguished according to the different types of dispositions to respond. That is to say, the modes are differentiated in terms of the interpreter, since the dispositions must be *in* an interpreter. Morris laments the fact that, even though the modes of signifying have been studied throughout the long history of philosophy, philosophers have failed "to distinguish with sufficient clarity between the signification of signs and the various uses and effects of signs

•• See E. Patterson, *Jurisprudence-Men and Ideas of the Law,* (Brooklyn: The Foundation Press, Inc., 1958), 296. On this point see also 'F. A. Philbrick, *Language and the Law,* (New York: Macmillan Co., 1949).

•• D. Rynin, Review of *Signs, Language and Behavior, The Journal of AestheticB and Art Criticism,* Vol. 1 (Sept., 1947), 67.

•• Morris also discusses the differences between sign and symbol, and treats also auditory and visual signs, and a group including gustatory, olfactory and tactile signs.

of different kinds of signification." [23] To remedy this Morris first treats the modes of signifying and then the uses of signs.

The five modes of signifying are the identificative, the designative, the appraisive, the prescriptive and the formative. The signs that signify in these modes are called: identifiors, designators, appraisors, prescriptors, and formators. A few words explaining these terms are in order.

Answering the question, "Where?", *identifiors* are signs that are preparatory-stimuli to an interpreter and cause in him a disposition to respond to a certain spatial:temporal region. Their sign status is "minimal." A *designator* or a "what?" sign" gives the characteristics of an object. By a designator an interpreter receives a stimulus that causes a disposition to respond to an object with specific characteristics. The designator prepares the interpreter "for objects with observable properties which permit the completion of responses in specific behavior-families." [24] Words like "black," "deer," and "taller," would be in this category. *Appraisors* are signs that dispose their interpreters to respond preferentially to specific objects. The response will be favorable or unfavorable. Words like " good," " bad," and " excellent " are all appraisors. Some words may be either appraisive or designative; the given sign situation must be carefully analysed to determine this. *Prescriptors* are signs that dispose the interpreter to a specific type of behavior which has a quality of obligation or requiredness about it. " Come here!," or " Present your credentials at the gate!," are prescriptors. The fifth type of sign in the major modes of signifying is the *fmmator,* or, as it is sometimes called, the logical sign, the formal sign or the syncategorematic sign. Morris lists as formators the following: " or," " not," "is," as well as suffixes, parts of speech and ·punctuational devices. Formators do give rise to dispositions to respond in the interpreter, but, according to Morris, this is a "second-order disposition," since it relates other interpretants. 'In Morris' own

[28] Morris, *Signs, Language and Behavior,*
•• *Ibid.,* 7!!.

words: " Formators are signs which dispose their interpreters to modify in determinate ways the dispositions to response occasioned by other signs in the sign combinations in which the formator appears." [25]

The other major division of signs is made in terms of usage. There are four main uses of signs: informative, valuative, incitive and systemic. Though there is a close relationship to the modes of signifying, Morris insists that the distinction is valid, since it is possible to have a sign-process without exercising its specific use. A designator, for example, may in fact give information, though it was not used to inform.

The four uses of signs may be used in any of the modes of signifying. The *informative* use of signs, as its name implies, informs the organism about. something. A command (prescriptive mode) may be used to inform someone you want some action done, even though this sign is not a designator. The *valuative* use of signs is present when signs are used to help an interpreter in his preferential behavior. Simple designation at times might be adequate to achieve this. Signs are used *irwitively* " to determine how the interpreter of the sign is to act to something." [26] The *systemic* use of signs is used to organize the behavior called out by other signs.

By combining the modes of signifying with the various uses of signs, Morris arrives at sixteen types of discourse. For example, scientific discourse is listed as designative-informative; poetic discourse as appraisive-valuative; religious discourse as prescriptive-incitive; metaphysical discourse as formative-systemic. In establishing the various types of discourse he does not intend to give a definitive solution for all the problems

[25] *Ibid.,* 157. Morris explains the function of the formator by a rather abstruse illustration. St, S., Sa, are signals to a dog of food in three distinct places. S. is another stimulus that neither prescribes, appraises, or designates, yet always appears in a sign combination. Hence, the combination St Sa S. is a sign complex in which the interpretants of S1 and S. are disposed in a specific way by the presence of S.. S. is a preparatory ..stimulus and, in this example, means that the dog " is disposed to seek food at one place if food is not found at the other place, and not to seek food at one place if food is found at the other place."

[26] *Ibid.,*

involved. He says that " it must be realized that the illustrations are tentative and indicate merely the problem and a direction at solution." [27]

B. EVALUATION

1. Norms of criticism:

It is ge:n:D.ane to a proper understanding of this critical section to have a clear concept of what we plan to do. Until now we have been mainly concerned with an exposition of Morris' theory. Now we can examine that theory in a critical light. We do not intend to give an exhaustive and minute criticism; it is not our intention to examine every single element of his work and pass judgment on it. Rather, we will concentrate on the principles which lie behind the theory and on which all the consequences and specific applications depend. We will attempt to show the advantages that a behavioral method implies, as well as to point out its basic imperfections and shortcomings. Our evaluation, then, will be positive and negative, constructive and critical.

Our basic norm of criticism is best expressed ·in the formula that our- ideas are *fundamentaliter in rebus et formaliter in mente.* This, the position of the moderate realism of St. Thomas, is for us the essential factor in the critique of Morris' theory. The problem of knowledge, one of the greatest mysteries confronting the human mind in the natural order, is of extreme importance in any critique. It is clear that any study of " semantics without a sound analysis of knowing is bound to be inadequate." [28]

It is understandable that there have been so many errors concerning knowledge. We have three facts to work with: the mind, the object, and the union of the two. The problem is to determine precisely how an immaterial subject can possess a material object. The history of philosophy through the ages

•• *Ibid.,* U6.

[28] J. A. Oesterle, *Logio--The Art of Defining and Reasoning,* (New York: Prentice-Hall, *5.*

has presented various solutions. An overemphasis on the mind results in an idealism which holds that man knows only his thoughts, and that only his thoughts are real. An overemphasis on the object of knowledge would lead to a positivism or empiricism: the only object proportionate to reason is a sensible fact. For positivists the one valid mode of thought for reaching truth is the mode in which the object can be sensibly experienced. Spiritual objects cannot be known, because no spiritual faculty exists in man. Nominalism, on the other hand, claims that the universal concepts we have are not concepts at all, only names and these not founded on reality. The reality of spiritual ideas is denied by the nominalists, and it is replaced by a common name which is simply representative of a group of concrete individuals.

Moderate realism allows for the part played by reason as well as reality in the mystery of knowledge. It does not overemphasize either the mind or the object, but recognizes the importance of each. Man needs universal concepts and the philosophers who deny them in fact use them in contructing their own systems. Man's universal concepts represent natures which are objectively real, which are singular not universal. Only individuals exist, but universals express the real. The role of the external and internal senses coupled with the necessity of an abstractive process of the mind are both acknowledged in moderate realism.

In making a critique of behavioral semiotic which is based on a positivistic foundation, our most important criterion is the fact that man does have universal ideas, that he does know abstract realities as well as concrete ones, and that, as a rational animal, he can rise above merely empirical experience.

At this point a description of the sign in scholastic terms will be appropriate. St. Thomas never wrote *ex professo* on the sign. References to the sign are found scattered throughout his works, especially in sections dealing with the sacraments or the types of knowledge. The most complete scholastic treatment of signs is found in the works of John of St. Thomas.

The most characteristic element of a sign, whether it be the very words on this paper, or a red traffic light, is that it represents something else. The whole *raison d'etre* of a sign is that it leads to or represents another thing. A sign has two representations. The sign taken as an object *(signum specificative sumptum)* has, like any object in reality, its own proper *esse* which is directly present to the knowing power. But the sign as a sign, *(signum reduplicative sumptum),* besides representing itself, also represents something else. A sign, therefore, has a direct or manifestative quality and an indirect or significative quality. If a thing can represent itself sufficiently there is no need for a sign. We can agree with John of St. Thomas that " a sign is rendered necessary by the fact that the thing does not disclose itself directly, but only through such an intermediary." [29]

If we consider the texts in which St. Thomas deals with the sign [80] we get a fairly accurate picture of what a sign is. A sign in the *strict* and *proper* sense is a sensible thing which, when known, leads in a quasi-discursive manner, to the knowledge of something else. A sign, in the *wide* sense, is an intelligible form by means of which we come to know something else, but without any discursive process.

A full notion of a sign must include an understanding of relation. A sign by its very nature involves another object and a knowing power. Between these three elements are found various relations. If we take the relation of the sign as object to the mind, we find that on the part of the object we have a logical relation, and on the part of the mind we have a real relation. There is also present ·here a relation *secundum dici,* that is, a transcendental or essential relation, between the mind

•• John of St. Thomas, *Log.* P. II, Q. XXI, art. I. *The Material Logic of John of St. Tk0'11W8,* translated by Y. Simon, J. Glanville, G. D. Hollenhorst, (Chicago: The University of Chicago Press, 1955), 892. "Ad hoc enim deservit signum, ut sit medium substituens loco signati, quod intendit manifestare potentiae, eo quo res per seipsam non innotescit." Joannis a Sancto Thoma, *CurBUB Pkiloaopkicm,* Editio Reiser (Taurini: Marietti, 1980), 648.

[80] *IV Sentencea.* D. 1, Q. 1, art. 1; *De Veritate,* Q. 9, art. 4, ad 4, and ad *5; Swm.ma Tkeologica.m,* Q. 60, art. 4 c, and ad 1.

and the sign as object. However, if we consider the relation between the sign as sign and the signified, a relation which is found in every sign, we have a relation *secundum esse.* That is, we have a relation whose sole function it is to refer the subject to the term: *"cuius totum esse est ad aliud se habere."* [81] Therefore, in natural signs, where there is an intrinsic relation between the sign and the signified, we have a real relation *secundum esse.*[82] With arbitrary signs the relation is again *secundum esse,* but logical. The relationship depends on an extrinsic denomination by the mind. Finally, formal signs, concepts which are signs of objects, ·contain also a relation *secundum esse* which is a real relation founded on quality, or more specifically, similitude and dissimilitude.[88]

2. Terminology and Modes of Signifying:

Morris constantly stresses the fact that the language of semiotic must be scientific. He argues that if a true science of signs is to be constructed, then the terminology must be scientific. He writes that the " vagueness and ambiguity " [84] of

[81] J. Gredt, *Elementa Philosophiae,* Editio Octava (Bareelona: Editorial Herder, 1946), Vol. 1, 154.

[89] Concerning thiS point Maritain writes: "An1 in the case of the natural sign, it is a real relationship; because the natural sign is naturally " more known " to us than that which it makes manifest; and to be more *knowabl-..a.nd* that is relative to another thing thereby also made knowable-is a real property, it is not a purely ideal relationship *(relatio rationis),* existing as such only in thought." Maritain, *Redewming the Times,*

[88] As to the question whether the *swu:rulum esse* relation is always predicamental, John of St. Thomas has the following illuminating passage: " We speak of the relation according to existence *(secundum eBBe), not* of the predicamental relation; for the sign in general, with which we are concerned, includes *not only* the natural sign *but also* the conventional one, which is a being of reason. Thus the relation we speak of here cannot be a predicamental being and cannot be a predicamental relation, although it can be a relation according to existence *(secundum esse).* Recall St. Thomas' doctrine that pure relations alone comprise both real relations and relations of reason. The relation of reason is obviously not a predicamental relation, but it is called according to existence *(secundum esse),* because it is purely relative and does not involve anything absolute." (Chicago University Translation, 889; Reiser, 646). Q. XXI, art. 1.

•• Morris, *Signs, Language and Behavior,* 4.

current distinctions' must be reduced into scientific formulas. Words like " idea," " thought," and " mind " are not used by him, because they are too indefinite and not suitable for a scientific investigation of signs. He insists time and again that the impersonal and vague semiotical terms must be replaced by precise and interpersonal ones. In spite of all the stress on a scientific terminology, we find that one of the annoying things in reading Morris is, in fact, the unscientific quality of his own terminology. New words are multiplied at the slightest provocation, and many words are not clearly defined. The result is confusion instead of clarity. The word "behavior," for example, is not given a definite meaning, nor does Morris give the exact meaning of " glandular " or " muscular " response. The relationship between interpretant, disposition to respond, significatum and denotatum is never clearly explained. This difficulty springs from the fact that these terms are not given a precise definition. One critic of Morris, A. F. Bentley, gives a long and detailed evaluation of Morris' terminology with the sole intention of judging its scientific character. He reaches a negative conclusion.[35]

The ambiguity found in so much of Morris' writing and theorizing, the obscurity and the vacillating character given the pivotal terms seems to contradict Morris' intention of creating a t;ruly scientific terminology. There are too many unanalyzed terms used indiscriminately. Thus, "reaction," "behavior," "produce," "condition," "cause," "influence," "need" are all undefined. These particular words are crucial ones, for the force of Morris' theory is lost unless we know exactly what he means when he uses these words. Some of them admit of various explanations and so demand a precise analysis and definition. At the same time, he does analyse some terms, such as" interpreter,"" interpretant," and" signficatum." The result is that we have a mingling of analyzed and unanalyzed words and in some instances we are not sure of

[85] A. Bentley, "The New Semiotic," *Philosophy and Phenomenological Research,* Vol. VIII, 1 (Sept., 1947), US.

just what Morris means. Morris is aware of the fact that he uses unanalyzed terms, but he claims that this procedure is, in fact, scientifically sound. He says that one is expected to borrow unanalyzed terms from other sciences and use them. In line with this, Morris takes many terms from biology and physics and uses them in constructing· his semiotical science. But here too we run into the same problem of ·communication. A biologist has a different meaning for the word " cause " than has the philosopher. Unless this difference is pointed out, the way is open for obscurity. It is certainly not scientific to use words, key words at that, without giving their meaning. This is even more true in the field of semiotic where the meaning of a sign, the semantic value of a sign, takes on such importance.

