

IS-UGHT: PRESCRIBING AND A PRESENT CONTROVERSY*

SINCE THE PUBLICATION of John Finnis's *Natural Law and Natural Rights*,¹ a controversy concerning the position of Aquinas on the "is-ought" question has intensified. Finnis follows Germain Grisez's stance, which sharply divides the realms of "is" and "ought", as will be explained below. Grisez articulated his views in his 1965 article "The First Principle of Practical Reason: A Commentary on the *Summa Theologiae*, 1-2, Question 94, Article 2".² Recently Grisez reaffirmed his adherence to the position expressed in that commentary and indicated that he and Finnis agree on the issues discussed in it.³

In the opposing camp are well-known interpreters of Aquinas such as Vernon Bourke,⁴ Ralph McInerney,⁵ and Henry Veatch.⁶

* I should like to express my gratitude to Canisius College, Buffalo, New York, for the faculty fellowship that made possible the research for this paper. I also wish to thank the Pontifical Institute of Mediaeval Studies in Toronto for access to its library throughout the summer of 1983. Oxford: Clarendon Press, 1980; hereafter *NLNR*.

²*Natural Law Forum* 10 (1965), pp. 168-201; hereafter *FPPR*. In his book Finnis acknowledges his indebtedness to Grisez on pp. vii and 53.

³"The Basic Principles of Natural Law: A Reply to Ralph McInerney," John Finnis and Germain Grisez, *American Journal of Jurisprudence* 26 (1981); pp. 21-31; hereafter Reply to McInerney.

In his article "Natural Law and the 'Is'-' Ought' Question: An Invitation to Professor Veatch" (*Catholic Lawyer*, vol. 26, no. 4, 1981) Finnis reiterates and develops points made in his book. This article will be referred to in subsequent footnotes as Response to Veatch.

⁴Review of *NLNR*, *American Journal of Jurisprudence* 26 (1981), pp. 243-47; hereafter Bourke's review; "Justice as Equitable Reciprocity: Aquinas Updated," *American Journal of Jurisprudence* 27 (1982), pp. 17-31; hereafter Bourke on justice.

⁵"The Principles of Natural Law," *American Journal of Jurisprudence* 25 (1980), pp. 1-15; hereafter McInerney.

⁶Review of *NLNR*, *American Journal of Jurisprudence* 26 (1981), pp. 247-59; hereafter Veatch's review; "Natural Law and the

All three criticize the Grisez-Finnis position for failing to ground adequately ethics in metaphysics, and for holding that Aquinas did the same. Bourke, for example, says that "Finnis' approach to ... natural law ... [reveals] his lack of interest in realistic metaphysics. Because he is too much impressed with Hume's version of the relation of 'is' and 'ought', Finnis does not pay enough attention to the realities of the world in which man lives ..."⁷ In criticizing Grisez's exposition of Aquinas's ethics, Bourke states "... Grisez's ethics is too far divorced from Aquinas's general metaphysics and philosophy of man."⁸ Similarly, Ralph McInerny takes issue with Grisez's "insistence that no transition from *is* to *ought*, from *fact* to *value* is going on in natural law".⁹ Most overtly distressed is Henry Veatch, who attributes to Finnis the position that, in truth as well as according to Aquinas, ethics need not be based on metaphysics, that the norms of human existence are not founded on the facts of human nature.¹⁰ Veatch dubs this stance, which he ascribes also to Grisez, a "canker" on Finnis's otherwise excellent account,¹¹ which establishes a wall of separation that provides support for an ethics of mere convention.¹²

Of course Bourke, McInerny, and Veatch take issue with Grisez and Finnis on a variety of points; in so doing, they reveal

Question," *Catholic Lawyer*, vol. 26, no. 4 (1981), pp. 251-65; hereafter *NLIOQ*. The above citations are not intended to be exhaustive. Furthermore, there are other authors on both sides. Some, such as Joseph M. Boyle, explicitly adopt Grisez's position (e.g., "Aquinas and Prescriptive Ethics," *Proceedings of the American Catholic Philosophical Association* 49, 1975, esp. pp. 86 ff.) Obviously, depending upon how one identifies the points of disagreement, there are an enormous number of other authors who fit into one camp or the other.

⁷ Bourke on justice, pp. 23-24.

⁸ Bourke's review, p. 244. In both articles cited here Bourke notes Finnis's debt to Grisez. In his review Bourke also comments approvingly on Ralph McInerny's criticism of Grisez as an interpreter of Aquinas's ethics: p. 244.

⁹ McInerny, p. 11, his emphasis.

¹⁰ Veatch's review, pp. 256 and 258; see also *NLIOQ*, esp. pp. 253, 254, 256, 265. In both articles Veatch, too, notes the dependence of Finnis on Grisez.

¹¹ Veatch's review, p. 259.

¹² *NLIOQ*, f. 265₇

their distinct approaches. Still, they are united in the conviction that metaphysics and the philosophy of man must ground ethics, that "ought" thus depends on "is", and that Grisez and Finnis, misinterpreting Aquinas on this point, offer an unacceptable alternative. In this paper, I attempt to show that the Grisez-Finnis view does not neglect nature as a basis for moral value. However, owing to their interpretation of "ought"-judgments as prescriptive rather than descriptive, Grisez and Finnis incorrectly separate the realms of "is" and "ought." After explaining these points, I offer an analysis of moral "ought"-judgments as inherently descriptive, recognizing that prescriptive uses can occur. Even in such cases, however, the descriptive component remains the ground of the directive.

Nature and Value

There is no question that both Grisez and Finnis sharply separate descriptive and evaluative activity. Contending that the Aristotelian-Thomistic distinction between the speculative and practical reason corresponds to the modern distinction between "is" and "ought", Finnis argues that Aquinas would allow no deduction of "ought" from "is", nor would he sanction attempts to derive basic practical principles or practical (evaluative) judgments from facts.¹³ This is in keeping with Grisez's more specific contention that moral "ought"-utterances-which he considers to be moral judgments or "ethical evaluations"-are fundamentally different from, and irreducible to, factual claims.¹⁴

The question that must be considered here, however, is: Does the above position entail the rejection of nature as a *basis* for moral value, or even a denial that all goodness is to be *understood* in terms of being?¹⁵ Neither Finnis nor Grisez thinks that it does. In a rejoinder to Veatch, Finnis points out that

1a E.g., *NLNR*, pp. 36, 47, 33-35, 63, 66, 73, 81, 85, 91.

14 *FPPR*, pp. 194-95.

u Veatch's review, p. 256.

he considers basic goods to be " basic aspects of human flourishing." ¹⁶ He quotes from his book: "The basic forms [of human good] grasped by the practical understanding are what is good for human beings with the nature they have." ¹⁷ Again, " The basic forms of good are opportunities of *being*; the more fully a man participates in them the more fully he is what he can be." ¹⁸ Following this, Finnis attempts to explain how the fundamental practical principles, dependent upon these goods, acquire moral force.¹⁹ Grisez makes similar points in numerous places. For example, he says" ... the rightness of moral choices must be based upon the well-being or flourishing of persons, for a moral agent can identify with this and find self-fulfillment in it." ²⁰ Holding that ' oughts ' arise from ' goods', that certain kinds of human activity are conducive to furthering all aspects of :flourishing or self-realization, which depend for their character on human nature and its potentialities, he declares the basic moral requirement to be " that one choose and act for some human goods, while at the same time one maintain one's appreciation, openness, and respect for the goods one is not *now* acting for." ²¹ Indeed, with one voice Finnis and Grisez reaffirm their commitment to a teleological understanding of all nature, including human nature, and a corresponding ethical objectivism. ²²

1aResponse to Veatch, p. 269; see *NLNR*, pp. 23, 67, 87, 144.

11 Response to Veatch, p. 271; *NLNR*, p. 34. Again, Finnis is purporting to develop Aquinas's position: p. 46. Veatch does, in fact, recognize that Finnis considers human goods to be determined by human nature: Review, p. 251.

is Response to Veatch, p. 270, *NLNR*, p. 103 (Finnis's emphasis).

¹⁹ See esp. *NLNR*, pp. 101 and 103.

²⁰ *Life and Death with Liberty and Justice: A Oontribution to the Euthanasia Debate*, co-author, Joseph M. Boyle (Notre Dame: University of Notre Dame Press, c. 1976; hereafter *LDLJ*), p. 362; *FPPR*; esp. 171, 180.

²¹ *LDLJ*, pp. 362-64; see also pp. 345, 368; cf. *Oontraception and the Natural Law* (Milwaukee: The Bruce Publishing Co., c. 1964; hereafter *CNL*), pp. 60-72; Reply to McInerny, p. 28.

²² Reply to McInerny, pp. 23-24.

Perhaps it should be pointed out here that Finnis's claims about the existence of definite human values or goods would be interpreted by many as

Moreover, they do not deny that metaphysical truths are an essential component in the formation of "normative conclusions"; their central contention concerns the essential difference between theoretical and practical *principles* (judgments), reflecting the distinct activities of theoretical and practical reason.²³ This theme is paramount in the works of these authors; one more quotation should help to formulate it as a position: "The [between Veatch and Finnis] is this: I [Finnis] assert that judgments [about man's natural goods, about what man should be] are primarily (though perhaps not exclusively) judgments of practical reason ... The differences between speculative and practical reason are differences between intellectual operations with differing objectives ... our primary grasp of human good ... is practical."²⁴

The Grisez-Finnis affirmative of the is-ought dichotomy, then, relates to the distinct mode of the apprehension of goods by the practical reason, and the consequent formulation of practical principles as irreducibly prescriptive. The critics of Grisez and Finnis do take issue with them on the relation between the practical and theoretical reason. Bourke suggests that Finnis's "strict separation" of these is un-Thomistic.²⁵ Veatch comments on the inordinate fear of Grisez and Finnis that the distinction between these might be blurred,²⁶ and McInerny objects to excluding purely factual statements from the domain

factual. At least he considers as legitimate characterizing the judgment "Knowledge is a good to be pursued" as objectively the case, correct, a correct assertion or affirmation (*NLNR*, p. 75) and as a "rational judgment about a general form of human well-being, about the fulfillment of a human potentiality" (*NLNR*, p. 72; see also p. 53). As already noted (n. 13 above) he identifies value-judgments with practical principles, but with regard to the former he uses language appropriate to descriptive utterances (more on this below). At any rate, he explicitly asserts that both he and Grisez reject (1) the assertion "that ethical principles can have no grounding in fact and in nature" as well as (2) the denial "that morals and ethics have any basis in nature or the facts of nature": Reply to Veatch, p. 266.

²³ Reply to McInerny, pp. 24-25.

²⁴ Response to Veatch, p. 272. See note 59 below.

²⁵ Bourke on justice, p. 23.

²⁶ Review of Veatch, p. 258.

of practical discourse.²¹ Still the heart of the controversy seems untouched by such objections. Below it will be shown how the ascribing of the different roles by Grisez and Finnis to the theoretical and practical reason is fundamental to the overall controversy. It will be held that the Grisez-Finnis position is objectionable not because it separates description and prescription, but because it identifies prescriptions and "ought"-judgments.²⁸

To understand this, an explication of the operation of the practical reason according to Grisez and Finnis must be preferred.

Basic Principles of Practical Reason

In his commentary on the first principle of practical reason Grisez stresses the point that the practical reason is reason directed to activity, to accomplishing some work or operation. Now such activity presupposes a good, something attracting, an object of tendency, which establishes the activity's direction. Thus is explained, in summary fashion, why Aquinas says that as being first falls within the unrestricted grasp of the mind, so good first falls within the grasp of practical reason.²⁹ This good is not the moral good; rather, "a good" here designates simply the en-<1-as-attracting; for the practical reason to proceed there must be "a purpose in view", which is "a necessary condition of reason's being practical."³⁰

Now the first principle of practical reason, "Good is to be done and pursued, and evil avoided," is seen to arise as a formulation of the mind's direction to achieve the end (or an end) before it.³¹ Grisez seems fairly lucid on this point, although in other places he adds some perplexing interpretations. He says, for example, that the first principle posits the requirement that every precept must prescribe: a redundant assertion

²⁷ McInerny, p. 11.

²⁸ E.g., Grisez and Finnis, Reply to McInerny, p. 23.

²⁹ *FPPR*, pp. 175-78.

³⁰ *Ibid.*, p. 177; see also pp. 181-86, *LDLJ* pp. 345-46, and note 37 below.