The modes of signifying while giving us the most important division of signs, also give us the most difficult. Morris recognizes this and goes to great lengths to solve the problems involved in the various modes. The problem of the differentiation of the modes of signifying is, according to Morris, " in the forefront of contemporary semiotic." [86] There are fundamental issues at stake here, and a workable semiotic needs a logical division of the modes. Morris insists that there are many different divisions of signs, and that the classification of the modes of signifying is not complete.[37] The five types of signs in the modes of signifying are identifiors, designators, appraisors, prescriptors, and formators. These can be illustrated by the following examples: a) that hat, b) red hat, c) good hat, d) buy that hat, and e) this hat or that hat. This division is made from the standpoint of the interpreter. A question can be raised, however, in regard to the basis of this division. Do we really have five modes of signifying, and are these five distinct?

•• Morris, *Signs, Language and BehaviOT,* 60.

•• It is possible, according to Morris, that there be signs that do pot fit into these categories. In determining the exact mode of signifying we should examine caxefully the disposition to respond that it causes. We should also take into account environment and need, since these axe important factors in selecting the proper mode for a given .sign.

Is Morris correct in listing five different modes or can these five be reduced?

In examining the five modes one fact stands out clearly: identifiors and designators are quite different from the remaining three modes. The former mediate for something in the environment. Identifiors and designators in some way place in an interpreter a disposition to respond. The response-sequence takes place if certain factors are present in the environment. For that reason identifiors and designators are called mediated response. Appraisors, prescriptors and formators, however, fall into a different category. In their case there is no question of a mediated response, nor even of a disposition to respond in the absence of a given stimulus. An appraisor does not denote, because if it did it would be a designator. The interpretant of an appraisor is not in the same order as the interpretants of identifiors, and the word " signify " has a unique meaning in the case of appraisors. Paul Wienpahl of the University of California notes this difficulty in an article written in *The Philosophical Review.* His comments are apropos: "Nor can we say an appraisor signifies anything. Strictly speaking *it signifies only in the appraisive mode.* In other words, appraisors signify in a different sense of " signify." [88]

This same reductive tendency is seen in the interrelationship of the modes. Here again we see that instead of five modes of signifying we have rather two modes. Morris claims that the designative ascriptor [39] includes both the identificative and the designative modes of signifying. The appraisive ascriptor as well as the prescriptive ascriptor normally include designation

•• P. Wienpahl, "Are All Signs Signs?," *The Philosophical Review,* Vol. *58,* (1949).

•• An *ascriptor* is a sign complex which brings together the identificative mode of signifying with some other mode or modes of signifying. Roughly equivalent to a sentence, ascriptors are named according to the dominant mode of signifying they contain. There are only four types of ascriptors, since Morris doubts that any combination· of identifiors could be joined to make an ascriptor. *Stattmumts, appraisals, prescriptiCYnB* and *furmulizatiCYnB* are ascriptors of the designative, appraisive, prescriptive and formative modes considered as produced by some interpreter.

by other signs. Formative ascriptors, since they are always in sign combinations, certainly involve designative and identificative modes of signifying. sums up the interrelationship briefly when he says that " prescriptions rest on appraisals and appraisals on statements in a way in which statements do not need to be followed by appraisals and appraisals by prescriptions." [40] Statements, as well as appraisals and prescriptions, all involve identifiors according to the definition of an ascriptor. The result is that we have two groups of signs: a) appraisors, formators and prescriptors; b) identifiors and designators. Group *a* cannot function alone. An ascriptor must contain the modes in group *b,* even though it may also contain the modes in group *a.* Group *a* is impossible without *b,* but you can have *b* without *a.* But Morris' definition of a sign does not include the signs in group *a,* because there is no provision made that a sign must appear always in sign complexes. So instead of five signs in the modes of signifying we have two types of signs: group *b* that fits Morris' formulation of a sign, and group *a* that needs the additional qualification of always appearing in sign combinations.

Formators are perhaps the most controversial of all the modes of signifying. The reason for the controversy is partially due to the vagueness with which they are treated. We have already seen that the formators appear only in combination with other signs and so they fall somewhat outside the definition of a sign that Morris gives. They are "special" signs in one sense, but this sense is never fully explained by Morris. The sign character of the formator rests on an ambigu·ous and extremely tenuous foundation. Formators are intimately connected with significata, a term which is never really defined clearly. In different places the significatum has different meanings. Morris insists that the significatum is different from both the denotatum and the interpretant, and that " to denote " is not the same as "to signify." Since the significatum is not a " special kind of thing " [41] for Morris, then it must be either

[40] Morris, *Signa, Language and Behavior,* 89-90. [41] *Ibid.,* 19.

equivalent to the denotatum, or equivalent to the interpretant. When response-sequences are completed, then the denotatum and the significatum are identified. But when they are not completed, the significatum would seen to be equivalent to the interpretant, since there is no denotatum in this instance. [42]

Wienpahl says that there is an added difficulty in regard to formators if one considers the interpretants they produce. Formators, like all signs in the Morrisean definition, produce a disposition to respond. But formators produce in an organism a disposition of a special type, namely, an interpretant to connect other interpretants. This is clearly a new use of the word interpretant, since previously the interpretant was used in a sense of a direct relation to the denotatum. We must agree with Wienpahl who says that " if formators have interpretants, they must also have denotata. And this they do not have unless the denotatum of "or," say, is alternativity, which it cannot be since alternativity is the significatum of " or " (and denotata and significata are not the same)." [48]

In conclusion, it would seem correct to say that formators do not stimulate interpretants. While they do cause a disposition in an organism to relate interpretants, this disposition is not an interpretant according to Morris' definition. The only reason we call a formator a sign is because there is confusion and obscurity in. the meaning of the term significatum. Is it to be accepted as meaning the same as the denotatum, or the same as the interpretant?

8. Extension of the division of signs:

Morris endeavors to treat *all* signs in his behavioral semiotic. We have seen the various categories and classifications he sets up to achieve this comprehensive view of signs. In spite of all this, we feel that in fact not all signs are explained by him. There are two large categories of signs: the natural sign and the formal sign, which are not satisfactorily examined. In

•• On this point see the article by G. Gentry, "Signs, Interpretants, and Significata," *The Jourruil of Philosophy,* Vol. XLIV, (June, 1947),

u Wienpahl, *op. cit.,*

order to put this problem in proper perspective, we will say a few words about the scholastic division of signs.

Though there are *tot divisiones signi quot philosophi,* it is possible to arrive at a satisfactory division. Pirotta, for example, divides the sign in two ways: first by considering the sign in relation to the knowing power, he derives formal and instrumental signs, and secondly, by taking the sign in relation to the signified, he derives natural, consuetudinal and conventional signs.[44] Boyer and John of St. Thomas do practically the same thing.[45] The only possible danger here is that you can easily get the impression that formal signs are not natural. For that reason a division of signs into formal and instrumental might be better. We say then, that all formal signs are natural, and all instrumental signs are either natural, or arbitrary.

For the basis of our division we take the relation the sign has to the knowing power. The formal sign, therefore, is one that immediately and through itself represents something else to the knowing power. The intelligibile form or concept is in the mind and, since it is a similitude of the object, when we know it we know the object. No pre-cognition is necessary. The only two examples of this type of sign are the image and the concept. They correspond to the two types of cognition we have: sense knowledge and intellectual knowledge. Formal signs are interior signs of knowing and by them we come to know objects. Our concepts are signs that belong to the representative order. Once we know the concept we *immediately* know the thing; the concept represents the form of the thing. There is no discursive process *(quasi discurrendo* in the words of St. Thomas) required in formal signs.[46]

u A. M. Pirotta, *Summa Philosophiae,* (Taurini: Marietti, 1931), Vol. 1, 24-27.

•• C. Boyer, *Cursus Philosophiae,* (Romae: Typis Desclee de Brower et Soc., 1950), Vol. 1, 70. John of St. Thomas, *op. cit.,* Q. XXI, art. 2.

•• As we said before formal signs are signs in the wide sense. Thus, St. Thomas says that " communiter possumus signum dicere quodcumque notum in quo aliquid cognoscatur; et secundum hoc forma intelligibilis potest dici signum rei quae per ipsum cognoscitur." *De Veritate,* Q. 9, art. 4, ad. 4. On this point see comments of F. A. Blanche, *BuUetin Thomiste,* Vol. 1, (1925), pp. 1-7.

With *instrumental* signs we find that first we must know the sign as an object before we can know that it signifies another object. This notion of *pre-cognition* is essential to the instrumental sign. In this instance the knowledge of the signified given to the knowing power is not immediate, as it is with formal signs, but *mediate.*

The formal sign is a natural sign. There is an intrinsic relation between the sign and the signified, between the concept and object. There is a natural connection here, not an external relationship. A causal relation is present.

Instrumental signs can be subdivided into two groups: the *natural* signs, and the *arbitrary* signs. Natural instrumental signs have a definite relation in nature. Fr. Gilby, an English Dominican, sums up this type of sign very well in the following passage:

> The force of the former (natural sign) does not depend on convention, arbitrary agreement, or previous instruction; instinctively and directly the attention is transferred from the sign to the thing signified. Thus a skull-and-crossbones by the roadside warns the driver to take care; the footprint told Robinson Crusoe that he was not alone on the island; some tones of laughter manifest gaiety of heart, some cries suffering, sonie glances affection.[47]

Arbitrary signs are present only when the relation between the sign and the signified is made extrinsically. Arbitrary signs are either conventional or customary. *Conventianal* signs are those whose relation to the signified is made by a man or a group of men and is accepted by society in general. Words are the classic example of conventional signs. There is no intrinsic relation between the word "tree" and the plant it signifies. A word signifies something, because it was decided that a specific word should have a specific meaning. Some words come close to being natural signs. Works like" Ouch!,"" Oh!," and " What!," as well as some children's words like " bow-wow," or "choo-choo," which are often accompanied by

•• T. Gilby, 0. P., *Barbara Celarent,* (London: Longmans Green and Co., 1949), 51-52.

or are onomatopoetic, resemble natural signs.[48] Words signify concepts which, in tum, signify objects. Words depend on concepts for their meaning.

Customary signs are signs in which the relation between the sign and the signified is established by tradition, custom or usage. The Cross is a sign of the Christian religion, and the greeting " Good Morning " the sign of courtesy. Though the customary sign may have some natural foundation for its meaning, still some element of usage and .tradition has to be present.

If we look at Morris again we find that at the beginning of his book he does mention natural signs. He sees in the example of the buzzer and the dog a case which " approximates what have often been called 'natural signs,' as when a dark cloud is a sign of rain." [49] Yet, if we look closer we see that this analogy limps; they are not identical situations. True, they both are non-language signs, but whereas the first is a sign to the dog only after long training and so not " natural," the second does have a natural spontaneous relationship. The relationship of the buzzer, as a sign of food, to the dog is not in the same category as the dark cloud as a sign of an impending rain. Following Morris' terminology we would call the dark clouds identifiors or even prescriptors if, for instance, they caused in the interpreter behavior of an obligatory type. Thus, seeing the clouds we would take them as a sign that we must rush home and close our windows. Or perhaps natural signs might fit into Morris' division of signs according to perception. Then the dark clouds would be visual stimuli influencing, in some way, our behavior. The difficulty with this classification is that the naturalness, the spontaneous quality, of the natural signs is lost sight of; they become no more natural than spoken

•• For an excellent treatment of this question consult J. Wild, "An Introduction to the Phenomenology of Signs," *Philosophy and Phenomenological Research,* Vol. 7, (Dec., 1947), 21711'. Wild uses John of St. Thomas for his theory of signs and believes that " this realistic theory is phenomenologically more adequate" (229) than the view of modern semioticians.

•• Morris, *Signs, Language and Behaviur, 5.*

words or other arbitrary signs. We then find natural signs relegated to that amorphous category of beings that cause some disposition to respond. It would follow from this that dark clouds would not be signs of rain unless they caused in the interpreter some disposition to respond if certain conditions were present. But the cloud-rain relationship is a natural one and does not depend on any disposition it may in fact cause. There is no convention here, no forced relationship. Hence, it makes no difference whether or not a disposition is caused. Dark clouds remain a natural sign without introducing a behavioral criterion. [50]

To the above criticism Morris might reply that the cloud-rain example and the buzzer-dog example are really the same type of sign if they are properly understood. Just as the buzzer is a sign of food for the dog, so dark clouds, because of our repeated experience of getting wet after they appear, are signs of rain. Yet, we ask, are these two situations really parallel? The dog reacts, it is true, to the buzzer; it's an indication that food is at a certain place. The buzzer is a sign that prepares for a particular type of goal-seeking behavior. But in the example of the cloud we have a sign that is not primarily a stimulus or a preparation for a specific type of behavior. Rather it is an indication of an object other than itself: rain. For Morris the dark cloud is an uncertain or polyvalent sign to which any person may respond in any number of ways. Yet according to the normal consensus dark clouds are quite certain signs, definite signs of an approaching rain. The primary effect of the sign of dark clouds is not the production of a disposition in the organism. The primary effect is an indication that rain is near. Once this is present we may in fact have other secondary effects, various dispositions produced in the organism. These dispositions, however, do not form an essential part of the sign complex. It seems to us that

[50] Wild, *op. cit.*, Q27, commenting on this problem as it is found in the semiotic of C. W. Morris and C. J. Ducasse, writes that their false conception of efficient causality and signs " leads them to regard all signs as arbitrarily imposed by usage, and hence blinds them to the important .category of *natural ai.gn."*

the primary effect of signs is not accounted for in Morris' semiotic. The reason for this is that the stimulus-response pattern is so fundamental to Morris' theory of signs, that the immense and important sphere of knowledge between the original stimulus and the actual response is lost sight of. In this area there is evaluation, elaboration and understanding of our observations of reality which are required before any behavior can take place. The natural sign operates in this sphere of knowledge. It leads us from the knowledge of one object-the cloud, for example-to the knowledge of another object-the rain. Its essential element is the transmission of knowledge rather than any given behavioral response.

When it comes to the category of formal signs (concepts or ideas), we find that they are unprovided for in the behavioral approach. Morris insists that the omission of such terms' as ' idea " and " mind " from his terminology, does not imply that he holds these terms to be meaningless. Rather, he argues, that it is a question of methodology, and he prefers to use biological and empirical terms instead of mentalistic ones. Even using these terms Morris does not treat of the reality which we call a formal sign. At one point he does say that "' idea ' and ' interpretant ' may in fact be synonymous," [51] but he does not elaborate this. Logically Morris cannot submit formal signs to the behavioral criterion. They fall outside his empirical approach. The inherent limitations in his principles make it impossible to treat the formal sign, although his intention is to establish a comprehensive sign theory.

4. The causality of signs:

In the reading of *Signs, Language and Behavior* one fact is evident: the sign exercises efficient causality with regard to the interpreter. Morris writes that in the examples of the buzzer and the words spoken to the driver, we have" signs of food and an obstacle, because they control the course of behavior with respect to the goals of getting food and getting

[61] Morris, *Signs, Language and Behavior,* 80.

to a certain place. . . ." [52] Again, in giving his formulation of a sign, he says that it " causes a disposition in some organism to respond." [58] From these citations, as well as from the whole tenor of his th,eory, it would be hard to deny the presence of a causal elemen,t. Morris himself offers us no explanation of the type of causality involved. Causality, always a favorite whipping post for philosophers, has endless varieties. Can we say with Bentley that Morris' " view of ' causation ' is of the billiard-ball type, under the rule 'once happen always happen,' " [54] or can we say he shares the metaphysical notion of causality as held by the scholastics? While the former might be probable, the latter is hardly possible, as the pragmatic background of Morris would not be likely to lead him to the scholastic doctrine. Whatever his full theory of causality may be, we can say that at least in his formulation of a sign he has efficient causality in mind. The sign causes, produces an empirical effect in the interpreter. Our problem can be thus stated: is efficient causality the essential causality in the sign process?

Thomists also insist on the element of causality in defining the sign. A sign is a go-between, a midwife, between the mind and another object. The scholastics define a sign in terms of the " to be " of a being. That is, they define a sign by showing how the sign causes knowledge-for the " to know " of a being is a further specification of its" to be." It is necessary to bring in causality, because the sign is in the representative order and, as John of St. Thomas tells us, "to represent is nothing else than to make an object present or united to a faculty/' [55] The sign affects the interpreter in some way, it causes something in the interpreter.

Professor Wild argues strongly that the sign does not exercise efficient causality. On this point he writes the following:

[62] *Ibid.,* 7.

•• *Ibid.,* 10.

•• A. Bentley, *up. cit.,* 125, footnote no. 48.

•• John of St. Thomas, *Log.* P. ll, Q. XXI, art. 5, 679. "Representare enim non est aliud quam facere obiectum praesens seu unitum potentiae."

The sign *as such* does not *influence* or cause the will to act in any way. To signify is not the same as to argue or persuade or advise. It is not to exercise any mode of efficient causality. The sign does not make us think of another object. It renders this other knowable . . . . [56]

Wild's view seems to be very close to the scholastic notion of sign causality. In sign phenomena we have examples of things which do not efficiently cause knowledge, but rather signify noetically to a knowing power. The noetic function of a sign is expressed by St. Thomas when he says that " a sign includes something which is known by us, and by which we. are led to the knowledge of something else." [57] This same idea is again expressed by St. Thomas when, in discussing the sign in the strict sense, he states " that the name sign is given primarily and principally to things that are offered to the senses; hence, Augustine says *(De Doct. Christ.* ii) that a sign is that which conveys something else to the mind, besides the species it impresses on the senses." [58] The principle effect of a sign, then, is to cause knowledge in the interpreter.

When we say that a sign causes knowledge, or that it causes things to be known, we· refer not to the order of efficient productive causality, but to formal extrinsic causality. It should be noted, however, that we are concerned here with the *essential* sign causality. Because, in fact, there are many acts of efficient causality present in the complete sign complexus. The production of intelligible species and action of the agent intellect are some examples. Yet if we center our attention on the fundamental type of causality in the sign, we see that it is not efficient causality. The crux of the whole argument for this lies in the fact that " the action of the sign is the same as

•• Wild, *(yp. cit.,* !t!M.

•• St. Thomas, *IV Sentences,* D. 1, Q. 1, art. 1. "Sicut dictum est, signum importat aliquod notum quoad nos, quo manuducimur in alterius cognitionem."

•• *Ibid., Summa Theologica,* ill, Q. 60, art. 4, ad 1. " Et inde est quod primo et principaliter dicuntur signa quae simsibus offeruntur; sicut AuguBtinus dicit in IT de Doctr. Christ., quod signum est quod praeter speciem quam ingerit sensibus, facit aliquid aliud in cognitionem venire."

the action of the object." [59] If the object of knowledge does not exercise efficient causality, then the sign, which is also an object, will not.

The sign whose " task it is to remove the gap between the object and the mind," [60] as Horvath informs us, *virtually* contains the signified. Even though it does direct, lead, or introduce us to another object, the sign, nevertheless, is known like any other object. The object of knowledge specifies and extrinsically determines the intellect. By extrinsic formal causality we mean the extrinsic determination specifying those things which by their nature have a transcendental relation to some other thing. The object, therefore, and the sign also, exercises formal causality in the act of knowledge. The intellect is capable of knowing all things, but when it comes into contact with an object, it is determined to that one specific object. The object specifies the intellect. It is formal causality, since it is by the form of the object that the object itself is known; this form of the object determines the intellect, but this determination is extrinsic not intrinsic.

John of St. Thomas calls this type of causality "objective cavsality." He is careful to point out that this is not the same as efficient causality: "To signify or to represent is not done by the sign efficiently, nor is to signify, formally speaking, the same as to produce an effect." [61] Maritain expresses the thought of .John of St. Thomas rather well in the following passage:

> Everything here is kept within the order of 'objective causality,' or formal causality of knowing, not within the order of efficient or

[59] F. X. Marquart, "La Causalite du Signe," *Revue Thomiste*, 1927, Janvier et Fevrier, 48.

[60] A. Horvath, 0. P., *Tractatus Philosophici Aristotelico-Thomistici*, (Budapestini: Typi.s Societatis S. Stephani, 1949), Vol. 1, 215. "Ex his vidimus signum *ad ordinem repraesentativum pertinere*. . . . De ratione autem repraesentationis est aufferre distantiam inter obiectum et facultatem coguoscentem, quod fit per similitudinem obiecti menti praesentis."

[61] John of St. Thomas, *Log.* P. II, Q. XXI, art. *5*, 680. "Signi:ficare seu repraesentare nullo modo est a signo effective, nee significare loquendo formaliter est efficere."

productive causality. When a sign produces an effect, it is never in so far as it is a sign. The sign does not even produce as an efficient cause the knowing of the signified; it produces knowing only because, in the cognitive faculty, it takes the place of the object, and thus makes the object present to that faculty and because, to this extent, it keeps itself within the same line of causality as the object (formal causality) .[62]

The term "objective causality" is peculiar to John of St. Thomas. It means that a sign has a causal relation to the intellect and to its act, which is such that it leads the intellect to another act and thus to another object of knowledge. In other words, the sign known by the intellect, is known as an object, and once known it leads the intellect to the knowledge of something besides itself.

5. Behaviorism as a method:

In constructing his theory on the empirical and observational level, Morris uses behaviorism as his method. He does not, however, restrict himself to any one type of behavior theory. Yet he does reject the extreme radical behaviorism which he calls the " mechanistic " approach. This was criticized severely by him in an article written in the late twenties, at a time when behaviorism was very much in vogue. Thus, he writes:

Whether one regards behaviorism as an emotional reaction, an irritating vagueness in psychology and sociology, or as caused by a grudge against mankind that is satisfied by reducing man to 'modified entera with gonadal appendages,'-in any case one can hardly take its philosophical implications seriously.[63]

By introducing the notion of disposition to respond into his definition of a sign, Morris intends to avoid the radical behaviorism he criticizes. Overt behavior is not necessary; a sign does not have to cause the organism (interpreter) to react by actual behavior. What is required is a readiness, a disposition to respond if certain other supporting conditions

•• Maritain, *Redeeming the Times,* 19!'!-193.

[63] Morris, "The Concept of the Symbol I," *The Journal of Philosophy,* Vol. XXIV, 10 (May 1!'!, 19!'!7), !'!58.

are present. While the condition of latency is accounted for in Morris' definition, the question still remains whether his formulation is adequate to describe the sign process. The problem, as we have pointed out arises when there is no overt behavior, and where our evidence for the disposition is vague and not dependable. Is the method of behaviorism, as interpreted by Morris, sufficient to construct a semiotical system?

An illustration or the inadequacy of the disposition to respond as an essential element in the definition of a sign is given in an article by Ducasse.[64] We will summarize it here. While sleeping a person is awakened by a crepitant sound on the roof which he takes immediately to be a sign of rain. He then goes back to· sleep. His only was his thinking of rain or believing that it was raining; he did not get up, or prepare for rain by getting on his rain coat. Morris would probably reply to this objection that, though there were no actual responses to the rain, there were subtle neural changes in the organism, or slight muscular differences which, in .other circumstances, would end in action that would be appropriate to the presence of rain. Ducasse replies that even supposing this to be true, there are no means to prove it. The plethysmograph or galvonometer cannot detect the slightest muscular or neural change. Nor can the difference between a disposition caused by rain and a disposition that is caused by sleet be shown. Ducasse concludes that " behavior," as Morris describes. it, does not extend to mental states,'images, ideas, or attitudes of belief or·disbelief.

Other recent critics of Morris have also found some problems connected with the " disposition." Max Black, for instance, says that in discussing the whole question of disposition to respond, Morris " may intend to assert that some previously established general relationship between needs, stimuli, and correlated responses" [65] is modified in the sign process. Thus,

•• C. Ducasse, "Some Comments on C. W. Morris's 'Foundations of the Theory of Signs,'" *Philosophy and Phenomenological Research,* Vol. 8, 1 (Sept., 1942), 44 ff.

•• M. Black, *Language and Philosophy* (Ithaca, New York: Cornell University Press, 1949), 178.

before the organism receives a sign its behavior is a very complex function of its needs which are represented by f1, which is a combination of *S*, the stimuli it receives and *N*, its needs. After reception of a sign the organism's responses will change and can be represented as $R = f2(S, N)$. The whole sign process, then, taking into account previous needs and stimuli, would be a change from $R = f1(S, N)$ to the form $R = f2(S, N)$. Black says that this would be close to Peirce's view that a sign is a habit of response, and so " the learning of a sign will no more require a unique overt behavior than the acquisition of a habit does." [66]

J. Phillips has also seen the need for some test to determine the presence of the disposition to respond. She says that if some science could measure ." understanding," then Morris' criterion could be used. However, since this is not yet possible, some test must be used to find out if *x* is a sign for a particular organism when no overt response is caused. She suggests that this disposition can possibly be known by using tests that would be performed under specific conditions that do support behavior. If it were a question of dealing with a thing that does not initiate response-sequences, as for example, " blackness," then " perhaps tests can be devised in which behavior caused by something else would be affected by whether or not this thing was black." [67] Using this criterion, you could determine " from that component of total behavior which is traceable to the stimulus in question whether or not it is a sign." [68] Professor Phillips admits that these are only suggestions, and while not solving any specific problems, they may point the way to an eventual solution.

The objections and suggestions of Black and Phillips are quite similar. They both say that the disposition to respond must be looked for in the total behavior patterns of the indi-

[66] *Ibid.*

[67] J. Phillips, "The Concept 'Disposition to Respond' in a Behavioral Semiotic." *Philosophy of Science*, Vol. 17, 4 (Oct., 1950), 852.

[68] *Ibid.*

vidual. Rather than limiting the investiga;tion to one sign and one response, it is necessary to consider the organism's complete behavior to various stimuli. They both insist that correlated responses, needs, .and other stimuli must be examined. The whole pattern of behavior of an interpreter is reflected in the way he reacts to a given sign. Just how this relation between a sign and previous complex responses is explained is not an easy question. It seems that it would entail a painstaking examination of the organism, and a minute listing of intangible and subtle tendencies in the organism. To do this would be, at best, an unwieldy undertaking and so of doubtful value to a workable semiotical theory. We are still left, therefore, with the problem of the disposition to respond.

Morris, then, draws on the behavioral method to substantiate his sign theory. Primarily, this method is applied to animals, and when we apply it to human behavior we have to allow for certain differences. Morris cites examples of animal behavior and also tries to establish broad semiotical principles that will apply to all types of sign situations. While it is true that behaviorism does apply to animal sign usages and even to many sign processes among humans, it cannot apply to all human operations. P. B. Rice points up this difficulty rather neatly when he says that " in practice Morris keeps such a nervous eye on his behaviorist allies' demands for laboratory controls that he does not take us far in the analysis of such characteristic human operations of signs as occur in aesthetic, moral and logical activity." [69] Morris seems to try to fit all types of sign into the dog-buzzer category. His constant use of this example has caused one critic to refer to his theory as " the semantics of the dog kennel," [70] and another to claim that Morris' constant cry was "back to the dog." [71] The main

[69] P. B. Rice, "The Semiotic of Charles Morris," *The Kenyon Review,* Vol. IX, 2 (Spring, 1947), 804.

[70] Title of chapter eight in M. C. Cornforth's *In Defence of Philosophy Against Positivism and Pragmatism,* (London: Lawrence Wishart), 1950.