³¹ *FPPR*, p. 178. As Aquinas points out, end has the *ratio* of good: *Rum.ma Theologiae* (hereafter ST) 1-2; 94, 2; *FPPR*, p. 190.

if one considers precepts to be essentially prescriptive. Again, he states that the establishment of this principle "determines that there shall be direction henceforth."³² If, however, the principle is naturally formed in a practical context as a basic directing to achievement of understood ends, such a formulation connotes an overly complicated process of a laying down of a precept in order to insure future goal-oriented behavior. Nevertheless, by such phraseology Grisez emphasizes a critical point: the first principle is inherently directing or prescriptive; it does not describe a state of affairs but rather orders the realization of one.

This point will be discussed more fully below, but one final area calls for summarizing. Aquinas declares that the order of precepts of natural law is according to the order of the natural inclinations (ST 1-Q, 94, Q). Grisez explains the reasoning leading up to this conclusion in the following way. As said above, in order for the practical reason to direct, it must be oriented toward an achievement apprehended as a good; practical reason prescribes in view of goods. The determinate goods giving rise to precepts of natural law will be human goods, for they indicate the range of possible human action. Now the objects of the natural inclinations are tended to by all human beings; as such, as naturally attracting, they are human goods. Grisez here notes that the fact that such tendencies and objects exist and can be satisfied in certain ways could, in a speculative context, be registered, and left at that. However, when reason is activated toward work, or practical activity, it directly apprehends the natural inclinations as pointing to possible areas of human accomplishment. The practical reason, then, generates precepts based on the objects of the natural inclinations inasmuch as these provide "possible patterns of human action," the basic orientations for more determinate projects, or objectives.³³ In *Life and Death with Liberty and*

^{a2} *FPPR*, p. 179.

³³ *Ibid.* pp. 179-81; 188-90; see also *ONL*, pp. 62-65.

Thro[ugh] natural law human beings participate in the eternal law; unlike irrational creatures, humans recognize human ends as possible areas for fulfillment: *FPPR*, p. 182; see Aquinas ST, 1-2, 91, 2 ff.

Justice. Grisez identifies human goods as aspects of human flourishing; their "pull", or what Grisez calls "normative appeal," is experienced from within as they are understood: "The good appeals to intelligence, not merely presenting itself as possible, but offering itself as a possibility to be realized through action. Thus there is a direct, normative appeal in every human good."³⁴ Similarly, Finnis says "... practical reason begins ... by experiencing one's nature, so to speak, from the inside in the form of one's inclinations."³⁵ Hence Grisez and Finnis deny that the basic precepts or principles of practical reason are *derived* at all, let alone from statements of fact. Rather they arise directly from the operation of the practical reason and are enabling prescriptions, rather than descriptions.³⁶

If this summary is reasonably accurate, it can be seen that the Grisez-Finnis position departs somewhat from the traditional understanding of the first practical principles as moral. Indeed, both Grisez and Finnis explicitly deny that they are moral, since as enabling prescriptions they are considered to make activity by good and bad people possible.³⁷ As indicated above, the Grisez-Finnis position is that morally right choices are not simply those that are harmonious with one or another basic human goods; rather, they are those that, although perhaps focussed on one, do not run counter to any other such good; right choices are "in accord with open-hearted love of all the basic human goods."³⁸

Nevertheless, Grisez and Finnis both seem to consider the prescriptivity of the first practical principles (i.e., the primary precepts of natural law), indicated by the gerundive (is-to-be)

³⁴ *LDLJ*, p. 363; see also *ONL* pp. 64-65.

³⁵ *NLNR*, p. 34, cf. *FPPR*, p. 191. But see fourth part of this paper, and Response to Veatch, p. 271.

^{aa} *FPPR*, p. 195. See Finnis, *NLNR*, pp. 34, 72-73, 85, and Reply to McInerny, p. 27.

³⁷ *FPPR*, pp. 187-190; *LDLJ*, pp. 363-64; *NLNR*, pp. 34, 45-48, 51, 72-73, 128; Reply to McInerny, pp. 27-28 (but see note 80 below).

{ls Reply to :P. 28, jlf()μote 21 above and *FPPR*, p. 190.

form, to be expressible in "ought"-judgments.³⁹ Since the basic prescriptive principles are not derivable, neither are basic "ought"-judgments. Moreover, such principles (or "ought"-judgments) are considered to be of the same type as value-judgments such as "Knowledge is something good to have."⁴⁰ Thus, for example, Grisez and Finnis can argue that it is perfectly acceptable to derive directly "this act ought to be done" from "this act is virtuous."⁴¹ This is because they hold that all the formulations noted in this paragraph share the characteristic of prescriptivity (or "normativity"), a quality Finnis identifies with "motivating significance."⁴²

It is difficult to understand what kind of "ought" these authors consider the "ought" of the first precepts to be if not moral. They do not consider it hypothetical; in one place Grisez calls it the "ought" of "common sense"—an enlightening suggestion.⁴³ Furthermore Grisez also holds that all the practical principles *but the first* can be rejected in practice.⁴⁴ But if these principles are all of the same type with regard to their "oughtness," what is one to make of the claim that only *some* "ought"-judgments—here, formulated by one's own reason—can be freely accepted or rejected? Is not the "ought" aspect of the *first* principle (as opposed to its purely directive or prescriptive aspect) superfluous?

Such questions call for viewing "oughtness" and prescriptivity as distinct. A principle can direct as a simple imperative, rather than as an "ought"-utterance. This point, however, leads to another claim of Grisez's: that there are prescriptions

so *FPPR*, pp. 194-95, also p. 176; *CNL*, pp. 60-61, 66; Grisez's *Abortion: The Myths, the Realities, and the Arguments* (New York: World Publishing Company, c. 1972; hereafter *Abortion*), p. 314. In Finnis see *NLNR* pp. 42 (n. 56), 12. Veatch also shares this view, although he seems to consider the force of "ought" here to be moral: *NLIOQ*, p. 262.

⁴⁰ See note 13 above; also *FPPR*, p. 194; *NLNR*, p. 72.

⁴¹ *FPPR*, p. 194. See also Reply to McInerney, p. 24.

⁴² *NLNR*, pp. 44-45; cf. *FPPR*, p. 191; *CNL*, p. 66.

⁴³ Not hypothetical: *FPPR*, p. 195; common sense "ought": *Abortion*, p. 314.

⁴⁴ *FPPR*, pp. 197, 189.

that are not imperatives because the latter imply an act of the will which the former do not. In order, then, to pursue the distinction between "oughtness" and pure prescriptivity, this contention must be considered. Such consideration will encompass an elaboration on conditions necessary for the arising of a practical principle. This entire discussion, in turn, will provide a basis for explaining such a principle as imperative, and for outlining the conditions necessary for the emergence of "ought"-judgments. It is hoped that these reflections will serve to clarify weaknesses in the Grisez-Finnis position which relate to certain claims about "ought"-judgments, but which (weaknesses) are not of the same extent and character as those targeted by the critics alluded to in the beginning of this paper.

Prescriptions and Imperatives

Grisez emphasizes the prescriptive or moving force of the first principle of practical reason in this way: "To know the first principle of practical reason is not to reflect upon the way in which goodness affects action but to know a good in such a way that in virtue of that very knowledge the known good is ordained toward realization."⁴⁵ As already explained, the attracting aspect of a good gives rise to (self-)direction toward it; hence activity is possible. Admitting that it would be grammatically appropriate to interpret the gerundive form of this resulting precept as an imperative, Grisez denies that Aquinas intends this, even though at the beginning of his treatise on law Aquinas alludes to an earlier discussion on the nature of commands or imperatives.⁴⁶ It is worth examining what Aquinas says in this discussion, since Grisez believes that it provides the basis for his distinction between imperatives and prescriptions.

In ST 1-91, 17, 1, Aquinas says "Now command [*imperare*] is essentially indeed an act of the reason, for the commander

⁴⁵ *Ibid.*, p. 191. See also notes 34, 35, 36, 42 above.

⁴⁶ *FPPR*, p. 192; ST 1-2, 90, 1 and ad 3.

Much of the discussion below is based on my doctoral thesis *Thomas Aquinas and R. M. Hare: The Good and Moral Principles*, for the State University of New York at Buffalo, 1978 (unpublished), pp. 327 ff.

[*imperans*] orders the one commanded to do something, by way of intimation or declaration." Such ordering [*ordinare*] is an act of reason. But, he continues, reason can in general intimate or declare something in two ways: either absolutely, in which case an indicative verb is used, or in a way by which a person is, as it were, moved to act, expressed in an imperative. Aquinas gives as an example of absolute (indicative) declaration or intimation "This is what is to be done by you" ("*Hoc est tibi faciendum*"). The example he gives of reason commanding is "Do this" ("*Fae hoc*").

When Aquinas says reason can declare or intimate in two ways, he does not use the words "in general," as contained in the above paragraph. However it is important to include them in order to avoid a misinterpretation of Aquinas's position, namely, that he is saying that reason can order in two ways—i.e., absolutely, or by moving. According to the Grisez interpretation, ordering with a kind of "motion" would be commanding or imperation, whereas ordering "absolutely" would be prescription. Yet it would indeed be odd if Aquinas first associated commanding (*imperare*) with ordering (*ordinare*) as he does in the text, and then divided ordering into two activities, one of which is *not* commanding (declaring or intimating by moving). Furthermore, in ST 2-2, 47, 8 Aquinas states that the principal act of the practical reason is to command. "*Praecipere*" here is used for command, but in this article Aquinas not only uses *imperare* and *praecipere* interchangeably (obj. 3, unchallenged) but he also points out that *praecipere* implies a motion with a certain order ("*praecipere importat motionem cum quadam ordinatione*"), which is an act of reason (ad 3). This is the way he characterizes *imperare* in the previously discussed article.⁴⁷

Hence in 1-2, 17, 1 Aquinas distinguishes two modes by which reason declares or intimates something: absolutely (*here ex-*

⁴⁷ ST 1-2, 17, 1 and ad 1 and 3; see also 1-2, 17, 2. In ST 2-2, 47, 8 ad 3 Aquinas is stressing the rational aspect of command, refuting the claim that command (*praecipere*) is not an act of prudence, an intellectual virtue (obj. 3). For *praecipere* as the principal act of the practical reason, see also ST 1-2, 57, 6.

pressed in the gerundive), and by commanding (*imperare* or *praecipere*), the domain of the practical reason. Thus there is no basis for claiming, as Grisez does, that Aquinas is distinguishing two distinct activities of the *practical* reason—prescription and imperation—and that the gerundive of the first practical principle is the former, but is *not* the latter.⁴⁸ Rather, given the analysis above, it must be concluded that reason directing is reason engaged in one type of activity—imperative, i.e., prescriptive—which can be expressed either in the gerundive or the imperative form. The first principle of practical reason is an imperative (= prescription) expressed by a gerundive.

This analysis may be thought to be inconsistent, in that the gerundive used in 1-2, 17, 1 is *not* here considered to be an imperation or prescription, but is rather an absolute declaration or suggestion (which I shall characterize here as a descriptive use of the gerundive: compare Aquinas's use of "indicative"). This can be explained if one considers gerundives to be descriptive or prescriptive depending on context, as I think is the case. Space limitations make it impossible to show this in this paper. However, it might be noted that the descriptive gerundive—as well as value-judgments containing words such as "good" and "ought"—need not be prescriptive to be suggestive or action-guiding to one seeking advice about how to act. As will be shown below, value-judgments may well be descriptive but also motivating in conjunction with human natural inclinations and human commitments.

Now, as Grisez points out and as will be explained, Aquinas holds that an imperative presupposes an act of the will.⁴⁹ Thus the contention that the first principle of practical reason is, in a Thomistic context, an imperative must be supported by evidence showing this principle to be preceded by activity of the will.

Aquinas discusses the nature of commanding (*imperare*) in the context of his analysis of the structure of human acts. He is basically considering the alternating movement of reason and

⁴⁸ *FPPR*, p. 192.

⁴⁹ *Ibid.*

will from intention (will) through counsel (intellect), choice (will), command (intellect), use (will).⁵⁰ Command here, then, is the direction by practical reason to the other powers to make use of a means already chosen by the will.⁵¹ That is, it is an act of reason presupposing an act of the will.

Does this mean the practical reason, which commands, is not operative until this stage? This does not seem to follow. Certainly there are other acts of the will leading up to the stage of choice, and Grisez is addressing himself to this more fundamental intellect-will interaction. However, he not only holds that a condition for the operation of the practical reason is the presence of a good; he also argues that no act of will is presupposed by the first principle of practical reason. Indeed, he holds that practical direction makes all acts of will possible; hence no basic practical principle can be an imperative, which presupposes the activity of the will.⁵² He, of course, is considering practical principles to be prescriptions rather than imperatives, a distinction argued against above.

While it is true that Aquinas contends that no willing is possible without prior apprehension, he also speaks of the first act of the will, i.e., its necessary orientation toward the universal good, as due not to the direction of reason but to the nature of a higher cause, namely God.⁵³ Indeed, such an inclination is necessary in order for any further activity of the will to occur, since the very attractiveness of an object apprehended as good depends not only upon the object, but also the subject.⁵⁴ Per-

⁵⁰ ST 1-2, 12-17. Consent, which Aquinas also discusses, is an aspect of choice: 1-2, 15, 3 ad 3.

⁵¹ A more detailed list of moments of the human act: intention (will); deliberation about means (counsel: intellect; consent: will; judgment or selection: intellect); choice of means (will); command (intellect); use (will). Counsel, consent and selection are discussed in ST 1-2, 15, 3 ad 3 and 1-2, 57, 6; I have combined Aquinas's discussions.

⁵² *FPPR*, p. 193.

⁵³ ST 1-2, 17, 5 ad 3; 1-2, 9, 4; 1-2, 9, 6 and ad 3; 1, 18, 3. On the other hand, every act of the will is preceded by an act of the mind: 1-2, 4, 4 ad 2; 1-2, 5, 8 ad 2. For necessary orientation of the will, see also 1, 82, I and 2; 1, 83, I ad 5, 1-2, 10, 2 and note 55 below.

⁵⁴ ST 1-2, 9, 2.

haps, then, a distinction should be made between willing as actual moving toward an already apprehended end, and the natural orientation of the will toward the ultimate end, a disposition which persists whether adverted to or not, in virtue of which the subject can be activated toward specific ends when apprehended.⁵⁵

Of course, as Grisez points out, the possible ends that activate, that we find attracting, are set within the domain of the objects of the natural inclinations. Grisez specifies that the practical reason views these objects to be possible ends, and prescribes according to them, when it is already operative, directed to work. However, it seems that one's disposition to be able to be attracted to some project, and hence to engage in activity or work, includes a disposition to be attracted by certain kinds of things, namely, those relating to the objects of the inclinations. It is the conjunction of an apprehended possible end (e.g., writing an article) and its initial attractiveness, dependent upon an inclination (to pursue the truth), that gives rise to a surge from immediate tendency instantaneously to conscious orientation toward the enterprise. This orientation consists in the intellectual urging to pursue the object grasped as attracting or good-i.e., it consists in a precept or imperative. It is in this way that the practical reason seems to become operative, that the basic precept of action seems to arise-i.e., just before an intention, which is an actual *settling* of the will on pursuing an end.⁵⁶ Still, through inclination and orientation

⁵⁵ See, e.g., ST 1-2, 16, 4; 1-2, 25, 2. Actual moving toward an end as desire or willing: ST 1-2, 1, 2; ST 1-2, 3, 4; orientation or tendency as persisting: ST 1-2, 1, 6 ad 3; see also 1-2, 3, 2 ad 4; 1-2, 2, 4. In some places Aquinas distinguishes natural appetite (inclination, love) and rational appetite or inclination (will): ST 1, 19, 1; 1, 60, 1; 1, 80, 1; 1-2, I, 2. In other places he speaks of natural orientation or love all creatures share: I, 60, 3-5; 1-2, 26, 1 ad 3; 1-2, 27, 2 ad 3. In I, 80, 1 and replies Aquinas speaks of both natural and rational appetite in rational beings.

⁵⁶ The activity of the intellect may also involve judgment about the possibility of achieving the end.

Of course in any concrete context there may be competing goods. But in order for action that brings about some result to take place, some end must be actively pursued. In order, then, for practical reason as such to carry through, it must follow its precept to pursue an apprehended good.

the will has been engaged from the beginning, as manifested in the human ability or disposition to be attracted and so moved by certain kinds of objects. And so the first precept or principle thus explained is appropriately considered an imperative to pursue an end before it.

Grisez does address himself to the role of the natural inclinations. In another place he says "It is impossible to act for anything without having an interest in it and it is impossible to become attracted to anything, and so to develop an interest in it, except to the extent that it falls within the scope of some inclination already present within oneself."⁵⁷ Must not such an inclination precede the arising of a practical precept that makes further action possible? Finnis seems to affirm this, when he suggests that an inclination or desire first arouses an interest in knowledge and may persist as motivation for one's pursuit of it.⁵⁸ These authors and I, then, seem generally to hold that natural inclination somehow makes possible the operation of the practical reason, although I contend that the dynamism of such inclination counts as will-activity, and hence that, in harmony with Thomistic principles, a self-prescription to pursue an object apprehended as good or attracting counts as an imperative.

According to the analysis offered above, in a situation of, for example, pursuing the answer to a particular question, one's practical reason directs by issuing an imperative to the agent to pursue the possible end (the answer) grasped as attracting. Thus is illustrated the directive role of the first principle. However, as already indicated, this paper is concerned with dis-

⁵⁷ *ONL*, pp. 63-64, but cf. p. 60. See also *FPPR*, p. 180: "However, when the question concerns what we shall do, the first principle of practical reason assumes control and immediately puts us in a nontheoretical frame of mind. . . . The object of a tendency becomes an objective which is to be imposed by the mind . . ." Yet the wording "when the question concerns what we shall do" suggests that practical reason is already somehow operating in a practical context; I am arguing that such context is established by the initial activation of some inclination.

⁵⁸ *NLNR*, p. 72; see also pp. 60-61, 65, and note 35 above.

tinguishing prescriptivity and "oughtness"; until now it has simply shown that practical reason seems first to become operative in an imperative way. In order to move to a discussion of "ought" (value) -judgments, the Grisez-Finnis position on the arising of the various (other) principles of practical reason or natural law must be examined further.

First Principles as Value-Judgments

Finnis gives his view succinctly in a quotation perhaps already known to readers familiar with the controversy under discussion:

One does not judge that 'I have [or everybody has] an inclination to find out about things' and then infer that therefore 'knowledge is a good to be pursued'. Rather, by a simple act of non-inferential understanding one grasps that the object of the inclination which one experiences is an instance of a general form of good, for oneself (and others like one).⁵⁹

In another place Finnis explains how, when directed to finding out something, the mind naturally moves beyond the particular question to the judgment that knowledge is a good thing to have: "'It's good to find out .. 'now seems to be applicable not merely in relation to oneself and the question that currently holds one's attention, but at large-in relation to an inexhaustible range of questions and subject-matters, and for anyone."⁶⁰ Such judgment, Finnis says, is about an aspect of human flourishing," the fulfillment of a human potentiality."⁶¹

Finnis is thus denying that the basic principles of practical reason and natural law are simple prescriptions or imperatives

⁵⁹NLNR, p. 34. See also p. 52; Response to Veatch, p. 271; and note 24 above.

In the context in which the passage referred to in note 24 arises, I am attempting to show that Finnis affirms as a difference between his criticism (at least Veatch) and himself the mode of operation of the practical reason and the consequent prescriptive formulation. Here I am specifically concerned about the formulation of the practical principle as a "good"-judgment or "ought"-judgment.

⁶⁰ NLNR, pp. 60-61.

⁶¹ *ibid.*, p. 72; see also p. 85 and Response to Veatch, p. 269.

to the self to pursue a particular end.⁶² What he is affirming is that basic precepts arise in a particular context but are the result of the mind's traveling beyond that context, arriving at a formulation concerning a basic human good. Since, as was pointed out above, he considers the gerundive form to be expressible in "ought"-judgments and these to be equivalent to value-judgments identifying basic human goods, such latter judgments are also deemed prescriptive.⁶³

Here is the true locus of the objectionable is-ought dichotomy maintained by Grisez and Finnis. That is, the distinction between imperatives-prescriptions and descriptions is not incorrect; insofar as a principle of practical reason may be viewed as an imperative, there is no difficulty with maintaining a distinction between this imperative and a theoretical or descriptive principle. What is objectionable is a claim that in themselves value-judgments and "ought"-judgments are prescriptive and that they therefore *cannot* be arrived at by theoretical reasoning, based on the understanding of human nature.

Let it be perfectly clear that Grisez and Finnis do contend that the first principles stated as value-judgments are normative (=prescriptive), and hence are the products of practical reason; as such, they are underivable from metaphysical claims:

One of the principles of *practical* thinking is that knowledge is a good to be pursued; this principle entails that knowledge ought to be pursued ... If "knowledge is a good for man" were understood theoretically, simply as a truth of metaphysical anthropology, then it would have no more normative implication than "knowledge is good for angels" has practical implication for us ... there can be no valid deduction of a normative conclusion without a normative principle, and thus ... *first* practical principles cannot be derived from metaphysical speculations.⁶⁴

⁶² This sentence should not be taken to imply that I am maintaining the position Finnis is denying.

⁶³ See notes 39-42 above.

⁶⁴ Reply to McInerney, pp. 23-24, authors' emphases.

Finnis explicitly denies that value-judgments about basic human goods are arrived at by activity from the outside, by psychological, anthropological, or metaphysical observations.⁶⁵ Yet one may ask, what does he mean when he says in a passage already quoted, that judgments about human goods are primarily *although not exclusively* judgments of practical reason?⁶⁶ Is he allowing for the possibility that such judgments *may* be judgments of theoretical reason? This latter is an extremely important question, because if it can be answered in the affirmative, Finnis is saying one of two things: Either such value-judgments are sometimes descriptive and sometimes prescriptive, depending upon how they are arrived at, or they are always prescriptive, although sometimes arrived at by theoretical reason. Yet, as has been seen, Grisez and Finnis attribute the prescriptive status of principles to their generation by the practical reason; hence the latter could not be the case. On the other hand, is it reasonable to hold that value-judgments can be sometimes descriptive, sometimes purely prescriptive? Above it was suggested that the gerundive can assume both forms, but here "good"-judgments and "ought"-judgments are being discussed.

Without examining in great detail the status of such value-judgments, it can nevertheless be shown that Finnis, apparently without realizing it, recognizes them as inherently descriptive.⁶⁷ He says, for example, that the basic forms of human flourishing are (naturally) understood to be desirable and realizable and *thus* to-be pursued.⁶⁸ His adding that in the practical understanding of the goodness of knowledge one is already beginning to direct oneself to action does not alter the point that if something is grasped as to-be-done or pursued (taken prescriptively) *because* it is understood as desirable, "desirable" must have some descriptive content that can be formulated. This content is no less descriptive because, in apprehending the ob-

⁶⁵ *NLNR*, pp. 33-34, 65; Response to Veatch, p. 268; cf. *FPPR*, pp. 194-96; *ONL*, pp. 65-66.

⁶⁶ Note 24 above; Response to Veatch, p. 272.

⁶⁷ I discuss the status of such value-judgments in my doctoral thesis, chapters 4-7 (note 46 above).

⁶⁸ *NLNR*, p. 45, my emphasis.

ject, one is attracted to it. **O**f course the content may simply be "having qualities I like"-this is descriptive, yet in the process of actual decision, this description will be a reason for acting for someone bent on possessing an object having the qualities he likes. In fact Finnis denies human goods are desirable in such a subjective sense. Like Aquinas, he sees human goods as objectively completing, as making one better off, as fulfilling human potentialities, as aspects of authentic human flourishing, and understood as such.⁶⁹

True, he distinguishes the way judgments of the truth of commonly acknowledged descriptive utterances and judgments concerning human goods come about. But as non-derivability need not imply lack of objectivity (as Finnis holds), neither need this different context for judgment entail lack of descriptivity.⁷⁰

Grisez and Finnis seem to argue that value-judgments must be prescriptive because otherwise they would not be action-guiding, as a quotation above indicates.⁷¹ Grisez suggests this in other places as well.¹² Interestingly, Finnis points out that Aquinas holds reason to be an 'active principle' because "one is motivated according to one's *understanding* of the goodness

so [*ibid.*, pp. 64, 72-73, 78-79; cf. *ONL*, p. 66.