[71] R. Feys, Review of *Signs, Language and Behavior, Revue Philosophique de Louvain,* Tome *45,* 1947, *252.*

criticism of behaviorism as a method is that it is unable to be applied to the speculative elements in man's activities, and seems to neglect the spiritual nature of man. The complicated and extremely subtle interrelations of language, concepts, feelings and emotions are not accounted for in a purely behavioristic semiotic.

It must be noted that behaviorism as a method is not wrong in itself. Our criticism of behaviorism is based on the use Morris makes of it-his application of the method. Behaviorism is a valid psychological method and is used today by almost all psychologists in some form. In regard to the sign process it also has great importance. The only way we can determine whether something is a sign for an animal is to see how it reacts. We have to and observe what they do. The same is true of the mentally deficient and very young children. Even in the use of signs by adults there is much to recommend a behavioral approach. With them also observation plays an important part in understanding the various types of signs. The behavioral method has much in its favor and, coupled with a wider metaphysical approach, it could be extended to all types of sign phenomena. Problems arise when we restrict ourselves to behaviorism of the type that Morris uses. Fr. Gemelli, in his *lntroduzione alla Psicologia,* claims that " behaviorism is a· psychology without a soul," [72] but he does insist that it must be used in some way if man is to be fully understood. Behaviorism is useful and indeed necessary to grasp properly the operation of a sign. We criticize it as a method only when it is used as the sole approach, the only answer, that explains all the operations of man.

There are some who use the method of behaviorism in the framework of a purely objectivistic psychology. They argue that they do not reject or deny any introspectioni!lt data, nor consider as unreal the mental operations of man. Rather they consider this data of private internal experience according to

•• A. Gemelli and G. Zuini, *Introduzione alla Psicologia* (Milano: Societa Editrice "Vita e Pensiero," 1947), 9.

the function it has in the direction of behavior. They content themselves with an examination of the behavior of the subject and draw inferences and conclusions from a careful and studied observation of this behavior. In view of this objectivistic outlook, they introduce the hypothesis of various motoric dispositions. Morris, it would seem, falls into this group, and it is his intention to construct an objectivistic system of signs by using behaviorism as a method. We feel, however, that behavioral semiotics cannot be a suitable vehicle to describe adequately the sign process. Even if we assume that the mortoric disposition, the disposition to respond, is valid in some cases, we cannot discover how Morris' theory can have a universal application.

The fundamental problem in Morris' explanation is that it does not explain properly the relation between the perception of the sign and the response to that sign. The response is given not to the sign itself, but to the thing that the sign represents. In the large and complex area between initial perception and ultimate response there are many acts which do not fall under the scrutiny of a behavioral method. Morris concerns himself with the sign *X* and the response *Y.* The process of evaluation, adjustment, reaction decision is not explained,. and we are left with the vague unsatisfying hypothesis of the disposition to respond. If we examine this area we will see that there is present a complex procedure both in animals and in men.

Animals possess a faculty, which while not properly speaking one of reason, is, nevertheless, a faculty of interpretation. This power enables the animal to perceive qualities which are beyond the reach of the other senses. It is a faculty that involves the use of some kind of judgment, but a judgment that is concrete, singular and individual. It observes relations, and observes them in a concrete way. This sense faculty of animals enables them to recognize favorable and unfavorable conditions in the environment. It is called the *vis aestimativa,* an internal sense, which is, according to St. Thomas, the highest faculty existing

in the animal organism.[73] The *vis aestimativa* comes close to reason *(attingit rationem)*.[14] Animals by this internal sense can use signs and, in view of past experiences and present circumstances, react to them. This power is sensory, but it is higher than any of the external or internal senses.

Man, too, has a special sense faculty which is called the *vis cogitativa,* or the particular reason. It is analogous to the estimative sense in animals, but, because of its closeness to the rational faculties in man, it is on a much higher level. Professor Allers defines the proper object of the *vis cogitativa* as "any value whatsoever, in so far as it is realized in a particular thing or a particular situation and apprehended as such."[75] The *vis cogitativa* takes the data furnished by the external senses, but it has a greater independence of the conditions of matter than either the imagination or the common sense. The cogitative power, then, can know only what is concrete, singular and individual. Its specific function is that of *collatio,* that is of taking possession of multiple elements for the purpose of reaching truth through comparison and division. Thus, St. Thomas says that the act of the cogitative power " consists in combination and division."[76] The *vis cogitativa* is a sense faculty, but, because of its close union with the intellect, it is a very superior sense. It grasps the differences that exist between individual data and compares this data. It cooperates with both the imagination and memory in preparing the phantasms so that they will be fit to receive the special influence from the agent intellect which makes them intelligible in act.

Man uses his cogitative power when he makes use of signs. He uses it, however, always in conjunction with his reason.

[73] More detailed treatment of the *vis aestimativa* and the *vis cogitativa* can be found in the following works: R. Allers, The *Vis Cogitativa* and.Evaluation," *The New Scholasticism,* Vol. XV, 1941, J. Peghaire, "A Forgotten Sense, The Cogitative," *The Modem Schoolm.an,* Vol. XX, March, 1948, 128-140 and May, 1948, D. Gangemi, *The Thom.istic Concept of the Vis Cogitative,* Catholic University Philosophical Studies, Washington, D. C., 1951.

[74] St. Thomas, *III Sentences.,* D. Q. 1, art. c.

[75] Allers, *op. cit.,*

[76] St. Thomas, *Sum.ma Theologica,* I, Q. 78, art. 4.

This faculty of interpretation is not and cannot be reduced to a mere motoric disposition. It is far more complex and detailed. It is unlikely that Morris would say that his disposition to respond contains all the elements that are found in the cogitative power. The latter is a function, a faculty of interpretation, that is concerned with an intelligent finding of the significance of a sign. It is a special faculty, a cognitive ability, that is superior to simple sense perception.

By insisting on the method of behaviorism Morris has, in fact, weakened the valuable insight of Peirce's understanding of the interpretant. Peirce insisted on a triadic relation in the sign process which included the object, sign and its interpretant. Since, as Peirce wrote, the interpretant is, in the last analysis, a " modification of a person's tendencies toward action," [77] we can see that there is some psychical element involved. There is a definite relation between the sign process and the mental process. Peirce made use of a process of mediation in describing the sign and included the mind's influence in the total sign process. Morris, though admitting Peirce's influence, does not follow Peirce in his "mentalistic" tenden<'ies. The result is a loss for Morris and severely limits the extension of his semiotical theory.

6. Behaviorism and language:

Before we see how the behavioristic method is applied to language, we shall first explain exactly ·what we mean by language. Basically, we can say that language is an expression of thought. The mind becames aware of reality, forms concepts of this reality, and then seeks to communicate these ideas to others. This communication is called language. Delacroix brings out this relation between the internal and external in his work on language. Hence, he writes:

> The internal exigency for analysis of thought which results in the mental sign meets the external exigency of the need of communica-

[71] C. S. Peirce, *CoUected PapeTs*, Vol. 5, 476.

tion. It is this conjunction of the mental sign and social sign that makes a language.[78]

Language cannot be divorced from thought. Indeed, as Delacroix points out, it is the concept, the mental sign of the thing, that makes language possible. Language is nothing more than the outward expression of an internal concept. Again in Delacroix's words, language "is one of the spiritual instruments which transforms the chaotic world of sensations into a world of objects and of representations." [79] Language is an expression of the intelligible and the sensible. The word is a sign of the thought, which, in turn, is the sign of the object in reality. Every word used in a proposition has many possible meanings. The dictionary does not give all the uses a word can be put to. We might recall the oft-repeated adage that a dictionary is a good servant but a bad master. Each word must be judged in terms of context in which it appears. We should not lose sight of the intentional aspectjn dealing with language. [80]

The intentional character of language becomes quite evident if *we* consider how animals use signs. While animals can perceive signs with their senses this perception is limited. The animal does not possess the same power of adaptation that man has; it cannot separate itself from the biological level. It is true to say that animals communicate, but this communication cannot, strictly speaking, be called language. Vendryes states that " the difference between animal and human language lies in the appreciation of the sign." [81] Animals react to signs, but not in the same way man does. There is no recognition on the part of the animal that the sign is an expression of an " intention." Animals are unable to free themselves from the immediate interest. The definition of a man as a rational

[78] H. Delacroix, *Le Langage et La Pensee* (Paris: Librairie Felix Alcon, 1924), 107.

[••] *Ibid.*

[80] On this point see the excellent article by Ch. Serrus " L'lntention de Signification," *Journal de Psychologie,* 1936, Vol. 33, 321-358.

[81] J. Vendryes, *Le Langage* (Paris: La Renaissance du Livre, 1921), 14.

animal implies that he is a user of signs which express his concepts.

Having seen briefly the character of language, we can now turn to an examination of Morris' theory and see how it treats linguistic problems. The first, and perhaps the most difficult, problem concerns formators or logical functors. Formators, as we have seen, are significant parts of speech, such as "or," " and," " if," and " is." They cause in the interpreter a special type of disposition, " a second-order disposition," [82] which operates by relating other dispositions. For example, we see that the formator " and " produces a disposition which modifies the dispositions to respond found in the sentences or clauses that " and " connects. When we attempt to define formators we must use other formators either implicitly or explicitly. For in defining " or," " if," and " then " of necessity we use formators and so are guilty of a certain circularity of thought that is unavoidable in the given framework.

To escape the dilemma outlined above, Morris might say that this second order disposition caused by the formator is a unique disposition. The formator is said to transform the complex dispositions into one united disposition. If this is true then we would have to posit in the subject a kind of operation which corresponds to the sign complex; We would have to say that there is some mental operation whereby the interpreter can produce the new united dispositiQn. It would follow from this that such an operation would be in the realm of the cognitive and would be present in every complex sign group. But this special disposition would fall outside the fundamental stimulus-response framework of Morris' theory and come quite close to the " mentalistic" explanation of signs that he rejects.

If we consider some of the types of discourse we can see more clearly how behavioral semiotic and language are related. Metaphysical discourse, for example, is listed in the mode-use scheme as formative .systemic. According to Morris, it fits into the .behavioral method because it orders our behavior in a

•• Morris! *Signa, Language and Behavior,* 157.

special way. Metaphysical ascriptors "organize behavior in such a way that their interpreter camiot be surprised." [83] Again Morris says that by this type of ascriptor we are " in a very general sense ' prepared for anything ' but not prepared for any specific happening." [84] It follows from this that even the most abstract conversation dealing with things in the purely speculative realm would, since it is metaphysical discourse, cause some disposition to respond. Yet it is hard to see how the ascriptor, " Being is true," would cause in its hearer any disposition to respond. We take response to mean, in Morris' sense, a glandular or muscular action. If there is such a thing as metaphysical discourse, a disposition to respond does not appear to be a necessary part of it. Is it true that " in a very general sense " we are prepared for anything to happen? Certainly even for the metaphysician there are surprises. He is often forced to examine a problem carefully and to question a fact which, at first sight, does not seem to correspond to his principles. The exact nature of the disposition caused by metaphysical discourse is not given and once again we fail to see how this type of discourse can possibly be reconciled to a behavioral approach.

The same problem exists in other types of discourse, as in mythical or poetic, where there seems to be no necessity to posit a disposition. Cornforth gives an example of a type of discourse which Morris would list as designative-informative. The sentence is: " Columbus crossed the Atlantic in 1492." Cornforth asks where is the disposition to respond, under what conditions would the response take place, and what behavior-family would be involved? He answers that no behavioral response is possible, and that it is much more sensible to list it as an historical statement and be done with it.

Can a behavioral method deal with all the subtleties of language? Carnap in his book, *Introduction to Semantics,* lists some examples of the concepts dealt with in the dimension of

[83] *Ibid.,* 178.
[84] *Ibid.,* 177.

pragmatics. He mentions the concepts of " believed," " verified," and " highly confirmed." [85] One could add to this list other concepts such as, " highly probable," " doubtful," or "certain." Can Morris, using behaviorism and biological terms, define these concepts? It is not difficult to see the difference between the overt behavior in response to a doubtful sign and in response to a certain sign. But is there any observable difference in a person's behavior in response to a highly confirmed sign and to a practically certain sign? In the latter example the behavior would seem to be the same, and the difference unperceptible. Yet there is a difference between a highly confirmed sign and a practically certain sign. The difference is in the noetic order, in the different motives for our consent. This difference is explainable only in terms for a theory of intellectual knowledge. Behaviorism is too narrow to handle these concepts, and it seems too much of a *tour de force* to attempt to identify from behavior the exact certitude a sign has for an individual. General types of certainty can be ascertained by a person's behavior, but not the subtle differences. The motives of consent and the working of the judgment do not always show themselves in behavior patterns.

The same difficulties described above are present if we examine the metalanguage that Morris uses to describe sign phenomena. This brings us to the semantical dimension which is a study of the relations between signs and their significations. A significatum, is defined as the conditions such that whatever meets· these is a denotatum of a sign, is necessary in the semantic level. An adequate explanation of the significatum includes terms that fall beyond the realm of a behavioral description. There is need for a metalanguage that would describe the properties shown by any possible denotatum of a sign. Such a metalanguage would have to be composed of abstract terms and logical concepts. The metalanguage that Morris uses cannot avoid being set in universal and abstract terms. Significatum, denotatum and interpretant are certainly

[86] R. Carnap, *Introduction to Semantics*, 28.

universal concepts. Yet Morris' theory has no place for universals. MoiTis, then, is faced with the impossible task of explaining the metalanguage of semiotics on the basis of behaviorism which, of itself, is too restricted to deal with such concepts.

It would be wrong to say that all language sigp.s are outside the behavioral method. There are many examples where a disposition to respond is caused by a language Slgn and where overt behavior is present. In the life of the ordinary man, whose actions are largely dependent on practical exigencies, there is most often a disposition to respond caused by language. While admitting this, we do say that we cannot infer from this that *all* language signs cause a disposition. Our argument rests on the fact that language is such a subtle entity, and so bound up with man's mental operations, that a behaviorial method alone cannot explain it.