⁷⁰ Finnis on non-derivability and objectivity: *NLNR*, p. 70. On the different mode or context of judging, see pp. 71-72, and Response to Veatch, pp. 270 ff.

Of course objections may be raised that an utterance such as "Knowledge is a complete aspect of human nature" or "Knowledge is fulfilling for humans as humans" is not descriptive but prescriptive, since "human nature" is covertly evaluative. Aquinas, however, considers human nature to be the same in all, having definite characteristics and properties. I have treated this matter more fully in my doctoral thesis (note 46 above).

It might be pointed out here that the analysis of a statement such as "Pursuing knowledge is a humanly (morally) good act" is more complicated. Briefly, it is roughly translatable as "Pursuing knowledge is an act that is complete, or has what belongs to *it* (and hence is suited to a desire one might have for such an act) according to the criterion of what belongs to, or is complete of, human beings. (This is explained more fully in my thesis, chapter 7.) On the logic of value-judgments, see also note 77 below. On Grisez and Finnis on moral precepts, see note 80 below.

ⁿ See note 64 above.

¹² E.g., *FPPR*, p. 194; *ONL*, pp. 65-66.

and desirability of human opportunities ...";⁷³ according to the analysis just offered, this understanding is of a descriptive notion, even if, for humans, attracting. Yet this supposed prescriptive function of value-judgments is not the reason for the Grisez-Finnis claim; rather, as already seen, their claim emerges from their conviction that such judgments are inherently prescriptive as formulations of reason prescribing. According to my alternative interpretation, prescription is basically imperation; prescription may involve directing to apprehended goods, and the goods-as-apprehended may be attracting, but the object understood as good and so as to be pursued must be understood under some descriptive aspect. Yet it is possible that this descriptive aspect-e.g., fulfilling, complete of human nature--will become clear in a practical context and will be attracting to humans because they are humans; so will arise self-prescriptions based on the first practical principle. *If* human goods are grasped as Grisez and Finnis claim, if human goods understood as fulfilling not just for the one prescribing but also for all humans are attracting to the one prescribing,⁷⁴ then in the context of practical reason, prescriptions will be issued to pursue such human goods.

Whether or not the above antecedents are true will not be discussed here. What must be stressed is that the prescription that follows the (descriptive) value-judgment emerges from the condition for human goods being attracting-i.e., the natural orientation toward them or, at later stages, the commitment to pursue what one understands to be really humanly good: not to resist, as Finnis might say.⁷⁵

Now if propositions about what human goods consist in are inherently descriptive, there is no reason why in principle they cannot be derived from theoretical reflection concerning human nature. Of course even if it is granted that those things that really perfect human beings are those to which in fact they all incline-i.e., presupposing the dynamism of the natural inclina-

⁷³ *NLNR*, p. 47, author's emphasis.

⁷⁴ *Ibid.*, pp. 34, 61; *ONL*, p. 66.

¹⁵ *NLNR*, p. 72.

tions—one might despair over the problem of induction: how do we know to what things all human beings tend? But that such problems may (or may not) exist does not militate against the appropriateness of such an attempt. Those of us who would wish to sort out our peculiar affections from those that are universal, who would like to confirm our initial intuitions with a more exhaustive search may prefer this route and still sustain an orientation toward human goods, understood as such, through our general inclination and perhaps commitment to act according to virtue.⁷⁶

What, finally, of the "is"- "ought" dichotomy? If "ought" is taken simply to imply prescriptivity, "is" and "ought" can remain separated; but since value-judgments are descriptive, there is no "is"-value dichotomy, either in fact or in linguistic (or logical) characteristics. However "ought" seems to imply something more-or other-than prescriptivity, as suggested by the problems pointed out in section two above with regard to interpreting all the basic precepts as "ought"-utterances. In the absence of detailed analysis of the logic of such utterances, I venture to say that they are primarily descriptive, expressing the appropriateness of a given action based on a specific criterion. To say that a human good ought to be pursued is to say that such pursuit meets whatever criterion characterizes the "ought": if it is moral, such a statement expresses the appropriateness of pursuing the human good to the completing of human nature.⁷⁷ Yet it seems that at times prescriptivity characterizes the moral "ought" too; after all, such "ought"-judgments do seem to be uttered *as* directives, as intending to motivate. Is such an utterance simply a (descriptive) value-judgment conjoined with an (implicit) imperative expressing a desire (natural or otherwise) of the one prescribing: "This is the morally good act and [let me] do it"?

⁷⁶ ST 1-2, 94, 3.

⁷⁷ A moral "ought" also implies that not doing the action in question would be wrong. Of course it could be true that not doing an act designated as a morally good act could be wrong, but the use of "a morally good act"

No, moral "ought"-directives seem to encapsulate the descriptive value-judgment as a reason for acting: "This is the morally good act, *so* [let me] do it." ⁷⁸

Now if "ought"-utterances are essentially descriptive, they too may emerge from metaphysical speculation. Yet if the practical reason at some point issues directives or imperatives as embracing and presenting the completing of human nature as their rational ground, then such directives concerning human goods may be appropriately described as full-fledged (descriptive and prescriptive) "ought"-judgments. According to the explanation proposed here, both the descriptive and prescriptive components are grounded in human nature: the former, as the criterion, the latter as having its roots in the natural inclination to act virtuously-to do the good because it is good.⁷⁹ Yet such moral "ought"-judgments seem to go beyond naturally formed precepts in that the former, as described above, imply a commitment on the part of the prescriber to acting on the basis of such goodness, *insofar as he is offering* *8Uch goodness as the rea.8on for action* (to himself or others) .⁸⁰

does not entail this: this phrase seems also to cover cases where alternative acts would equally meet the moral criterion regarding the (general) kind of action in question (e.g., helping one's parents). "X is the morally good act", on the other hand, implies that to omit X would be wrong; this phrase, however, seems to be restricted to very concrete situations, where "ought" too, is used. "Ought", however, is also used of very general types of acts, the omission of which would be wrong. The logic of "ought" is treated further (if not absolutely thoroughly) in my thesis, chapter 7; note 46 above.

⁷⁸R. M. Hare, who would not agree with our analysis, nonetheless insists on the necessary relation between value-judgments and reasons: this is at the heart of his universalizability thesis (e.g., *Freedom and Reason*, London: Oxford University Press c. 1963, p. 21.) I cannot here engage in a comparison between Hare's theory and mine; perhaps it should simply be pointed out that he rejects the essential descriptivity of value-judgments as explained above.

⁷⁹ ST 1-2, 94, 3; 1-2, 19, 6 ad 1; 1-2, 19, 7 ad 3.

⁸⁰It seems that at least the precepts enjoining the pursuit of human goods might be considered by Grisez and Finnis to be moral insofar as they direct to ends completive of human nature. These authors clarify their application of the terms "pre-moral" to such goods by pointing out that "both morally good and morally bad choices are directed (although in different ways),

In other words, it would be inconsistent for the prescriber to *propose* moral goodness as the reason for acting, issuing an imperative on this basis, and yet not *accept* that goodness as a reason for action. On the other hand, there is no reason why simply descriptive "ought"-judgments—including moral judgments—cannot be assented to and proclaimed but not conformed to in _____ by the one assenting and declaring. For he may not be committed to acting on the basis of understood moral goodness.

The basic objection to severing "is" from "ought" is the objection to divorcing authentic humanly enhancing principles for actions from their source in the human subject. A fully humanly directive principle—a moral "ought"-judgment—alludes to that source as its ground and its justification as prescriptive. To equate the "ought"-aspect of a principle with its prescriptivity, as the Grisez-Finnis position does, is to excise from such a principle its intrinsic relation to its foundation in human nature as its very reason for *being* authentically directive. This is to strip the principle of its inherent rationality.

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toward one or more of them (or, at least, toward some partial aspects or appearances of one or more of them)": Reply to McInerney, p. 28. As the quotation seems to suggest, however, many morally bad choices are not directed toward even one specific human good as universal—Le., as complete of not only the agent, but of all humans (or at least as not interfering with the flourishing of others). In fact, much moral evil consists in making an exception of oneself unjustifiably. Furthermore, the authors hold that a morally bad *choice* can be directed to one genuine human good while running counter to others. (See notes 21 and 38 above). This does not entail that the directive to pursue that good is not of a moral nature; it simply implies that, according to Grisez and Finnis, the choice in question encompasses direction to an action against at least one (other) human good. As such, that *choice* would lack what is required for it to be, *simpliciter*, conducive to human flourishing.

THE METAPHYSICS OF BRAIN DEATH,
PERSISTENT VEGETATIVE STATE,
AND DEMENTIA

A LIFE-SUPPORT TECHNOLOGY has advanced over the past half-century, a great number of thorny philosophical and moral problems have arisen regarding patients with serious neurologic damage, who in generations past would have died from their acute illness. While the concept of "brain death" as death of the person has finally gained almost universal acceptance in the medical, legal, and public sectors, there are still a number of vigorous critics. Persistent vegetative states have become a still more perplexing issue for medical ethics. This article is intended to provide a brief overview of the salient arguments in these debates, followed by the author's analysis of the issues according to the metaphysical principles of Aristotle and St. Thomas Aquinas.

THE BRAIN DEATH DEBATE

Up until the 1960s, the diagnosis of death was relatively straightforward. Death occurred when the heart irreversibly stopped. With cessation of blood flow, the first organ to become irreversibly damaged is the brain, with the other body tissues succumbing shortly thereafter. There is, therefore, the possibility of a critical period of a few minutes during which the *only* irreversibly damaged organ is the brain. The heart still has the potential for being revived, since it is driven by its own intrinsic pacemaker, and not by the brain (the role of which is merely one of *modulating* the heart rate). If the lungs were ventilated mechanically, then the heartbeat and blood flow could continue, and the non-neural tissues of the body could remain alive.

With the advent of advanced cardiopulmonary resuscitation and improved mechanical respirators in the 1950s, this condition passed from a theoretical possibility to an increasingly common reality in hospital intensive care units. The initial confusion concerning the nature of this state is reflected in the various terms that have been used to describe it: "*colla depasse*",^{1,2} "irreversible coma",^{3,4} "brain death",⁵ and "cerebral death."^{6,7} In the first two terms, the word "coma" implies that the person is still alive, although unaware of self and environment, as in a very deep and permanent sleep. "Brain death" is the most commonly employed term today, although its meaning still varies from one author to the next, often without explicit definition.⁸ It has been used in any of three basic ways. The first implies that, within an otherwise alive body, one organ (the brain) has died. This usage is equivalent to speaking of a "dead piece of skin" or a "dead finger" due to gangrene, in no way implying that the person himself is dead. The second usage implies a more radical concept: namely that brain death is actually a type of personal death, in addition to the standard cardiopulmonary death. This interpretation is especially prevalent in the legal sector, and is explicitly formulated in the brain death statutes of a number

1. Mollaret, P., Goulon, M: Le coma depasse. Rev. Neurol. (Paris) 101:3-15, 1959.

2. Mollaret, P., Bertrand, I., Mollaret, H.: Coma depasse et necroses nerveuses centrales massives. Rev. Neurol. (Paris) 101:116-139, 1959.

a. Beecher, H. K., et al: A Definition of Irreversible Coma; report of the ad hoc committee of the Harvard Medical School to examine the definition of brain death. JAMA 205:337-340, 1968.

4. Walker, A. E., Diamond, E. L., Moseley, J.: The neuropathological findings in irreversible coma. A critique of the "respirator brain." J. Neuropathol. Exp. Neurol. 34:295-323, 1975.

5. Korein, J. (ed.): Brain Death: Interrelated Medical and Social Issues. Ann. N.Y. Acad. Sci., Vol. 315, 1978.

s. Walker, A., et al: An appraisal of the criteria of cerebral death; a summary statement. JAMA 237:982-986, 1977.

† Walker, A. E.: Cerebral Death. Baltimore-Munich, Urban & Schwarzenberg, 2nd ed., 1981.

s. Black, P. McL.: Brain Death. N. Engl. J. Med. 299 (7) : 338-344 (Part I) and 299 (8) :393-401 [Part II], 1978.

of states (e.g., Kansas, Maryland, New Mexico, Virginia, Oregon, and Colorado).⁹ Finally, the most radical sense of the term implies that there are not two "types" of death, but only one death, which occurs when the essential organ, the brain, dies.¹¹ According to this view, the only reason that traditional cardiopulmonary death is death at all, is precisely because it necessarily includes brain death, not *vice versa*. "Cerebral death" is an unfortunate choice of words as applied to death of the entire brain, since, literally, the cerebrum is only a part of the brain; this usage is therefore easily confused with the concept of death of the cerebral hemispheres alone (also known as "neocortical death" or "persistent vegetative state" -see below).

The proponents of the radical interpretation of "brain death" argue that, since the brain is the organ which mediates all that is specifically human-thought, desire, emotion, etc.-then the death of this essential organ should suffice to result in the death of the *person*. They also point out that modern technology makes it possible to take a fresh cadaver (already pronounced "dead" using cardiopulmonary criteria), warm it, force air into the lungs, and cause the blood to circulate again. Even though this body looks alive to a superficial observer, it was and still is a cadaver. Such "life support" would be both a misnomer and a grotesque game. Moreover, the modern phenomena of heart transplantation and artificial hearts render the traditional cardiac criterion of death rather meaningless. It is no longer necessary that the natural heart function in order to be alive. This fact was recently brought

⁹Capron, A. M.: The Development of Law on Human Death. In Korein [5], pp. 45-61.

¹⁰ President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research: Defining Death; Medical, Legal, and Ethical Issues in the Determination of Death. U.S. Government Printing Office, Washington D.C. 20402, 1981, pp. 62-67, & Appendix C, pp. 109-134.

¹¹ Korein, J.: The Problem of Brain Death: Development and History. In Korein [Q], pp. 19-115.

home to the public quite strikingly in the case of Barney Clark, the first artificial heart recipient, who lived for 112 days on the device.¹²

Critics of this position^{13,18} maintain that, while the brain is certainly essential for thought, thought is not the same as life itself. Furthermore, those who accept the existence of a spiritual soul insist that we cannot know precisely when the soul leaves the body. For this reason it is traditional that priests, for example, give conditional anointing even up to an hour or so after cardiopulmonary death has been medically declared.¹⁹ This being the case for the traditional criteria of death, it would seem imprudent and presumptuous for medical science to declare a person dead merely because he has irretrievably lost only cognitive function. Critics of the notion of brain death also fear that such a concept represents the first step in the direction of legalized euthanasia. "Brain death" is seen as a mere construct designed to deceive society into accepting medical practices which otherwise would never be tolerated on living patients. The most important of such practices is the harvesting of vital organs for transplantation. There is also the concern of possible misdiagnosis of a salvageable patient as brain dead. A lesser fear is that lives may be termi-

¹² Los Angeles Times. March 24, 1983, part I, p. 1.

¹³ Harrison, C. P.: Re: Cerebral Death. *Linacre Quarterly* 4(9) :291-293, 1982 (letter) .

¹⁴ Byrne, P. A., O'Reilly, S., Quay, P. M.: Brain Death-An Opposing Viewpoint. *JAMA* 242: 1985-1990, 1979.

¹⁵ Byrne, P. A.: Response. In McCarthy, D. G., Moraczewski, A. S. (eds.) : *Moral Responsibility in Prolonging Life Decisions*, St. Louis, Pope John Center, 1981, Chap. 3, pp. 53-57.

¹⁶ Fost, N.: Research on the brain dead. *J. Pediatr* 96: 54-56, 1980.

¹⁷ Jonas, H.: Against the Stream: Comments on the Definition and Re-definition of Death. In Jonas, H. (ed.) : *Philosophical Essays: From Ancient Creed to Technological Man*. Englewood Cliffs, Prentice Hall, 1974, pp. 132-140.

¹⁸ Currie, B. S.: The redefinition of death. In Spicker, S. F. (ed.): *Organism, Medicine, and Metaphysics*. Boston, Reidel, 1978, pp. 177-197.

¹⁹ Moraczewski, A. S., Showalter, J. S.: *Determination of Death. Theological, Medical, Ethical, and Legal Issues*. St. Louis, Catholic Health Assoc. of United States, 1982, P. 11,

nated simply for the economic consideration of the cost of extended intensive hospitalization. By simply redefining death in order to call such patients "dead," transplantation and cost consciousness could be made to appear more acceptable to the public. The facts that brain death statutes in some states define it as an alternative "type" of death, and that many employ terminology such as: "for legal purposes" a brain-dead patient "may be considered dead" (as though tacitly acknowledging that in reality he is not dead) -only serve to reinforce these fears.

THE NEOCORTICAL DEATH DEBATE

In spite of such concerns, most doctors, legislators, and lawyers, as well as the lay public, have come around to accepting the notion of brain death as true death of the person, rather than as verbal trickery. Not so with the concept of *neocortical death*,²⁰ also known as "cerebral death",^{21, 22} "persistent vegetative state",^{23, 24} "apallic syndrome",^{25, 26} and "*coma vigilie*." This state differs from brain death in that only part of the brain is destroyed (the neocortex, or cerebral hemispheres). Although some daring persons have advocated that total brain death is too restrictive a concept, and that neocortical death

²⁰ Brierly, J. B., Adams, J. H., Graham, D. I., Simpson, J. A.: Neocortical death after cardiac arrest. *Lancet* 2: 560-565, 1971.

²¹ Korein, [5], pp. 95-96.

²² Kricheff, II, Braunstein, P., Korein, J., George, A. E., Kumar, A. J.: Isotopic and angiographic determination of cerebral blood flow. A correlation in patients with cerebral death. *Acta Radiol. [Suppl.] (Stockh.)* 347: 119-129, 1971.

²³ Cranford, R. E., Smith, H. L.: Some critical distinctions between brain death and the persistent vegetative state. *Ethics Sci. Med.* 6: 199-209, 1979.

²⁴ Jennett, B., Plum, F.: Persistent vegetative state after brain damage. A syndrome in search of a name. *Lancet*, 1:734-737, 1972.

²⁵ Ingvar, D. H., Brun, A., Johansson, L., Samuelsson, S. M.: Survival after severe cerebral anoxia with destruction of the cerebral cortex: The apallic syndrome. In Korein [5], pp. 184-214.

²⁶ Ingvar, D. H.: Cerebral blood flow and metabolism in complete apallic syndromes, in states of severe dementia, and in akinetic mutism. *Acta Neurol. Scand.* 49:233-244, 1973.

should suffice to constitute the death of a person,^{21,30} most people regard this position with great suspicion. The idea was rejected by the President's Commission which studied brain death and related issues.³¹ All the criticisms and fears mentioned above with regard to brain death are even more justified with regard to neocortical death. The most important concern is that withholding fluids and nutrition from a patient in this condition might constitute euthanasia.

Viewed in historical perspective, however, the level of acceptance today of the concept of neocortical death is rather similar to that of brain death two decades ago. It would hardly be surprising, given the direction in which society has been moving, if in another decade or so the laws will have been revised to reflect a general acceptance of neocortical death as death of the person. Up to now this evolution has reflected merely the chaotic tossing of the waves of emotional opinion and the biases of the mass media, without any basis in clear or uniform principles. The purpose of this article is to summarize the medical facts and to provide a philosophical framework by which to interpret them, humbly proposing it as a reasonable foundation for the development of public policy regarding these issues.

PATHOGENESIS OF BRAIN DEATH

The brain is one of the most metabolically active organs of the body. Although it constitutes only 23 of body weight in an adult, it utilizes 15-20% of the output of blood from the

²¹ Veatch, R. M.: *Death, Dying and the Biological Revolution*. New Haven, Yale Univ. Press, 1976, pp. 71-76.

²⁸ Veatch, R. M.: The whole-brain-oriented concept of death: An outmoded philosophical formulation. *J. Thanatol.* 3 (1) :13-30, 1975.

²⁹ Pearson, J.; Korein, J., Braunstein, P.: Morphology of defectively perfused brains in patients with persistent extracranial circulation. In Korein [5], pp. 265-271.

³⁰ Beresford, H. R.: The Quinlan decision: Problems and legislative alternatives. *Ann. Neurol.* 2:74-81, 1977.

³¹ President's Commission [10], p. 40.

heart.^{82, 83} As a consequence, brain cells are more vulnerable to lack of blood or oxygen than most other cells of the body. At normal body temperature after only four minutes of loss of blood flow (ischemia), nerve cells in the cerebral cortex begin to die,^{84, 85} while after 10 minutes the entire brain is destroyed.^{36, 37} What happens at the cellular level is the following.^{38, 39} Cells require a constant source of energy in order to maintain the integrity of their membranes. Normally this energy is derived from sugar and oxygen from the blood stream. Under ischemic conditions, a cell must begin to break down its own proteins for energy, resulting in its membranes becoming leaky. Not only is the cell then unable to function normally, but digestive enzymes, which are normally packaged safely within intracellular membranes called lysosomes, leak out into the cytoplasm and begin to digest the cell itself.

In addition to directly damaging the cells, this causes water to be drawn into them by osmosis from the blood stream. The cells lining the capillaries of the brain also swell, thereby obstructing the blood flow through them. As the brain swells, the pressure within the head rises, so that even if the heart were restarted, it would not be able to pump sufficient blood to the brain against the pressure. The decreased blood flow to an

32 Folkow, B., Neil, E.: *Circulation*. New York, Oxford University Press, 1971, p. 434.

38 Keele, C. A., Neil, E. (eds.): *Samson Wright's Applied Physiology*. London, Oxford Univ. Press, 1971, p. 143.

34 Plum, F., Posner, J. B.: *The Diagnosis of Stupor and Coma*. Philadelphia, Davis, 3rd ed., 1980, p. 209.

35 Levy, D. E., Brierley, J. B., Silverman, D. G., Plum, F.: Brief hypoxia-schemia initially damages cerebral neurons. *Arch. Neurol.* 32:450-456, 1975.

36 Weinberger, L. M., Gibbon, M. H., Gibbon, J. H., Jr.: Temporary arrest of the circulation to the central nervous system: I. Physiologic effects. *Arch. Neurol. Psychiatry* 43:615-634, 1940.

37 Myers, R. E., Yamaguchi, M.: Effects of serum glucose concentration on brain response to circulatory arrest. *J. Neuropathol. Exp. Neurol.* 35:301, 1976.

88 Fein, J.M.: *Brain Energetics and Cerebral Death*. In Korein [5], pp. 97-104.

39 Plum & Posner [34], p. 196, 202-206.

already sick brain causes still more brain damage and swelling, so that a vicious cycle is established. When cerebral blood flow drops below 20% of normal (at normal body temperature), a critical point is reached when the cells can no longer survive,^{40,42} ending in total cessation of blood flow to the brain (the "no-reflow" phenomenon), even in the face of normally restored blood flow to the rest of the body.^{48,46} This takes place as soon as the intracranial pressure exceeds the mean arterial blood pressure.

As brain swelling continues, the cerebral hemispheres are squeezed out through an opening in the tough membrane called the tentorium, into the posterior fossa (where the brainstem is located). The brainstem is then squeezed out through the opening at the bottom of the skull where it connects with the spinal cord. Such herniation of the softened brain through these small openings is very similar to the way that toothpaste is squeezed out through a tube. Often at autopsy broken-off pieces of necrotic brain are found floating in the spinal fluid up and down the spinal canal. The spinal cord itself, how-

⁴⁰ Korein, J., Braunstein, P., George, A., Vichter, M., Kricheff, I., Lieberman, A., Pearson, J.: Brain Death: I. Angiographic correlation with the radioisotopic bolus technique for evaluation of critical deficit of cerebral blood flow. *Ann. Neurol.* 2(3) :195-205, 1977.

⁴¹ Hoyer, S., Wawersik: Untersuchungen der Hirndurchblutung und des Hirnstoffwechsels beim Decerebrationssyndrom. (Studies of cerebral blood flow and cerebral metabolism in the decerebration syndrome.) *Langenbecks Arch. Klin. Chir.* 322: 602-605, 1968.

⁴² Brierley, J. B., Brown, A. W., Meldrum, B. S.: The nature and time course of the neuronal alterations resulting from oligaemia and hypoglycemia in the brain of *Macaca mulatta*. *Brain Res.* 25:483-449, 1971.

⁴³ Ames, A., Wright, R. L., Kowada, M., Thurston, J. M., Majno, G.: Cerebral Ischemia. II. The no-reflow phenomenon. *Am. J. Pathol.* 52:437-453, 1968.

⁴⁴ Braunstein, P., Korein, J., Kricheff, I., Lieberman, A.: Evaluation of the critical deficit of cerebral circulation using radioactive tracers (bolus technique). In Korein [5], pp. 143-167.