Morris' semiotic is founded on the most primitive type of sign relations: sign, denotatum, interpretant. Language, however, goes beyond this type of sign relation. Language is an expression of an internal reality, the concept or judgment. In man the simple stimulus-response relationship is more often than not quite complex. We have a stimulus which is followed by a network of internal concepts of meaning. Each language sign has distinct objective concepts and meanings in a middle level between the stimulus and response. It is this level of intention which distinguishes man from the beast. Morris' approach does not properly explain that area of interpretation, combination and evaluation.

C. GENERAL CONCLUSION

After having presented MoiTis' theory of behavioral semiotic and having examined it critically, we came to a negative conclusion. We felt that his approach was inadequate to treat the various types of sign phenomena. Morris, as a positivist, seemed to insist so strongly on the biological and empirical foundations of the sign process, that the spiritual character of

the interpreter was overlooked. In concluding this article we would like to make a few remarks in a more positive direction regarding the genuine contribution Morris has made to the field of semiotic.

The three dimensions of semiotic: semantics, syntactics and pragmatics, are described at length in Morris' *The Foundations of the Theory of Signs.* We find only a brief mention of them in *Signs, Language and Behavior,* where Morris was more interested in presenting the unity of semiotic. This division into three levels or dimensions has been most favorably received by the vast majority of American philosophers. It is a logical and a useful way to divide the different aspects of semiotic. A thorough examination of the science of signs would necessarily treat of each of these dimensions. A glance at current philosophical periodicals will reveal that this division is widely used. At times a footnote will acknowledge the debt due to Morris. More often than not, the division will be used with no reference, thus indicating that it has been taken over as a part of a working terminology.

In formulating the dimensions of semiotic, Morris incorporated the investigations of other philosophers who had studied the question of signs. Carnap, for example, wrote much on syntax and, in his earlier works, insisted that logical syntactical analysis was the only work of philosophy. George Mead gave no place to syntax in his philosophy of signs, but stressed the social factor in sign usage and examined the relations between signs and their interpreters. Morris used these two levels and joined to them a third which he called semantics. This third dimension studies the relations of signs to the objects signified. It has been pointed out that "the limitation to Syntax was felt to be suicidal," [86] and it is equally true to say that the science of signs could not be restricted solely to a consideration of the social aspect. Roy Wood Sellers remarks that the use of these

[88] R. W. Sellers, "Materialism and Human Nature," in *Philosophy for the Future,* ed. R. W. Sellers, V. J. McGill, M. Farber, (New York: The Macmillan Company, 1949), 94.

two levels resulted in " an advance into semantics and semiotics under the guidance of C. W. Morris." [87] Morris took syntax and extended its meaning to include more than just language signs. He made syntax, in Camap's sense,[88] part of the dimension of syntactics. The dimension of pragmatics, based on Mead's insistence on the social aspect of signs, treats the origin, use, effect and social enviomment of the sign. It is Morris' intention that the three dimensions of syntactics, semantics and pragmatics have a universal application and not be restricted to just language signs.

In an extremely well written article by R. Z. Lauer entitled " St. Thomas and Modem Semiotic," [89] we find discussed the relationship between Morris' behavioral approach and St. Thomas' theory of signs. Miss Lauer affirms that in many aspects they are surprisingly close. She believes, for instance, that both agree on goal-seeking behavior, since it would not be possible to hav-e behavior that is not directed to some goal. She reminds us of the truth that " *Omne agens agit propter finem."* The difference in the two approaches is that for Morris the goal is always extrinsic, outside of the agent, while for St. Thomas, the goal of immanent behavior is intrinsic. In comparing the *interpretant* of Morris with the *concept* of St. Thomas she finds reconciliation possible. She argues:

> Nevertheless, since all willed actions are what they are by reason of the knowledge the agent has (though this is not the sole cause of their specification), and since any knowledge contains at least the possibility of influencing behavior, a concept can be said, in some sense, to be a disposition to respond. [90]

One can agree with Miss Lauer that " in some sense " there is a similarity between the interpretant and the concept. She

[87] *Ibid.*

[88] Carnap's views on linguistic analysis have evolved much since his earlier writings. He now holds that the work of linguistic analysis must include pragmatics and semantics, as well as syntax.

[89] R. Z. Lauer, "St. Thomas and Modern Semiotic," *The Thamist,* Vol. XIX, 1 (Jan., 1956).

[90] *Ibid.,* 92.

makes it clear, however, that, in its most important aspect, a concept is not a disposition to respond, since " knowledge is not *ultimately* for the sake of any action which depends upon the will; rather, knowledge holds the ultimate place in the series of human goals." [11] Yet, in so far as intellectual cognition consists in the actualization of a potency, then there is some response, but not in quite the same sense as in Morris' theory. Again, since we receive all our knowledge in some way from the senses, then there is present in the interpreter an opportunity or possibility to respond. We can also say that, in as much as every sign draws or directs _our attention to something besides itself, we have a behavioral action in a very wide sense. The fact remains that the fundamental differences between Morris and St. Thomas make any work of correlation all but impossible.

While we do not agree with Morris' theory of signs, we do feel, nevertheless, that he has made a genuine contribution to semiotic. His book *Signs, Language and BehavioT* is encyclopedic and is the most thorough work we possess on behavioral semiotic. His attempt is a sincere one and one cannot read his writings without receiving new insights into specific problems as well as developing a certain awareness_of the difficulties present in any sign theory. We did criticise his use of behaviorism as a method, but we also pointed out that we did not intend to condemn the behavioral method *in se.* The method of direct observation, of empirical evidence, is important in the science of signs. It is most beneficial for scholastics to read Morris and to examine this modern contribution to semiotic. A thoughtful and clear examination of modern semiotic helps the scholastic to re-examine his own position and to seek truth no matter where it may be found.

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[11] *Ibid.*

A TENTATIVE PROBLEMATIC FOR A PHILOSOPHY OF THE SOCIAL SCIENCES

I. INTRODUCTION

SLIGHT acquaintance with the social sciences and with some of the philosophic discussions concerning problems they raise is sufficient to convince any philosopher that the philosophy of the social sciences is a vast and largely uncharted domain for investigation. However, the, inherent importance of the philosophic issues raised by the social sciences and the practical urgency of their implications compel the attention of anyone concerned with ethics as a discipline relevant to social policy. Moreover, the manifold difficulty and relative scarcity of studies in the philosophy of the social sciences render this field uniquely challenging.

How should one begin? It might seem that the necessary first step is to cultivate a broad and deep acquaintance with the elements of all the social sciences and to seek a certain level of competence in one or more of them. Certainly some such undertaking will be essential, since it obviously is impossible to develop an adequate philosophy of the social sciences without a firsthand knowledge of them in themselves. But such study will be endless and pointless if it is not guided by some tentative heuristic structure. Which works should be studied? Which should be passed over as too specialized and too remote from central philosophic issues? In the philosophy of the natural sciences-in the foundations of physics, for example-this problem is not so great, since the material is well organized and the issues are sharp. But in the social sciences there can be considerable doubt even concerning which disciplines or which topics within ·any discipline are fundamental.

Should one begin, as a good scholar, by surveying the work which has been done in the philosophy of the sciences?

Certainly, this survey will be necessary, since any attempt to develop a comprehensive philosophy of the social sciences can profit greatly from work already accomplished; moreover, any new undertaking must reckon with previous relevant work, either to integrate its results or to show their inadequacy. Yet such a survey is rendered difficult, not only by the extent of the material, but also and especially by the lack of a clear demarcation of the philosophy of the social sciences. Diversities of philosophic view already have their effect within the social sciences themselves. It would be all too easy to permit available indices and bibliographies to narrow or even to predetermine the outcome of an investigation in the philosophy of the social sciences, since diverse philosophic orientations will locate the investigation in diverse places; either in treatises near the beginning of substantive works in the social sciences, or in special treatises such as those on methodological issues, or at some point within one or more of the established philosophic disciplines, or in a special philosophic inquiry. If a survey of available materials is not to be arbitrarily narrowed, all possible sources should be explored in so far as they are relevant.

" In so far as they are relevant" -there is the difficulty. An investigation must begin somewhere and it must use some criterion of relevance at the outset. In any philosophic investigation we begin from where we are. We need not peer out out through metaphysical peepholes and assume absolute cash-value for the promissory notes of our merely contingent opinions. Quite the contrary. We must become aware of the peepholes we use in order to see around them and we must discount our opinions as we begin questioning what we had assumed without question. The first step toward a comprehensive philosophy of the social sciences is to draw up. a tentative list of the problems to be investigated together with the reasons one already can construct on both sides of each ISSUe.

This tentative problematic is a useful *first* step, since it must be followed by serious study of the social sciences themselves

and an adequate survey of philosophic work on issues they raise. No conclusions can be reached without carrying out both of these studies. The list of problems should be *tentative,* since it will be merely heuristic; as the inquiry proceeds it will be modified repeatedly and even completely recast. Like an initial filing system for a new business, it will aid us in our first attempt to sort the materials, but it will be adapted as much as possible to meet the requirements of the materials. When the system breaks down, a new one will have to be established, since we must not cut our business to the measure of our operating procedure. The list also must be a tentative *problematic,* since only questions determine what is relevant to an inquiry. The problematic should include *arguments* one already can construct, since prejudices can be discounted if they are made explicit. Finally, arguments *on both sides* of each issue should be stated, since the questions are still open; the whole of one's opinions relevant to the issues should be stated, for the richest possible alternatives must be developed if the outcome of the investigation is to be at all adequate to its subject matter.

True, one can begin an inquiry without working out a tentative problematic. However, I think it safer to be explicit about the point of departure. Besides, the nearest place to begin looking for philosophic reasons is within one's already-formed opinions; the evident inadequacy of this source for knowledge is at the origin of the curiosity which both leads to further investigation and guides it by determining the greater relevance of a few of the almost infinite materials which could be studied.

No universally valid, tentative problematic is possible. In the nature of the case, this stage of inquiry is personal. Why, then, should it not remain among its author's private papers? Inasmuch as it is a fragment of an inquiry, it should. Nevertheless, I present this fragment for three reasons. First, as an example of the method of tentative problematic, which I have just described. Second, as a proposal of several questions and

arguments, for whatever value they may have. Third, as a stimulant to discussion among those interested from diverse points of view in the philosophy of the social sciences.

I have divided the questions and arguments into four groups: subject matter, method, principles, and purposes. This division, based on Aristotle's division of causality, reflects my own broadly-Aristotelian orientation. · Within each section I offer four problems.

II. PROBLEMS CONCERNING SUBJECT MATTER

1. Whether the subject matters of geography and history are such that they can be sciences?

On the one hand, the proper principles for the organization of data in geography and history-namely, space and time-seem to make their subject matters non-scientific, if " science " connotes generality and necessity expressible in laws or law-like statements. Of course, neither geography nor history concerns isolated particulars, for both of them study trends and distributions. These studies, nevertheless, seem to involve mere grouping of data, rather than any generalized interpretation of data; the mathematics used in their organization, which is scientific to be sure, does not serve as a theory from which the data can be derived. Of course, attempts have been made to develop geographical and historical laws, but the purported laws seem to derive from and properly belong to other disciplines-for example, to economics or to political theory. The conditions and properties of social entities insofar as they are in space and time can be subject matter for a general investigation-for instance, philosophic anthropology or philosophy of history-but such investigations seem to rest on metaphysical assumptions. Their results are not subject to confirmation or falsification by any given set of social phenomena. For these reasons, it might seem that geography and history do not have such subject matters that they can be sciences.

On the other hand, physical geography and natural history apart, there is a close relationship between geography and

history and other disciplines which are numbered among the social sciences. One might try to explain this relationship by saying that geography and history are non-scientific disciplines auxiliary to properly scientific social inquiries, or by saying that geography and history are joined with the other social sciences in objectives rather than in subject matter. However, cannot a case be made for calling geography and history "social sciences" in a stricter sense? Space and time, considered in certain ways, it is true, do not establish intelligible order, but only empirical unity. However, in genetic theories space and time in the concrete may enter as conditions of an intelligible order. Considered as conditions or relationships immanent to a moral object-that is, as cultural factors-space and time in the concrete have some intelligible status. The relationship between particular and universal in a logic suited to natural science (or to part of it) may not apply in a logic suited to social science. Quite diverse logics may be necessary, since moral objects seem to be intelligible particulars.

2. whether the subject matter of economics is such that it can be a *social* science?

On the one hand, economics seems to be the most solidly established and clearly scientific of all the social sciences. Economists claim to use a scientific methodology; clearly, the subject matter with which economists are concerned does not prevent them from making general statements having a certain degree of necessity or a law-like character. Moreover, since economists as such are not interested in natural entities inasmuch as they are natural, but only insofar as they are circumstances or materials conditioning human processes of production, distribution, and consumption, it appears both that economics is a science and that it is a *social* science.

On the other hand, the development by economics of theories requiring idealized models, including models for man-such as the economic man-may cast doubt upon both the scientific knowability and the social character of the subject matter of economics. The concept of efficiency is essential to economics.

This concept presupposes a defined set of goals attainable by multiple but relatively scarce means. Consequently, one might argue that economics is merely a technology for acquiring and distributing scarce resources. According to this view, the history of economics as a rational discipline is merely the history of the emergence of a technique from practical experience at the level of common sense; economics has no more reason to be called " social science " than has any other type of engineering, since all such techniques guide human operation by applying scientific knowledge.

8. Whether the subject matter of psychology is such that it can be a *social* science?

On the one hand, psychology seems to be a natural science rather than a social science. Of course, some problems included in what is conventionally called " psychology " are metaphysical or otherwise philosophical. Hqwever, the study of man as such is the study of a natural entity which is prior to society and a condition of it.. Even when psychologists examine the abnormalities of diseased individuals and the distinguishing characteristics of psychological types, they are investigating the variability and constancy of the structure and functioning of human beings inasmuch as they are entities of nature. Of course, many social factors have been investigated by psychologists, particularly by those interested in personality and in so-called social psychology. These studies, however, seem to be included in psychology only by a historical accident; properly, they belong to ethics, sociology, political theory, or anthropology.

On the other hand, it seems impossible to consider man as man and yet to study him as a merely natural entity. True, we can study man in this way if we consider him only according to what he has in common with other entities in nature. For example, for a physicist, man as a mass behaves as any other mass. For a biologist, man dispiays structures and functions common to other higher animals or differing only in detail from theirs. However, a consideration of man in himself requires a

point of departure in his integrated and total behavior insofar as it is observable externally, introspectively, or in both ways. If this requirement is observed, social determinants cannot be ignored; in inquiry into man as man, the natural aspe<fts of human behavior become subordinated to the organization of culture and the integration of individual personality. Since culture is essentially social and personality-integration is unintelligible in abstraction from social conditions, it follows that psychology is a *social* science.

4. Whether there is *one* subject matter for social science? On the one hand, the very plurality of the social scjences seems to show that there cannot be a single subject matter for all of them. In many cases, the same objects are considered in diverse aspects by two or more of these disciplines. Moreover, there seems to be no general social science of which the rest are specifications. Although the social sciences study a single order of entities-the social-moral order-this community no more indicates unity of subject matter than the community of nature indicates unity ·of subject matter for the natural sciences. A subject matter is not unified by the connection and unity in any respect whatever of the things considered-if were the case, only one science would be possible-but by the unity of things considered under a definite and unified point of view. Thus, the social sciences have only an unsystematic unity based on their common concern with a single order of entities.

On the other hand, if we eliminate those treatises in social science which can be distributed among literature, philosophy, technology, and natural science, there remains a definite group of inquiries which seem to have unity of systematic subject matter. The distinctions among the various disciplines seem to be less according to proper points of view than according to their attachment to different adjacent disciplines and the different phenomena within the social-moral order selected for investigation. There cannot be a general social science, then, since there is only one social science, whose parts or treatises are

dispersed among separately institutionalized disciplines. The differences in treatment of the same data by different disciplines arise in either of two ways: {1) the data investigated are not- within the primary subject matter of social-scientific consideration, and they can be viewed differently from various problematic points of view; (fl) the differences in treatment manifest diverse theoretical positions which happen to be institutiionalized as parts of distinct disciplines-for example, pragmatism may be accepted implicitly by the treatment of the family in one discipline while a more empiricist view may be ac<Jeptedimplicitly by the treatment of it iy another.

The unitary subject matter of social science may be defined in terms of culture. Culture is the collective totality of all the consequences of human decisions. It includes as its elements: {1) character, habits, and acts; (fl) beliefs, attitudes, and customs; {8) everything conventional and symbolic, including all uses of language; (4) positive laws with the rights and obligations arising under them, institutions, and all instances of human conflict and cooperation; (5) all products of human effort, art, and technology. *A m.dture* is a subset of the class of culture. A culture derives from a specified group of persons or a *community;* it is defined by their joint participation in one or more cultural elements; their culture can be characterized by the probable -occurrence of definite cultural elements under specified conditions such that (1) these conditions are present in the community, (fl) the probabilities of the occurrence of two or more cultural elements can be correlated, and (8) the pattern of their correlation can be referred to and in some sense explained by the elements which define the community. To say that social science has culture as its common subject matter and that the primary social entities are cultures is not to limit social science to anthropology. Culture as I have defined it includes everything in the social-moral order. The anthropologist, however, is concerned only with cultures that can be defined in terms of some institutional community including spatial-temporal continuity among its determinations.

III. PROBLEMS CONCERNING METHODS

I. Whether experimental method is applicable in the social sciences?

On the one hand, the experimental method seems to be nothing other than the natural way in which the human mind operates. Given a problem, a possible resolution of the problem is suggested, and this suggestion is confirmed when it yields suitable results in practice. The refinement of the experimental method practiced in the natural sciences may not be applicable in the social sciences, but neither is the method precisely the same in diverse applications in the natural sciences. Areas in the social sciences in which experiment is impossible are not strictly scientific; rather, they belong to the formation and execution of concrete policies.

On the other hand, one may argue that the experimental method, properly speaking, is a procedure originating in technology, a variant of which has been developed and used in the natural sciences. True, one can view moral life and politics in the light of a general technology, for example, dialectical materialism. Although such a position is morally unsound, viewed in this way the moral and political order becomes subject to the method of experimentation. In so far as experimental method requires the confirmation of a general hypothesis by the fulfillment of predictions deduced from it, it is not applicable in genuine *social* sciences for two reasons. (I) The subject matter reacts to experiments performed upon it in ways that are unpredictable and irregular. (2) The isolation of part of culture from the remainder of it is impossible and classes of cultural events can never be represented adequately by any of their instances. Moreover, it would be immoral to attempt to use experimental method in social science, since this method subordinates the subject matter to the interest of the scientist as such.

2. Whether there are special instruments and laboratory techniques in the social sciences?

On the one hand, one may argue that special instruments and laboratory techniques are required in the social sciences inasmuch as exact measurements must be taken; precise instruments of measurement must be designed and the measurements must be taken with carefully controlled techniques. These conditions are satisfied in the design of tests or questionnaires, the selection of samples, and the interpretation of statistics, just as they are by the special instruments and laboratory procedures of the natural sciences.

On the other hand, one may reply that calling these methods "scientific procedures " is merely a metaphor. The instruments used in natural sciences are useful for two reasons. (1) They augment our rather weak perceptive powers. (2) They transform qualitative differences into readings on numerical scales. Our perception of social-moral phenomena is not sensitive but total-experiential; it neither needs nor is susceptible of artificial augmentation. The use of survey techniques, tests, and questionnaires is not an improvement on ordinary means of estimating moral-social realities, but is either part of the ordinary means or a surrogate for them, having only the advantage of speed in handling a huge volume of data without a lived experience of every item. Qualitative differences here cannot be transformed into different readings on a numerical scale; although judgments can be expressed metaphorically by mathematical models, such expressions are not strictly meaningful, since they are never proportionate to what they are intended to represent.

3. Whether it is possible in the social sciences to establish law-like statements from which precise predictions can be made?

On the one hand, it seems impossible in the social sciences to establish law-like statements from which precise predictions can be made. Of course, insofar as the social sciences deal with natural entities, certain laws may be established; insofar as they deal with techniques, certain rules may be set down; insofar as they contain metaphysical speculation, certain meta-

physical statements may be formulated. Properly, however, the social sciences investigate the consequences of human choices, and choices are not determined by the unique insight which formulates the unique object with which they are concerned-they are free. Laws, therefore, cannot be established with respect to them, except in the sense that imperatives made to guide them are called "laws." Presumably, however, science seeks general, factual, but necessary statements; these cannot be established by a properly *social* discipline.

On the other hand, one can rejoin that this position would require so absolute a freedom that all generalization with respect to culture would become impossible. Yet this proposition is manifestly false, since we leam by experience in the moral-social order, just as we do in the natural order. From a sample, generalizations applicable to similar cases can be made successfully. True, the generalization is only statistical, but it is genuine and it has a certain necessity. Predictions made concerning the actions of a man having a certain character will hold for the most part; of course, his character may develop, but even this development can be taken into account. The demand for total indeterminacy overemphasizes the requirements of determinacy; all that is required for necessity is that probabilities hold within a certain margin of error. Social-moral entities do occur with such necessity; the cases wherein the probabilities do not hold are those in which a conversion process or a cultural revolution occurs. To require absolute indeterminacy would be to suppose that eyery single act manifests a total and radical conversion; experience does not bear out this supposition.

4. Whether there is an appropriate mode of defining in the social sciences?

On the one hand, one may argue that no mode of defining can be proper to the social sciences, since the various modes of definition are logical, and logic remains the same regardless of subject matter. Certainly, there are definitions in the social sciences different from those given in other disciplines, for they

have a special subject matter to investigate; however, the *modes* of defining are the same.

On the other hand, social-moral entities in some way are constituted through their formulation by man's own deliberation. Hence, these entities have no definitions distinct from their nominal definitions as natural entities do-that is, the conditions required for using a certain word to signify a moral entity are precisely what that entity is. The assumption logic is the same for any subject matter may be correct for different theoretical sciences. However, thinking concerning moral-social entities is not merely a specialization of theoretical thinking. The understanding of culture requires some personal engagement that the understanding of nature does not, since the whole of culture is relative to deliberation and choice. Moreover, although a certain abstraction is possible so that definite meanings can be given to " just," " president," " public works," and so on, still the affirmation of a concretization of one of these ideals is never twice ·quite the same. We know by *common* sense what a just act is, but no two just acts have exactly the same realization of justice; nor is this difference only in degree, since it is impossible for " more " and "less" to qualify" just" except metaphorically. The implications of this point include the following: thinking about social-moral entities is a process quite different from thinking about natural' entities; the former process requires a logic all its own.

IV. PROBLEMS OF PRINCIPLES

1. Whether there are any principles common to the social sciences and other disciplines?

On the one hand, it seems that the principles of mathematics are common to the social sciences and other disciplines; at least, the leading principles of mathematical logic (although not the principles within any single system) would seem applicable in either domain. Otherwise, the basic notions of unity and plurality, class, relation, and so on, would not apply in the social sciences. This consequence is patently false; moreover, it would imply that the social disciplines not only have a mode

of knowing diverse from the natural sciences, but that they have no mode of knowing at all.

On the other hand, one might reply that two diverse types of propositions are used in the social sciences, just as in the natural sciences. Sometimes, merely hypothetical assertions are made; in such cases, the ordinary rules of logic apply and generalizations can be formulated-at least, to some extent-mathematically. Sometimes, however, the assertions made are unconditional, although only probable with a degree of probability. In such cases, the assertions cannot be formulated mathematically; the rules of *ordinary* logic need not apply, and there are no principles strictly common to the social sciences and to other disciplines. Of course, certain verbal formulae can be given analogous meanings in the social disciplines and in the natural sciences; however, insofar as they do not define their subjects in the same way, no principle has the same meaning; common words are equivocal.

2. Whether there are any principles common to all of the social sciences?

On the one hand, if there is community of subject matter then there must be community of principles in the social disciplines. No doubt, there are few principles common to the entire domain; perhaps these few are not even very interesting once they are understood. The notion of culture itself appears to be one common principle. Moreover, although they may not function as principles in the social sciences, the notions of value, choice, norm, character, obligation, and certain generalizations which can be made about them, seem to be principles relevant to all the social sciences.

On the other hand, one might argue that these principles are not principles of social science, but of social philosophy. Let us assume that social science achieves law-like statements verified concerning a common subject matter--culture. Nevertheless, there are no common principles, since existing cultural orders depend on man's diverse opinions and choices. Since opinion evolves and will be either good or bad in a variety

of ways, social-moral entities exist and are defined in ways irreducibly diverse so far as scientific consideration is concerned. Thus, even if the subject matter of the social disciplines is one, there is no principle common to it, but a variety of conflicting principles, having diverse degrees of adequacy, which can be stretched to cover the entire domain.

3. Whether natural law provides principles for the social sciences?

On the one hand, it seems that natural law must give principles to the social sciences; if their subject matter is culture (defined as the consequences of choices), natural law determines their subject matter. True, one cannot always argue from what ought to be to what is in fact; however, in case one is considering a man of perfect good will, such an inference is valid. The ideal case may serve as a typic in terms of which other cases can be understood; without a typic, all cases remain unintelligible. Thus, natural law seems to provide principles for the social sciences indirectly by providing a rational norm in terms of which existential perversity and degeneracy can be judged and by which actual situations must be understood.

On the other hand, the principles which constitute natural law are imperatives, not statements of fact. As imperatives, these principles are independent at least of the experiences which social scientists study. Nor are the principles of natural law necessary to establish a typic in terms of which facts might be understood. The general norms expressed by natural law are inapplicable to particular cases except insofar as each situation is formulated and understood independent of natural law as a moral case, which then can be seen to conform or not to conform to it. The only community between statements of social science and imperatives of natural law, then, is in certain terms which occur in both.

4. Whether any principles in social science are general-that is, univocally applicable to parts of the class of which they are asserted primarily?

On the one hand, some principles must be general or all of

them would be specific. If so, it would be impossible to organize the social disciplines or to find any interrelationships. True, there may not be anything really common in which all the entities studied by the social disciplines participate; however, there must be some intelligible unity expressible in univocal terms.

On the other hand, one can argue that there cannot be any general principles whatever in social science. A general principle presupposes an isolable aspect of a subject matter-that is, a structure intelligible apart from the conditions of its concrete occurrence (a form apart from matter). In social science, however, the subject matter does not involve such a metaphysical constitution that admits of general consideration; to consider the material of culture apart from its status in a social-moral order is to consider something which is established in an altogether different order. The general principles, therefore, ·lie outside social science itself in philosophy or in the natural sciences. Furthermore, what holds of social entities considered in general does not necessarily hold of them in particular cases; a social entity can exist without having what is essential to it, since evil is a species of moral reality.

V. PROBLEMS OF PURPOSES

1. Whether knowledge in the social sciences can be for its own sake?

On the one hand, inasmuch as social science consists of factual, not normative, principles and conclusions, such knowledge can be sought for its own sake. Detachment from possible practical implications of what is discovered is a necessary condition of unbiased objectivity here just as it is in the natural sciences. The results of human decisions are entities like any other entities; one can be interested in them merely for the sake of knowing them.