⁴⁵ Kricheff, I., Pinto, R. S., George, A. E., Braunstein, P., Korein, J.: Angiographic findings in brain death. In Korein [5] pp. 168-183.

⁴⁶ Rosenklint, A., Jorgensen, P. B.: Evaluation of angiographic methods in the diagnosis of brain death. Correlation with local and systemic arterial pressure and intracranial pressure. *Neuroradiology* 7:215-219, 1974.

ever, may remain relatively intact, or may have been directly damaged from the initial cardiac arrest. Such a condition of the brain at autopsy (the technical term is "respirator brain") is the rule in cases of brain death, with the occasional discrepancies between clinical signs and autopsy findings being largely attributable to variations in timing of the autopsy.^{47, 49}

The same end-stage may also result from causes other than cardiac arrest. Any condition that causes severe brain swelling (e.g., head trauma, infection, etc.) may set up the same vicious cycle leading to brain death. Over time, if the rest of the body is supported with mechanical ventilation, nasogastric feedings, and intensive nursing care, the intracranial pressure drops back down, and blood flow to the dead brain resumes.^{50, 52} This subsequent blood flow may even be greater than normal (so-called "global luxury perfusion"), but it does no good, since the brain cells are already dead, and the brain remains without any electrical activity.⁵³ During the course of many weeks, the body's scavenger cells, called macrophages, remove the dead brain tissue, eventually leaving nothing but water in the skull. This natural process thus has the same effect as though some macabre neurosurgeon had opened up the skull,

⁴⁷ Walker, A. E.: Pathology of Brain Death. In Korein [5], pp. 272-280.

⁴⁸ Moseley, J. I., Molinari, G. F., Walker, A. E.: Respirator brain. Report of a survey and review of current concepts. *Arch. Pathol. Lab. Med.* 100: 61-64, 1976.

⁴⁹ Pearson, J., Korein, J., Harris, J. H., Wichter, M., Braunstein, P.: Brain death: II. Neuropathological correlation with the radioisotopic bolus technique for evaluation of critical deficit of cerebral blood flow. *Ann. Neurol.* 2:206-210, 1977.

⁵⁰ Radberg, C., Soederlundh, S.: Computer tomography in cerebral death. *Acta Radiol. [Suppl.] (Stockh.)* 346:119-129, 1975.

⁵¹ Hekmatpanah, J.: Cerebral circulation and perfusion in experimental increased intracranial pressure. *J. Neurosurg.* 32:21-29, 1970.

⁵² Greitz, T., Gordon, E., Kolmodin, G., Widen, L.: Aortocranial and carotid angiography in determination of brain death. *Neuroradiology* 5: 13-19, 1973.

⁵³ Gordon, E., Greitz, T., Widen, L.: Global luxury perfusion in deeply comatose patients: Report of 3 cases. In Russell R. W.R. (ed.): *Brain and Blood Flow. Proceedings of the 4th International Symposium on the Regulation of Cerebral Blood Flow.* London, Pitman, 1971, p. 285-288.

removed the entire brain, and deposited it down the garbage disposal. Of course, long before this process is complete, the heart spontaneously stops, or these patients are disconnected from the respirator, so that at autopsy the brain may be found in various stages of liquefaction, rather than completely absent.

A patient in this condition lies motionless, although there may be some automatic reflex movements upon stimulation, such as tendon reflexes or spinal-mediated leg withdrawal (if the spinal cord was not damaged by the primary insult). The patient has no awareness of his own body or the environment. The possibility that he might be aware but simply cannot communicate is simply not tenable, because patients with lesions of the brain's sensory areas specifically report numbness, blindness, etc., and these lesions are certainly included in destruction of the entire brain. Whether some sort of pure self-awareness is or is not preserved neither is clinically ascertainable nor distinguishes *per se* whether someone has passed from this life to the next. It therefore has no bearing on questions related to the moment of bodily death.

Although purely vegetative functions such as nutrition, blood pressure, wound healing, etc., are not directly dependent upon brain functioning, eventually even these fail: the blood pressure drops and the heart stops despite resuscitative efforts. Therefore, brain dead patients cannot really be kept vegetatively "alive" *indefinitely*; with good nursing care, however, they can be maintained up to several months.^{54, 55}

PATHOGENESIS OF PERSISTENT VEGETATIVE STATE

If the original brain damage was not severe enough to cause death of the entire brain, a *persistent vegetative state* may result. As mentioned above, the cerebral hemispheres, and

⁵⁴ Walker A. E., Molinari G.: Criteria of cerebral death. Trans. Am. Neurol. Assoc. 100:29-35, 1975.

⁵⁵ Parisi J. E., Kim, R. C., Colins, G. H., Hilfinger, M. F.: Brain death with prolonged somatic survival. N. Engl. J. Med. 306: 14-16, 1982,

especially their mantle of gray matter (the neocortex), are more susceptible to lack of blood flow than the brainstem. An intermediate degree of brain pathology may therefore be seen, in which only the cerebral hemispheres are damaged by the ischemia. The capillary and hemispheric swelling impede blood flow to the hemispheres as in whole brain death, but the severity is not quite sufficient to cause herniation through the tentorial notch into the posterior fossa and destroy the brainstem.^{56,57}

Initially following cardiac arrest, the brainstem is usually rendered temporarily dysfunctional, so that mechanical respiratory support must be provided. However, after a few days the brainstem often recovers sufficiently for the patient to breathe on his own. As in total brain death, the cerebral hemispheres eventually liquefy and the debris is gradually removed through the blood stream. All that is left is a more or less functioning brainstem. This allows such patients to breathe spontaneously, open their eyes, and go through what appear to be sleep/wake cycles.

In spite of their apparent wakefulness, there is no real awareness of their body or the environment. Even though their eyes are open and may even track a slowly moving object,⁵⁸ they show no evidence of effort at communication through eye movements, as patients with the "locked-in syndrome" do.^{59,60} Their limbs are typically fixed in a spastic posture with legs

⁵⁶ Korein, J., Braunstein, P., Kricheff, I., Lieberman, A., Chase, N.: Radioisotopic bolus technique as a test to detect circulatory deficit associated with cerebral death. 142 studies on 80 patients demonstrating the bedside use of an innocuous IV procedure as an adjunct in the diagnosis of cerebral death. *Circulation* 51:924-939, 1975.

⁵⁷ Heiskanen, O.: Cerebral circulatory arrest caused by acute increase of intracranial pressure. A clinical and Roentgenological study of 25 cases. *Acta. Neurol. Scand.* 40: Suppl. 7, 1964.

⁵⁸ Levy, D. E., Knill-Jones, R. P., Plum, F.: The vegetative state and its prognosis following nontraumatic coma. In Korein [5], pp. 293-306.

⁵⁹ Hawkes, C. H.: "Locked-in" syndrome: report of seven cases. *Br. Med. J.* 4:379-382, 1974.

⁶⁰ Nordgren, R. E., Markesbery, W. R., Fukuda, K., Reeves, A. G.: Seven cases of cerebral medullary disconnection: the "locked-in syndrome". *Ninr- (:Minneapolis) 21:110-114, 8, 1971;*

extended and arms flexed. There may be reflex withdrawal from noxious stimuli, as well as reflex grimacing or purposeless uncoordinated chewing movements. They cannot eat, however, and attempts to feed them result inevitably in aspiration of food into their lungs. Thus, they must be fed through a nasogastric or gastrostomy tube.

Persistent vegetative state is thus an apt name for such a condition. An X-ray CT (computed tomography) scan of such a patient's head will show the supratentorial space full of fluid, surrounded perhaps by a thin shell of scar tissue. As might be expected, the electroencephalogram reveals no electrical activity from the surface of the scalp. Such patients may be kept alive in this state indefinitely, if nursing care is good enough to prevent bedsores and aspiration pneumonia, and nutrition is maintained through proper tube feedings. The longest survival on record for such a patient is 37 years.⁶¹

Less severe forms of this state also occur commonly in clinical practice, perhaps even more frequently than those resulting in complete liquefaction of the cerebral hemispheres. **I**t often happens that only the nerve cells themselves are lost, leaving a residual shnmken hemisphere composed of non-neural elements and scar tissue, totally lacking any functional potential.⁶² **I**n some cases, much but not all of the cerebral hemisphere is destroyed. The areas of "no-reflow" may be patchy, depending upon the degree of ischemia, and any relatively preserved areas of rain may manifest some abnormal but present electrical activity on EEG. Interestingly, with the passage of time, blood flow returns to the areas of "no reflow," resulting paradoxically in patchy "luxury perfusion" of areas without electrical activity, and less circulation to areas with electrical activity. For the sake of clarity, further discussion of vegetative states will be restricted to those cases in which the nerve

⁶¹Cranford & Smith [23], p. 89 (quoted from Guinness Book of World Records).

⁶²Dougherty, J. H., Jr., Rawlinson, D. G., Levy D. E., Plum F.: Hypoxia-ischemic brain injury and the vegetative state: Clinical and neuropathologic correlation. *Neurology* (NY) 31:991-997,1981.

cells of both cerebral hemispheres have been totally destroyed. i.e., true "cerebral death," without necessarily requiring that all the dead tissue have been removed yet.

It should also be clear that the following will be a theoretical analysis of the *nature* of these states in general; we are not here concerned with the practical issues related to determining whether a given patient is in such a state or not. The former is a philosophical issue, while the latter is a medical one. Both are extremely important, as is the distinction between them, which is often blurred by critics of the brain death concept. The reality and nature of these states in individual patients should not be considered vague, simply because of the difficulties in making an early diagnosis of their irreversibility. To think in this way would be the same as to imagine that the reality of an early cancer were somehow reduced simply by our inability to detect it. One should endeavor to have a clear understanding of the metaphysical nature of these states, so that when they are diagnosed in a given patient, one will know how to apply the norms of morality governing life and death. If the diagnosis is uncertain, then one must employ other moral norms which govern situations of factual uncertainty. It would be a great mistake to confuse the two issues, however.

GENERAL PHILOSOPHICAL PRINCIPLES

At the outset, let it be explicitly stated that this analysis is based upon the metaphysical principles of Aristotle and St. Thomas Aquinas. Justification of these principles in the light of modern science is beyond the scope of this article, but interested readers may refer to a number of contemporary works.⁶³⁻⁷⁰ It will be seen, however, that the neuroanatomical considera-

⁶³ Van Melsen, A. G.: *The Philosophy of Nature*. Pittsburgh, Duquesne University Press, 2nd ed., 1959.

⁶⁴ Koren, H. J.: *An Introduction to the Philosophy of Nature*. Pittsburgh, Duquesne University Press, 1962.

⁶⁵ Koren, H. J., (ed.) : *Readings in the Philosophy of Nature*. Westminster, MD., Newman Press, 1965.

⁶⁶Hoenen, P.: *The Philosophical Nature of Physical Bodies*. West Springs, IN., West Baden College, 1955,

tions which will be made are equally valid for other philosophical systems.

According to Aristotle and St. Thomas, all existing things are what they are in virtue of two co-principles of being: prime matter (pure potency) and substantial form (specifying the essence of the thing). These constitute the substance. This, together with accidents (properties), constitutes the actual existing thing. This conception of physical nature is called hylomorphism (from the Greek "hyle" =matter, "morphe" =form). In the case of living things, it is the substantial form which specifies their essence precisely as *living*; i.e., substantial form is the vital principle which organizes the material components into a functioning unity, which cannot be reduced to the mere sum of its parts. What differentiates living from non-living things is that the former are capable of "moving themselves," whereas inanimate things must be moved by another.^{71, 72} This "motion" includes not only local motion but also other immanent accidental changes such as growth, changes in shape, etc. Modern biology supports the notion of substantial form, insofar as there is a constant dynamic turnover of the individual molecules and atoms comprising all the tissues of a living body, including the nervous system^{73, 74} and

⁶¹ Walshe, F.: Further Critical Studies in Neurology and Other Essays and Addresses. Baltimore, Williams & Wilkins, 1965, Chaps. 7 and 9, pp. 157-178, 196-218.

⁶⁸ Jaki, S. L.: Brain, Mind and Computers. South Bend, IN. Gateway, 1969.

⁶⁹ Jaki, S. L.: The Relevance of Physics. Chicago, University of Chicago Press, 1966, Chap. 7, "Physics and Biology," pp. 283-329.

⁷⁰ Grene, M.: Individuals and their Kinds: Aristotelian Foundations of Biology. In Spicker SF. (ed): Organism, Medicine, and Metaphysics. Boston, Reidel, 1978, pp. 121-136.