On the other hand, one can maintain that knowledge in social science should not be sought and cannot be possessed merely for its own sake. True, a theoretic consideration of moral entity is possible; however, such a consideration is metaphysical, not

social-scientific. Social science cannot be had for its own sake, because it cannot be had at all without a personal involvement of the knower, since without engagement in the values which determine or fail to determine the entities investigated, the inquirer has no means of defining them. Further the entities studied by social science not only can change, they can change unpredictably in response to the very social process of inquiry itself. Moreover, even if social-scientific knowledge could be had merely for its own sake, it should not be sought with purely theoretical interest; the elements of the subject matter are or affect human values which, insofar as they are direct objects of choice, are more important than any possible knowledge about them.

i. Whether knowledge acquired in social science can be applied-that is, used as a social technology or engineering?

On the one hand, it seems that such knowledge cannot be applied in a social technology or engineering, since man is not a material that can be subordinated to the operations and objectives of an art. Since man's fulfillment is not a limited objective, his decisions, which conduce to his end, cannot be guided with efficiency. The knowledge gained by social science only contributes to moral deliberation. Of course, parts of the existing social sciences are natural sciences applicable in techniques, and other parts are purely technical. However, properly social knowledge is neither technical nor applicable in any technique.

On the other hand, not everyone accepts the notion that man's fulfillment is infinite and indefinable. Inasmuch as such a notion is not accepted, men and societies do treat themselves as material susceptible to technical manipulation. In at least some such cases the knowledge gained by social science can be applied as a social engineering-although one might wish to argue that such application is immoral. Perhaps, moreover, the knowledge acquired by social science can be applied, if in fact man's end is definable in a significant respect, and adequate means to it are provided, if not by nature, then by a supernatural economy of salvation.

3. Whether knowledge attained in social science can lead to categorical imperatives?

On the one hand, on two grounds it seems that knowledge gained in social science cannot lead to categorical imperatives. First, the statements of the social sciences themselves are indicative; no accumulation of indicative statements can conclude in an imperative statement. Second, social science cannot remain scientific if it includes principles of faith. Those who accept such principles may believe that without them it is impossible to formulate categorical imperatives, since all imperatives which disregard the content of divine revelation are inapplicable to man existing in his true situation-which man cannot know by himself.

On the other hand, one may argue that the knowledge acquired by social science is valuable precisely insofar as it aids in the formation of moral objects ·and the judgrilent of these as morally good or bad. Such concrete judgments of conscience are the only true categorical imperatives. The investigations of the social sciences indicate what is appropriate to men and societies of various kinds; they help one to be consistent with his own character. This assistance implies no mere static determination, since the evolution both of individual character and of social structure is appropriate. The social sciences also help us to know what to expect of others under various conditions, information important if wise judgments are to be made. Knowledge of social science leads to categorical imperatives, then, not determining them wholly, but contributing significantly to their formation.

4. Whether the objectives of the social sciences vary according to the personal commitments of each social scientist?

On the one hand, it seems that the personal commitments of the scientist cannot enter into the determination of the objectives of social science; otherwise, the social sciences would lose scientific detachment. If the objectives of the inquiry were controlled by the purposes of the investigator, then his methods and principles also necessarily would be controlled by them.

The result would be as many social sciences as social scientists (or, at least, as distinguishable moral types of social scientist); this consequence seems absurd.

On the other hand, the social sciences do seem to vary according to the political conditions and personal commitments under which they are conducted. This variability should not be surprising; the objectives of a scientist cannot be distinguished altogether from the objectives of the science itself in a non-theoretical inquiry. The social sciences neither are nor should they seek to become purely theoretical. The commitments of the scientist, consequently, will play some role in determining the science. There are not necessarily as many sciences as scientists or types of individuals, however, since basically there are only two types: (1) those who recognize the distinctness of the moral order, and treat the knowledge attainable by social science as distinct both from purely theoretical knowledge and from technical applications; (2) those who try to align social science with the natural sciences, and who treat the normative implications of social science as technical applications rather than as contributions to prudent deliberation.

VI. CONCLUSION

The second side of each argument is the one which I at present consider more likely. Nevertheless, the positions presented "on the other hand" do not form a consistent view, much less a compelling one. If they were consistent, I would be in a position to offer a hypothesis rather than a tentative problematic; if they were compelling, there would be no problems to investigate.

I am certain that many additional arguments can be constructed on either side of these problems, and I am not at all certain that these are the only or even the most relevant problems. The improvement of the problematic itself, however, is the business of the actual investigation to which these considerations are no more than a tentative introduction.

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NOTES ON OUR CONTRIBUTORS

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PATRICK GRANFIELD, 0. S. B., Ph. D. *(Collegia Sant' Anselmo,* Rome), S. T. D. (Catholic University of America), a member of the faculty of the School of Theology at Catholic University, has been made an associate editor of *The American Ecclesiastical Review.*

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BOOK REVIEWS

The Idea of Freedom, Vol. II. By MORTIMER J. ADLER. Garden City: Doubleday and Company, 1961. Pp. 754, with bibliographies and indexes. $7.50.

Volume One of this work appeared in 1958 and has been reviewed extensively. The *Thomist* carried a review of this work in Vol. XXII, N. 4 (October, 1959), pp. 565-570, written by Fr. David O'Connell, O. P., and readers may refer to this review for a detailed account of the contents of Volume One. The first chapter of Volume Two makes the transition between the two volumes. Here it is necessary only to state very generally the contents of Volume One in order to see its relation to Volume Two.

Volume One was divided into two books. Book I explained and defended the nature and method of the dialectical enterprise with which the Institute for Philosophical Research has been engaged. In particular, this dialectical effort was distinguished both from a history of ideas and from a strictly philosophical consideration of such subjects as freedom. (Despite some criticism which can be and has been raised against the legitimacy of this distinction-particularly as to whether various authors can be considered in relation to each other without doing violence to historical context-nonetheless these three areas, though always related, are still sufficiently distinct provinces of investigation, each meriting its own proper development.) Book IT of Volume One thereupon applied the method described to the idea of freedom by dialectically examining the different conceptions of freedom. Adler and his associates arrived at the position that there were five distinct subjects involved in controversies centering on freedom. Three of these, considered to be main subjects, are named: *Circumstantial Freedom of Self-Realization* (an individual is able to act as he wishes for his own good as he sees it); *Acquired Freedom of Self-Perfection* (by acquired wisdom or virtue, one is able to will or live as he ought in conformity to moral law or some ideal); *Natural Freedom of Self-Determination* (a freedom possessed by all men in virtue of a power inherent in human nature). The other two subjects are sufficiently different to warrant distinct consideration. *Political Liberty,* a variant of circumstantial freedom, is a freedom possessed only by citizens having the right of suffrage; *Collective Freedom,* though a variant of *Self-Perfection,* differs from it by being acquired by the human race in the course of its historical development. Over and beyond these five subjects of special controversy there is the controversy among all authors about the generic meaning of freedom. This meaning is formulated as follows: *a man is free who Twa*

in himself the ability or power to make what he does his own action and what he achieves his own property (p. 16}•

In the course of clarifying the meaning of freedom and in listing the various authors who hold views compatible with those meanings, Volume One also outlined the problems to be solved arising from controversies. Five are listed. The first two are solved in Volume One:

(1) To identify the distinct freedoms which are the subjects of special controversies.

To identify the subject of the general controversy about the kinds of freedom, i.e., freedom in general.

The remaining three problems, to be solved in Volume Two, were:

(3) To formulate the questions which raises the issues that constitute the controversies about each of these subjects.

(4} To formulate the positions taken on each issue, together with the arguments pro and con that constitute the debate of these issues.

(5} To describe the form· or structure of each controversy by reference to the ways in its constitutent issues and arguments are related.

Chapter Two of Volume Two carefully explains the technique used to solve these problems. Let us suppose, for example, that there is to be a dialectical construction of an issue about circumstantial freedom. Two authors, in minimal topical agreement on the subject, may give incompatible answers expressed so explicitly that it only remains to *report* the issue and their disagreement. Often, however, the two authors do not explicitly join issue. Here is where dialectical construction begins in that Adler and his associates may find it possible to *construe* the authors as being in disagreement if, implicit in their expressed views, there is ground for interpreting their positions on freedom as answering in opposite ways the same question. To do this satisfactorily, i.e., objectively, the dialectical construction must be in a " neutral " language devised expressly for this purpose; that is, it must be a language not peculiar to doctrinal commitments of this or that author. At the same time, this construction in a " neutral " language must be based on what the authors have said and would be (or would have been) acceptable to the authors in question. The whole success of this tremendous venture depends on the validity of such dialectical construction, not only for formulating questions at issue, but for carrying on debate about the issues when formulated.

It may be questioned whether a language can be " neutral " in the sense required. A sufficient answer is that, in principle, *ordinary* language, by the very fact it is ordinary in the sense of common usage, is an uncommitted means of communication. Were it otherwise, any and all discussion is doomed in advance to failure. The only valid criticism on this point is not with respect to the principle involved, but whether in fact it is con-

sistently and validly applied. It seems to this reviewer that only by way of exception can criticism along this line be raised.

Part. I of Volume Two, then, covers the recapitulation of Volume One and the exposition and defense of the dialectical method used in the construction of the controversies.

Part II, the longest section of the volume (pp. *32-535)* , is on the general controversy, that is, the controversy concerning the five kinds of freedom; thus, some authors maintain there is only one, others two or more, and still others that while freedom is unitary, nonetheless it has several distinguishable aspects. These views had already been summarized in Volume One (pp. *592* ff.) resulting in thirteen different answers to the general question about the kinds or aspects of freedom. Adler and his associates wisely recognize that the issue thus presented would be too complex (one issue involving thirteen sides, each opposed to all the rest) . They therefore broke up the complex issue into a number of simpler issues; each issue is thus about one kind of freedom that certain authors affirm and others reject. One kind of freedom, however, may give rise to more than one issue, and this difference leads to a distinction between " conceptual " and " existential " issues. In a conceptual issue, the conception of a kind of freedom is directly attacked. In an existential issue, while the conception of a kind of freedom is involved as well, it also stipulates one or more clements which must have reality in human life-physical, psychological, or moral. Hence Part II unfolds in the following manner:

Chapter 4: The Issue Concerning the Freedom of Self-Realization (there is only one issue here, a conceptual one)
Chapter 5: The Issues Concerning the Freedom of Self-Perfection
Chapter 6: The Issues Concerning Political Liberty
Chapter 7: The Issues Concerning Collective Freedom
Chapter 8-12: The Issues Concerning Freedom of Self-Determination

The last topic requires several chapters because of the large number of authors who dispute the existence of natural self-determination, the extent of debates on the issues, and the need to distinguish four important subordinate issues under the main issue. Centering, as it does, on the traditional " problem of free will," investigated both conceptually and existentially, it forms the most interesting part of the volume.

It is, of course, impossible to try to summarize such a wealth of material in a review. However, Chapter Eleven, dealing with the theological issue on man's freedom of self-determination, may be dealt with briefly because it is a topic of special interest to readers of this magazine, and also because it illustrates readily the dialectical method of the Institute in action.

The theological issue is an existential one and the Institute clarifies it by confining its research to the dispute between authors who disagree about .

the existence of free will in man while agreeing about the existence of God. A threefold division of authors is proposed: (1} those who maintain that God's foreknowledge or foreordination necessitates all that happens; those who affirm free choice together with God's omnipotence even if their reconciliation is inexplicable; (8} those who attempt to show that the irreconcilability is only apparent and who try to counter arguments advanced by opponents of free choice. The negative position, the first listed above, is developed largely from the writings of Luther, Calvin and Jonathan Edwards, but problems and difficulties discussed by adherents of free choice are also brought in (e. g., Boethius and Aquinas). The affirmative side of the debate covers the other two positions. Those who accept free will and God's foreknowledge without explanation or defense are, principally, Ockham, Descartes, and Thomas Reid; some interesting dia. lectical constructions of their positions are advanced. The rest of the chapter, over half the remainder, is given over to those who defend free choice and God's foreknowledge. Here the discussion is based largely on the writings of Augustine, Boethius, Maimonides, Aquinas, Hartshorne and Tillich. What emerges from a reading of this chapter is a sense of legitimate debate once the prerequisites are drawn, e.g., minimal topical agreement. One is able to detect where and when arguments could be joined, thus perhaps leading to a term beyond the scope of the present work, a resolution even if only tentative. It is interesting to note, also, that long and continued discussion has led to refinement of argument and distinction. This is notably the case with the third position which, having the burden of showing the compatibility of free choice and God's foreknowledge, has been led to make such refinement in the face of strong arguments and difficulties on the other side.

There is, of course, the constant question of whether the authors in question are being handled with both the accuracy and dialectical neutrality the Institute aspires to, and it is inevitable that anyone will find some occasion to question the Institute's formulation or even comprehension of this or that author. For example, on p. 465, Aquinas is said to hold that " while God moves the human will in all its acts, he moves it in such a way as to leave it the *sole* cause of its own acts on the plane of natural causes " (italics added). A footnote on this confusing sentence refers one back to pp. where, after referring to *Summa Theologiae* 1-11, Q. 9, A. 4, reply to 8, and *Trutk* Q. A. 1, reply to 4 (which are used soundly to explain -how the human will is a principal cause in one respect while God is the principal cause in another) the concluding sentence is: "These replies are consistent with Aquinas's view of the will, not as a first or uncaused cause,absolutely speaking, but only as a cause which, when it operates, is not the effect of any other efficient cause *on the plane of finite causes* " (italics in original) . Thus the confusion still remains, making it

appear that Aquinas is trying to have it both ways. The reply to the third objection in Article 6 of Q. IX of I-II *Summa Theologiae,* among other places, would have made it clear that, apart from moving the human will by grace, God is always the first mover of man's will and precisely with respect to the universal object of the will, the good. Man is never the *sole* cause of his own acts even though he is a proper cause " on the plane of natural causes," and so is able to determine freely this or that good. (In Volume One, pp. 470-478, some of this ambiguity is dissipated in treating Aquinas on causal initiative, yet the conclusion that Aquinas feels justified in speaking of the will " on 1he plane of finite causes, as a first or uncaused cause," remains misleading, if not erroneous. True enough the will may be regarded as a prime mover, but in a relative sense and in relation to other powers of the soul; it could not be regarded in any proper sense as an uncaused cause, and the phrase " on the plane of finite causes " adds nothing here.)

Part III is on special controversies, Part II having dealt with the general controversy which embraced issues about each of the five kinds of freedom. Special controversies arise among authors who accept one of the kinds of freedom as existent and genuine but still differ about it in important respects. Accordingly, for fruitful dialectic about a special controversy, not only is minimal topical agreement required, but also categorical agreement on the reality of such freedom. The chapters proceed in the following manner. Three {14-16) are devoted to issues on freedom of self-realization, subdivided into conceptual, existential, and normative issues; subsequent chapters are devoted to issues concerning freedom of self-perfection, collective freedom, and freedom of self-determination. It is worth noticing that explicit disagreement among writers is much less frequent in special controversies, and hence there is more need for *construing* than *finding* writers as disagreeing. Perhaps because of this or for some other reason, Part III does not appear to measure up in interest to general controversy in Part II.

We must turn, finally, to the concluding observations in Chapter Twenty. This brief chapter is marked by an underlying tone of intellectual melancholy. Adler and his associates conclude that only a few instances of controversy can be found in the literature on freedom; the rational debate in twenty-five centuries of Western thought about freedom is "a very poor performance "; not even the best philosophers have thought it necessary to engage in controversy by disputing, point by point, issues on which they are opposed.

A judicious reply to this lament might consist in pointing out that the Institute, possibly because of an ultra-rationalistic ideal of philosophical debate and discussion, had too great expectations. Men being what they are (extraordinarily limited when one comes to dwell on the matter) and

philosophy in its traditional sense being intrinsically difficult (far too much so for most men) and dialectic being the special talent that it is (many great philosophers hardly evince it at all), the performance, even if regarded as poor from a too ideal point of view, is perhaps better than one would expect if all relevant considerations are taken into account.

The Institute is on much safer ground when it recognizes the need for 11 division of labor in the overall philosophical enterprise. There is the v8J.id and important distinction between the philosopher and the dialectician, and failure to recognize these distinct provinces may be the most cogent reason for whatever lack of both dialectical and philosophical progress there may be. The dialectician and the philosopher are not usually united in one person just as, in an interesting parallel, the critic and the creative artist usually are not; or, to take a closer parallel, the dialectician and the demonstrator (in the Aristotelian sense) often are not. In brief, the role of dialectic " in the clarification of a field of thought for the sake of progress in that field" has been largely undeveloped in philosophy, except during some periods of the Middle Ages. Predictably, a variant of it has been highly successful in the area of experimental science. Consequently, it would appear, the Institute would do better to argue more for the spread of the function of dialectic in philosophical enterprise rather than lament its absence in the past. Further, it somewhat compromises the distinction it insists upon between the dialectician and the philosopher when it berates philosophers for not being more controversial and dialectical. A first rate philosopher, for the most part, simply would not have the time, the energy, the patience, perhaps even the ability, to do the dialectical task that is needed (though he could well profit from its being done by others). Hence all the more need for such work as the Institute seeks to do. But when all is said and done, since the dialectical task remains so huge in a purely extensive sense, a realistic appraisal suggests that the sights be lowered for some time to come.

The very size and extent of the present two volumes on the one idea of freedom is likely to be a deterrent to most prospective readers. It will strike many as wearisome to read, and it will be an easy temptation to ridicule some passages which go to great length and detail to trace discussion and debate. The suspicion will also arise that some of the debate and controversy may seem more fabricated than dialectically constructed. However, a serious and open-minded examiner of this work will see the advantages far outweighing the disadvantages. He will discount an excess of rationalism that perhaps inevitably arises when one engages in the arduous task of dialectic. He will recognize that this is a *pioneer* work in a neglected field. He will see that the primary value of the work emerges when one knows how to read it and make use of it; it is *not* to be read through once as though that is to be the end of it. It is to be treated

primarily 88 a *research* work. The various parts of the two volumes have sufficient independence to be considered by themselves in relation to particular interests or personal projects. One must become familiar with Book I of Volume One first, understanding sufficiently what philosciphical discussion or controversy is. Thereupon, one should normally settle for the tiine being on *one* of the five kinds of freedom, tracing it through Volume One so as to see first what the topic means, the extent of literature on the subject, and what problems begin to emerge. Then, in Volume Two, seeing further the questions and issues which lead to controversies about this kind of freedom, and the arguments pro and con which constitute the debate on the issues both for the general and special controversies. An approach along these lines is necessary if one is to profit from the work of the Institute. If it took a large number of persons in the research staff, along with consultants, nine years to put out the two volumes in finished form, the serious reader will view this work 88 one to refer to throughout his ·academic life.

Not the least significant value of this work is that it represents the collective work of many minds able to work together for the desirable common goal of progress in philosophical knowledge and the pursuit of truth. It gives substance to Aristotle's opening remarks in Book m of the *Metaphysics.* "For those who wish to get clear of the difficulties it is advantageous to discuss the difficulties well; for the subsequent free play of thought implies the solution of the previous difficulties. . . . Hence one should have surveyed all the difficulties beforehand . . • because people who inquire without first stating the difficulties are like those who do not know where they have to go. . . . Further, he who has heard all the contending arguments, as if they were parties to a case, must be in a better position for judging " (Ross translation) .

Thanks to the Institute, those who are seriously engaged in the philosophical enterprise are, if they make careful and discriminating use of this two volume set, in a better position for judging the many issues surrounding the important idea of freedom.

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De Ordine. Tom. I *De lnatitutione.* Pp. 1014 with indexes. $19.00. Tom. IT *De lnatitutione-De Materia et Forma.* Pp. 9U with indexes. $19.00. By EMMANUEL DoaoNzo, 0. M. I. Bruce: Milwaukee, 1957 & 1959.

The valuable dogmatic tracts of Fr. Doronzo are brought closer to completion with the appearance of the first two volumes of the treatise on Holy Orders. The dogmatic treatment of this sacrament is particularly welcomed, since this fundamental aspect tends to become submerged in the more prevalent moral, canonical and ascetical aspects of the priesthood. For one or another reason the orders other than the priesthood and the nature of the ·episcopacy itself are quickly passed over in the theology classroom and even by many textbooks.

The author remains faithful to the general division of matter as set down in the works of St. Thomas and to the thomistic scientific method which he is convinced is the most apt instrument of systematic theology. It is indeed strange that this could have been missed by anyone familiar with the author's previously published tomes. However, Fr. Doronzo has properly and forcefully defended his procedure against certain criticisms in his Introduction (I, pp. 80-82).

The institution of the sacrament of Holy Orders extends through three articles of Volume I and four articles of Volume IT. One final article in the second comprises the entire exposition of the· matter and form of this sacrament. The presentation of non-Catholic opinions and theology is most helpful, and the explanation of Scriptural texts and the testimony of sources very satisfying to the student of these matters. As in previous volumes several important indexes are included. Volume m, the next to appear, will cover the extrinsic causes: the effects, properties, minister, subject, ceremonies of the Sacrament.

The author treats the famous controversial statements of St. Jerome, but does not regard them as a denial of the divine origin of the episcopacy (IT, pp. 72 sq.). Moreover, he subscribes to the more common opinion of an immediate divine origin, as sufficiently found also in Tradition. His stricture on the position of a mediate institution ends with the significant words: " The aforesaid explanation of a few moderns seems to proceed from a certain hasty inclination, quite befitting modem morals, for new and facile ways of approaching the solution of certain historical difficulties, which the progress of positive science brings with it, and for reviewing and reforming, from the bottom up as they say, certain acquired and peaceful positions of the older theology. Such reason for acting does not seem to offer the us':lal signs of traditional and authentic theology " (p. 114).

In the thorny and complicated area of the relationship of the episcopacy

to the priesthood Fr. Doronzo, after a page examination, concludes that the episcopacy as distinct from the priesthood is more probably not a sacrament at all but rather pertains to the sacrament of Orders as its extension and so can be truly if not homogeneously termed sacramental (pp. 308). He traced the historical development of theological thought on this point down to current writers. Analyzing the texts of St. Thomas and refuting the interpretations of certain recent Thomists, he satisfactorily exposes and defends the traditional thomist teaching on the episcopacy that with reference to the eucharistic body, it is undistinguished from the power of the priesthood, but with reference to the mystical body is a certain higher ministry or power of another and non-sacramental kind. He deplores in the thomist school the somewhat undue development of an ambiguous sacramentality regarding the episcopacy, since St. Thomas founded his whole system on the nature of the episcopacy and its relationship to the priesthood on the distinction of a sacramental and a non-sacramental order (pp. 175-176, 179-180, Moreover he holds that this position has not been substantially affected by the Constitution " Sacramentum Ordinis " of Pius XII (pp. sq.).

On the other hand, accepting the documents of history and tradition he admittedly departs from the teaching of St. Thomas and holds as more probable that the subdiaconate and the minor orders are of :merely ecclesiastical institution and in no way sacramental. In article seven, discussing the current question of the notion of the priesthood of the laity, the author tries to bring out clearly the meaning of the Angelic Doctor's statements. This article is valuable for. putting into focus the present state of the question.

In the one article of chapter two which considers the matter and form of this sacrament, it is noted that the Constitution of Pius XII has settled for the future the practical question of the matter and form of the episcopacy, priesthood and diaconate. However, the controversy is not resolved whether the imposition of hands was always and only the matter of this sacrament, how the decree of Florence is to be understood in proposing as matter the handing over of the instruments, and whether the Church has the power of changing the matter and form. In approaching his conclusions the author surveys the present Latin and Oriental rituals, the long historical development of the rite of ordination, the force and sense of the pertinent ecclesiastical documents, and finally the interpretations and opinions of the theologians.

Fr. Doronzo reasons quite cogently that the inescapable stumbling-block, the Florentine decree for the Armenians, should be considered as doctrinal but not as decisive, in that it exposes the integral essential matter of Orders. Nor did the Constitution of Pius XII as such settle the controversy over the matter of this sacrament in the past, although it is at least theologically

certain that regarding the actual and valid matter and form now it is a magisterial and infallible definition of a dogmatic fact. In discussing the opinions taught before this Constitution he feels that, although the texts of St. Thomas mention the handing of the instruments and not the imposition of hands as essential matter, the Angelic Doctor's mind did not seem to be closed to the special importance of the latter in the conferral of this sacrament. Moreover St. Thomas is not validly invoked in support by those who hold for a merely generic institution of the sacraments and Orders in particular. The author also holds that the Church has the power to lay down invalidating conditions for the sacraments not as regards the sacramental rite but only regarding the minister or the subject. Thus the comprehensive conclusion of Fr. Doronzo is that by the specific institution of Christ the imposition of hands is the sole matter of the episcopacy, priesthood and diaconate not only now and in the future, but more probably was always so held in the past. It has never been changed nor could be changed hy the Church by subtraction or addition.

It is not necessary to agree with an. author in his every opinion and interpretation to recognize the quality of his scholarship, his method of development and the value of his argumentation. But it is necessary, I think, to recognize that in these volumes Fr. Doronzo has continued the impressive work which has made his dogmatic so highly respected and valued in the field of sacramental theology.

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The Scientific Art of Logic. By E. D. SIMMoNS. Milwaukee: Bruce Publishing Co., 1961. Pp. Stn. $4.80.

It is a paradox of our time that curriculum studies tend to eliminate logic from the liberal arts program when the quality of scholastic logic in our country has attained a level never before enjoyed. Dr. Simmons' book is another witness to the happy blending of sound scholarship and practical pedagogical experience which has characterized .logic courses in Catholic colleges and universities in recent years.

The book opens with an introduction on the notion of logic. The logic course itself is divided on the basis of the three operations of the mind: simple apprehension, judgment, and reasoning. The first part, concerning simple apprehension, contains seven chapters which consider: simple apprehension and signs, comprehension and extension, the universal, the predicables, the categories, definition, and division. The second part has five chapters: the nature of judgment, the supposition of terms, the

categorical proposition, the compound proposition, and the relations between propositions. The final part, treating of the third act of the mind, is divided into nine chapters: the nature of reasoning, the categorical syllogism, the rules for the categorical syllogism, the hypothetical syllogism, the complex syllogism, demonstration and dialectical discourse, indqction, fallacies, and the nature of logic. This last chapter of the third part serves as a conclusion to the whole work. Scattered throughout the book are twenty-two exercises. Finally, there is a fine index.

To this reviewer the chief attraction of Dr. Simmons' book is the manner in which the entire course gradually unfolds the precise nature of logic as a science without the neglect of its artistic role. The reader, to some extent at least, is able to see for himself that logic is the science of second intentions-the last chapter merely makes explicit what is already contained in the body of the book. This methodology is in the finest philosophical tradition, and does not make of logic a matter merely of memory and application. Teachers of logic can use this book as an instrument to develop scientific inquiry and method.

It has become the practice in scholastic circles to abandon the division of logic into formal and material as a pedagogical device, even though most modem text-books are based on the *Ar., Logica* of John of St. Thomas. Dr. Simmons' book is no exception. He divides his work according to the three operations of the mind, not according to matter and form. To some logicians, this new approach is poor pedagogy. In view of the fact that John of St. Thomas himself was a very successful teacher, this aspect of modem scholastic method needs more investigation and study. This reviewer favors the arrangement as found in Dr. Simmons' book as a better approach to modem problems in logic. Nevertheless, more teaching experience may change his views.

Two words of caution remain to be said. First, this book is written with a vocabulary proper to the ·schola.Stic tradition, which may prove a difficulty for non-scholastics, or even for scholastic teachers who have had a varied background. Second, this book supposes a teacher. Indeed, the text is difficult in places, e. g. in the discussion of abstraction on pp. 18 fl. These difficulties, however, are more. than compensated for by the rest of the book.

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