⁷¹ Koren, H. J.: An Introduction to the Philosophy of Animate Nature. St. Louis, Herder, 1955, pp. 14-38.

⁷² Aquinas, T.: Summa Theologiae, I, q. 18, a. 1.

⁷³ Norton, W. T.: Formation, Structure, and Biochemistry of Myelin. In Siegel, G. J., Albers, R. W., Agranoff, B. V., Katzman, R. (eds.): Basic Neurochemistry. 3rd ed., Boston, Little, Brown & Co., 1981, Chap. 4, pp. 81-87.

⁷⁴ Gardner, J. M., Fambrough, D. M.: Metabolism of Cell Surface Receptors: Possible Roles in Cell Sensitivity and Responses to Activators. In

b. ALAN SIEWMON: b.

even bone.⁷⁵ After a while, none of the original atoms remains. In spite of this, the organism is still the same individual, because what *does* remain the same at the atomic/molecular level is the *relationship* among the atoms and molecules, i.e., the *form* of the body.

A mathematical analysis of life processes, such as that given by Varela,⁷⁶ also leads to some conclusions which are much more in accord with hylomorphism than with mechanism, even though the author is more a mechanist than a Thomist. He uses the term "autopoiesis" or "autopoietic machine" to define the essence of living things: "An autopoietic machine continuously generates and specifies its own organization through its operation as a system of production of its own components, and does this in an endless turnover of components under conditions of continuous perturbation and compensation of perturbations. Therefore, an autopoietic machine is a homeostatic (or rather a relations-static) system that has its own organization (defining network of relations) as the fundamental invariant." (fn. 76, p. 13) An intriguing conclusion is that the mathematical representation of inanimate dynamic systems (i.e., sets of recursive differential equations) is inadequate as a *complete* description of the autopoiesis of living organisms. (fn. 76, pp. 204-206) While lacking any reference to hylomorphism, such a formulation definitely places the essence of an organism on a higher level than the mere (accidental) interaction of its parts, and equates it with a global organizational principle, which seems to be identical to what Aristotle and St. Thomas would call the substantial form.

Substantial forms which convey the property of vitality to matter are called by Aristotle and St. Thomas "souls" (*animae*), which term is used in a broader, more technical

Goldberger, R. F., Yamamoto, K. R. (eds.): *Biological Regulation and Development*. New York, Plenum, 1982, pp. 299-339.

⁷⁵ Ross, G.: *Essentials of Human Physiology*. 2nd ed., Chicago, Year Book Medical Publ., 1982, pp. 649-650.

⁷⁶ Varela, F. J.: *Principles of Biological Autonomy*. New York, North Holland, 1979. [Series in General Systems Research Vol. 2].

sense than we are accustomed to in modern everyday parlance. Depending upon the level of complexity of the organism, souls may be vegetative (the life-principles of plants), animal (which provide in addition sensation and mobility), and human (which provide in addition the spiritual faculties of intellect and will). In higher organisms, all the lower powers are still operative; in fact, the higher faculties are always built upon, and depend for their proper functioning upon, the lower ones. The human soul, therefore, provides not only the spiritual faculties, but also specifies the sensorimotor faculties proper to the animal level and the nutrient and trophic functions proper to the vegetative level. Although these levels of functioning are conceptually quite distinct, there are not three different souls in a human being, but one soul, which harmoniously unites the vegetative, sensitive, and spiritual levels into an individual person.^{77, 78}

When one material substance is transformed into another, a *substantial change* takes place. The original substantial form vanishes (reverts to the potency of prime matter) and a new one instantaneously supersedes it (is educed from the potency of prime matter).^{79, 80} Substantial changes are brought about through a sequence of critical accidental changes. Minor accidental alterations, such as heating, stretching, etc., do not affect the original essence. If, however, some accidents are changed so as to render the matter incompatible with the original essence, then the original organizing principle, or substantial form, is lost. It is important not to fall into the trap of trying to construct a mental image of forms emerging from and descending into prime matter, as though they were things themselves which took up physical space.^{81, 82} It is meaningless

⁷⁷ Gilson, E.: *The Christian Philosophy of St. Thomas Aquinas*. New York, Random House, 1956, pp. 187-222.

⁷⁸ Aquinas, T.: *Summa Theologiae*. I, q. 76, aa. 3 & 4.

⁷⁹ Aquinas, T.: *Summa Contra Gentiles*. bk. II, ch. 86.

⁸⁰ Aquinas, T.: *Quaestiones Disputatae de Spiritualibus Creaturis*. a. 2, ad 8.

⁸¹ Koren [64], pp. 45-47.,

⁸² Aquinas T.: *VII Metaphysiconim Commentarii*, lect. 7^o μo,

to ask "where did the form go," since it is not a thing itself, and has no existence apart from matter. **It** would be just as meaningless as to ask where the form of a symphony went after the performance was over.

The only exception to this is the human soul, which, because of its spiritual faculties of intellect and will, transcends the physical realm (even though it depends upon the internal senses for its normal functioning). Unlike vegetative and animal souls, which revert to the potency of prime matter at death, the human soul continues to subsist independently of matter.⁸³ Nevertheless, this is an unnatural state, in which the nutritive and sensitive powers remain only virtual,⁸⁴ and the incorporeal soul, as substantial form of the body, remains incomplete until the final resurrection of the body.⁸⁵ Such a conception obviously has little to do with the Platonic notion of death being a liberation of the soul from a kind of unnatural imprisonment in the body.

Sometimes multiple new forms are educed during a substantial change, resulting in a mixture of things, where there had previously been one thing. What the new form or forms will be is determined by the accidents at the time of the substantial change, i.e., whichever substance is (or substances are) most compatible with the new accidental properties at the critical moment of substantial change.^{86, 87} Thus, substantial changes are instantaneous, even though the accidental changes are continuous, and we cannot empirically determine the precise moment of substantial change, since what we observe through our senses are the accidents.⁸⁸

In the case of vegetative organisms, a substantial change constitutes the death of the organism. Without the unifying vital principle, the component chemicals of the organism proceed to react with each other in an uncoordinated manner,

sa Aquinas, T.: *Summa Theologiae*. I, q. 75, a. 2.

84 Aquinas, T.: *Summa Theologiae*. I, q. 77, a. 8.

ss Koren [71], pp. 280-282.

ss Koren [64], pp. 48, 49.

s1 Glenn, P. J.: *Cosmology*. St. Louis, Herder, 1941, p 165.

6s Glenn r871 pp. 39, 163 183,

resulting in decay. Thus the one original substantial form becomes replaced by a myriad of inanimate forms of various chemical substances, initially accidentally juxtaposed in the general shape of the original organism.

In the case of higher forms of life, such as animals and man, the accidental changes immediately responsible for death are usually also changes which attack the unifying principle at the vegetative level: i.e., irreversible loss of integrity of the cells throughout the body. As the soul quits the body, the body becomes a great mixture of chemicals. However, suppose the accidental changes attacked the essence of the organism at a level higher than vegetative. There is no *a priori* reason to exclude the possibility of a higher level soul being superseded by a lower level soul, rather than by a mixture of inanimate forms.

In fact, instances of substantial change from one living thing into another do occur in nature, albeit much less commonly than substantial changes to the inanimate level (i.e., decay). Many plants and certain lower animals, such as starfish and planaria, have the capacity for severed parts to grow into new complete organisms.^{89,93} Here we observe the multiplication of living substantial forms through the mere physical separation of parts, as opposed to the ordinary route of natural reproduction. The severed part loses participation in the original organism's substantial form, but instead of decaying, it has enough functional unity of its own to stay alive and to develop into a whole organism again. The functional unity indicates that a new substantial form was actualized at the moment of separation of the part.

⁸⁹ Van Melsen [63], p. 129.

⁹⁰ Goss, R. J.: *Principles of Regeneration*. New York, Academic Press, 1969.

⁹¹ Rose, S. M.: *Regeneration: Key to Understanding Normal and Abnormal Growth and Development*. New York, Appleton-Century-Crofts, 1970.

⁹² Thornton, C. S., Bromley, S. C., (eds.): *Vertebrate Regeneration*. Stroudsburg, PA. Dowden, Hutchinson, & Ross, 1973.

⁹³ Slack, J. M. W.: *Regeneration and the Second Anatomy of Animals*. In Subtelny, S., Green, P. B. (eds.): *Developmental Order: Its Origin and Regulation*. New York, Liss, 1982, pp. 423-436.

Even more interesting for our purposes is the fact that parts severed from higher animals may also continue to live, but with a substantial form quite different from that of the original animal. For example, a wide variety of cells (such as skin fibroblasts,⁹⁴ certain blood cells,⁹⁵ and even brain cells⁹⁶ may be taken from an animal or a human, and kept alive in a nutrient culture medium. Not only that, but they tend to grow and multiply into new generations of the same type of cell. These cells are obviously living substances, on the same level of existence as naturally occurring one-celled organisms. Even though they may have been derived from a human body, they are certainly not new human beings.

Although such a phenomenon is not encountered in everyday life by most people, its possibility in the controlled environment of a laboratory is certainly not incomprehensible. St. Thomas would have explained that the new, lower, form was *virtually* present in the original, higher form.^{97, 98} In a compound substance, the "virtual presence" of the more elementary substantial forms is defined as an "active potentiality; " i.e., in contrast to the "passive potentiality" of prime matter to any form, the "active potentiality" of the elementary forms virtually present in a compound is responsible for the natural tendency for things to change only in certain ways, as opposed to randomly or chaotically. Virtual elementary forms contribute some, but not all, of their properties to a compound.^{99, 100} (If they contributed all of their properties, there would be no compound substance at all, but a mixture of the elementary

⁹⁴ Adams, R. P.: *Cell Culture for Biochemists*. Amsterdam, Elsevier, 1980 [Vol. 8 of *Work*, T. S., Burdon, R. H. (eds.): *Laboratory Techniques in Biochemistry and Molecular Biology*].

⁹⁵ Glick, J. L.: *Fundamentals of Human Lymphoid Cell Culture*. New York, Marcel Dekker, 1980.

⁹⁶ Fedoroff, S., Hertz, L. (eds.): *Cell, Tissue, and Organ Cultures in Neurobiology*. New York, Academic Press, 1977.

⁹⁷ Aquinas, T.: *Summa Theologiae*. I, q. 76 a. 4, ad 4.

⁹⁸ Aquinas, T.: *Quaestiones Disputatae de Anima*. a. 9, ad 10.

⁹⁹ Koren [64], pp. 51, 62.

¹⁰⁰ Glenn [87], pp. 163, 164.

substances.) This concept of virtual presence is perhaps more familiar these days at the level of quantum mechanics. For example, the substantial form of an electron is virtually (not actually) present in an atom, and the substantial form of an oxygen atom is virtually present in a water molecule.^{101, 102} When an accidental change occurs that is just sufficient to result in a substantial change, the latent (virtual) forms are the ones which become actualized. Thus many vegetative souls (corresponding to each individual cell of the body) are *virtually* present in a living body, and under the proper circumstances may become actual.

Such substantial transformations from one level of life to another may go in the other direction as well. Just as the individual oxygen and hydrogen atoms become only virtual when they fuse into a water molecule, so does the water molecule vanish into "virtuality" when it is drunk by an animal and begins to participate in the vital functions of the animal. Similarly, a fibroblast growing in culture loses its own individual vegetative substantial form when transplanted back into the donor person, becoming "reinformed" by that human soul. In the case of a larger piece of tissue, such as a kidney awaiting transplantation (temporarily kept alive in a nutrient oxygenated bath), this is not a single unified living organism, as the fibroblast, but rather a conglomerate of many independently living kidney cells, each with its own substantial form. Upon successful transplantation, the forms of all these cells become only *virtually* present again in the human soul.

HYLOMORPHISM AND BRAIN DEATH

From all of the above, it is clear that the range of possible "souls" is not limited to those which occur naturally, but also includes countless varieties made possible through modern technology, such as tissue culture laboratories. By removing a

¹⁰¹ Hoenen [66], nos. 240-246, 248-252, 255 a-d.

¹⁰² Hoenen, P.: Hylomorphism: The Virtual Presence of Substantial Forms. In Koren [65], Chap. 33, pp. 191-205.

living fibroblast or kidney, one or more new, lower-order living substances come into being, without in any way destroying the unifying principle of the original person (i.e., killing him). This fact can help us arrive at an understanding of brain death through the back door, as it were, by leading us to consider the following question: *how much* tissue can be removed from the original body and kept independently alive, without killing the person? Another way of phrasing it might be: what is the minimum part of the human body still capable of supporting the human essence?

Suppose that instead of removing just a fibroblast from the body, we remove an entire limb, but with surgical care, so that the limb's main blood vessels are connected to a cardiopulmonary bypass machine as well as a hemodialysis machine. The severed part is no longer informed by the person's soul, but neither is it inanimate matter. Like the donor kidney, it is an aggregate of many living cells, each with its own vegetative soul. Apart from the person's body they do not constitute a functional unity, so there is no one substantial form of the severed limb as a whole. The original person is still alive, however, with the same soul as before, even though the quantity of matter informed by that soul is now somewhat less.

Now suppose this person were unfortunate enough also to have his other three limbs amputated and kept alive in the same way. Then his kidneys were removed, so that he required regular hemodialysis. Although he is no longer in the best of health, he is obviously still alive and the same person as before. Now his intestines are removed, and he has to receive all his nutrition and fluids intravenously. At this point he is placed on a cardiopulmonary bypass machine, so that his heart and lungs may be excised without ill effect. The liver is also taken, and his blood is purified by perfusion through a pig liver in series with the bypass machine. Air is forced through his trachea, permitting him to speak with us. As he describes his feelings about all of this, it is undeniable that he is still alive and still the same person as before. Since the functions of all

the vital organs except the brain are now subserved by mechanical devices, the torso has become a superfluous shell and may be surgically removed from the neck without any detriment to the patient. Of course, all the machines are now reconnected to the blood vessels of the neck. In order to preserve communication with the patient, the nerves to the larynx are carefully preserved, and the continuous flow of air is maintained through the trachea. Although now reduced to only a head and neck, this is still the same person as before, as he himself will attest if we ask him. In the meantime, all the removed parts have been connected to machines to keep them alive as well.

Suppose we now remove his eyes and ears. Though blind and deaf, he still continues to talk: to us about his memories, imaginations, thoughts, desires, and emotions. Since all that is needed for him to communicate with us is the speech apparatus, we could proceed to dissect away (humanely, of course, under local or general anesthesia) the parts of the head and neck not involved with speech: the skin, the skull and spinal bones, spinal cord, and most of the neck muscles. Now his body is reduced to a brain, mouth, trachea, and larynx, still kept alive by the same machines as before.

If we now remove the speech apparatus, we would lose all contact with him, but would hardly kill him. He would continue thinking, remembering, imagining, and wishing just as before, but it would all be kept to himself, due to his inability to communicate. His body is now reduced to his brain alone, floating in a warm solution and connected to the cardiopulmonary, dialysis and parenteral nutrition machines. Since that function which distinguishes animal from vegetable, namely consciousness, is still present, no substantial change has yet been induced by all this mutilation. The spiritual soul is still there, informing what little volume of matter remains.

Let us pause for a moment to return our consideration to the various body parts which have been removed and kept alive, each with its own set of cardiopulmonary, dialysis, and nu-

tritional machines. It is obvious that at this point whatever is done to them will have no effect upon the person. They could be discarded or surgically reanastomosed one to the other, and it would make no difference. For that matter, they might just as well have been removed *en bloc*, rather than one by one. A careful neurosurgeon could have done this by opening the skull and connecting the main blood vessels of the brain to the bypass machine, all the while avoiding bleeding from the cut vessels. Then all the cranial nerves and the spinal cord would be severed and the intact living brain carefully shelled out of the skull and placed in its nutrient bath. The skull would then be replaced and the scalp sutured back together. It should be evident that, in spite of appearances, such surgery would not constitute "removing the brain from the person's body." A more accurate description would be "removing the skin, muscles, bones, visceral organs, and eyes from the person's body," since afterwards the person's body is his brain.

This being the case, what then is this removed flesh, which looks so much like a human body, but is not? It has a heart that pumps blood through it. Its lungs, moved by a mechanical ventilator, provide gas exchange. Its kidneys and liver cleanse the blood of waste products. Its stomach and intestines, fed via a nasogastric tube, provide nourishment. Its blood cells fight infections in the usual manner. Its wounds heal normally. It is clearly something more than a mere aggregate of individual fibroblasts and other types of cells, as the isolated limb and kidney were. It possesses a certain degree of functional unity at the vegetative level. In other words, it is a vegetative organism in its own right, with its own substantial form. At the moment of separation from the body (now only the brain), this form became actualized from its previous virtuality in the spiritual soul, just as in the case with the fibroblast.

Now this brainless vegetative substance, which looks like a human body but is not, is exactly what one is dealing with in a case of brain death. The only difference is that, with the latter, the agent which removed the brain was not a surgeon

but nature. In our macabre laboratory, it is evident that the person will die, not when we disconnect the respirator from the vegetative human-looking organism, but when we disconnect the machines from the floating brain. It should therefore be equally evident that, in the natural context, a person will die (and his spiritual soul will leave the body) the moment his brain dies, irrespective of whether the rest of the body maintains some vegetative integrity or not.

The notion that the brain is *the* crucial organ which determines the body's compatibility or incompatibility with the human soul is also perfectly consistent with the tradition of the Catholic Church regarding the baptism of two-headed infant "monsters." For centuries, it has been considered proper to administer two baptisms absolutely if the monster had two chests and heads. If there were two chests and one head, or one chest and two heads, there would be one absolute and one conditional baptism.¹⁰³ Thus, even long before medical science clarified the respective functions of the heart and the brain, the Church had manifested its openness to the possibility that the brain alone could be the critical organ for determining the presence or absence of a human soul. If there should be two baptisms, then it also follows that death of one of the heads would constitute the death of a person, even though the body it was attached to remains alive (as his sibling's body).

The notion of brain death as death of the person is therefore perfectly in keeping with the Church's traditional criteria for enumerating souls in the context of bizarre medical circumstances. The same conclusion is also reached by one of the few Thomistic theologians who have written specifically about brain death.¹⁰⁴

HYLOMORPIDISM AND PERSISTENT VEGETATIVE STATE

Let us not yet kill the floating brain, however, so as to see

10a Merkelbach, B. H.: *Summa Theologiae Moralis*. Vol. III: *De Sacramentis*. Montreal, Desclee de Brouwer, 1949, p. 133.

104 Moraczewski & Showalter [19], pp. 15-18.

how much of it can be removed without interfering with the person's consciousness. We may begin with the lower brainstem (i.e., including the lower pons and the medulla oblongata), which subserves a number of visceral functions (such as blood pressure, respiration, digestive tract motility, etc.), but which is not essential for consciousness.¹⁰⁵ Without any visceral organs to regulate, the lower brainstem is obviously of no use to the person, and can be innocuously removed. **But** consider if we had simply left it in the vegetative body in the first place, and only removed the brain above it. Now the vegetative body no longer needs mechanical ventilatory support, since the lower brainstem causes it to breathe spontaneously (although hardly normally).

This body is now identical to what one encounters in the severest cases of persistent vegetative state. Whether the rest of the brain is removed by a surgeon or by natural causes, in either case what remains is no longer the body of a *person*. In our laboratory, the person is still alive across the room with his reduced body, consisting of the cerebral hemispheres plus upper brainstem. **If** circulatory support were stopped to this brain, the person would then die. But this is precisely what has already happened in the naturally occurring persistent vegetative state. This state, therefore, like that of brain death, implies that the person has already died. The moment the brain cells in the hemispheres and upper brainstem become irreversibly damaged, the body is rendered incompatible with the human essence, forcing a substantial change. The spiritual soul departs and a vegetative soul is actualized, which had been virtually present all along in the vegetative aspects of the original human soul.

There is no reason not to extend our dissection of the person's brain still further, as long as we preserve the structures which mediate his consciousness. Under ordinary circumstances, these critical structures are the reticular activating system in the upper brainstem plus at least one cerebral

¹⁰⁵ Plum & Posner [34], pp. 15, 28,

hemisphere.^{106, 107} At the present time it is not known with certitude whether consciousness requires *specific* patterns of neural activity in *both* reticular system, and cerebral hemispheres, or whether the latter alone suffice (the reticular system providing merely *nonspecific* facilitation to the hemispheres). The second possibility is analogous to the relationship between a battery and a radio. The production of music does not depend upon that particular battery; one could even do just as well with a non-battery power supply, such as an electric wall-socket. What is specifically necessary for the production of music is the electronic circuitry of the radio itself. The battery is merely one way of facilitating the functioning of this circuitry.

There is to date some evidence, though hardly definitive, that the reticular activating system plays such a subsidiary, facilitatory role relative to the cerebral hemispheres. In man unilateral lesions of the brainstem reticular system do not impair consciousness.^{108, 109} Judging from the human cases reported, the precise location of the lesion within the reticular system does not seem to matter much, but rather the *volume* of tissue. This would seem to indicate a great amount of redundancy and nonspecificity in the output of the reticular system to the cerebral hemispheres. Of special interest is the fact that, in animals, if multiple smaller lesions are made gradually over a number of days, essentially the entire brainstem reticular system can be destroyed without interfering with the animal's consciousness. This is presumably due to func-

¹⁰⁶ Plum & Posner [34], pp. 1-29.

¹⁰¹ Steriade, M.: Mechanisms underlying Cortical Activation: Neuronal Organization and Properties of the Midbrain Reticular Core and Intralaminar Thalamic Nuclei. In Pompeiano, O., Ajmone-Marsan C., (eds.): Brain Mechanisms of Perceptual Awareness and Purposeful Behavior. New York, Raven, 1981, pp. 327-378 [International Brain Research Organization Monograph Series, Vol. 8].

¹⁰⁸ Plum & Posner [34], p. 28.

¹⁰⁹ Chase, T. N., Moretti, L., Prensley, A. L.: Clinical and electroencephalographic manifestations of vascular lesions, of, the pons. Neurology (Minneapolis) 18:3157-368, 1968.

tional reorganization above the lesion, probably within the thalamus.^{110, 111} This result argues even more strongly in favor of a nonspecific facilitatory role of the reticular system upon the hemispheres.

It is always dangerous to extrapolate from animal data to humans. There is, however, at least one report in the medical literature of three patients whose consciousness could be sustained by electrical stimulation, after a brainstem stroke had destroyed the midbrain reticular activating system.¹¹² Since the patients were still deeply comatose after a number of days, an experimental operation was performed in desperation. Tiny electrodes were inserted in the brain at sites above the destructive lesion and involved in the diffuse nonspecific system of projections of the thalamus to the cortex. After intermittent stimulation over a number of days, the investigators "were able to raise the level of consciousness to such a degree that the patients opened their eyes, looked around, performed spontaneous movements of the limbs, and seemed to recognize their relatives, even to the point that they cried out when their relatives tried to leave the room ... In two cases ... the improvement of the level of consciousness stopped at the end of the stimulation period." Fortunately, for humanitarian reasons, such stories are few and far between. Nevertheless, even a single such report provides a rather remarkable insight into how nonspecific a role the reticular system most likely plays in consciousness. If something so gross as a wire electrode in the thalamus is capable of making up for the lack of brainstem input to the cerebral hemispheres, it is reasonable to conclude that the hemispheres alone contain the structures which are both necessary and sufficient for human consciousness.

¹¹⁰ Hass, W. K., Hawkins, R. A.: Bilateral reticular formation lesions causing coma: their effects on regional cerebral blood flow, glucose utilization and oxidative metabolism. In Korein [5], pp. 105-109.

¹¹¹ Adametz, J. H.: Rate of recovery of functioning in cats with rostral reticular lesions. *J. Neurosurg.* 16:85-98, 1959.

¹¹² Hassler, R.: Basal Ganglia Systems Regulating Mental Activity. *Int. J. Neurol.* 12:53-72, 1977.

Let us therefore return to our laboratory and remove not only the person's lower brainstem, but the entire brainstem, and stimulate the cerebral end of his reticular system stump with an electrode. A small continuous electrical stimulation should suffice to maintain his cerebral hemispheres in a state of consciousness, so that he will continue to think, remember, desire, and experience emotions, just as before with the brainstem intact. If the whole brainstem had been left in the vegetating cadaver across the room, one would then have a more typical "persistent vegetative state," in which the body not only breathes spontaneously but also exhibits functions mediated by the upper part of the brainstem, such as spontaneous random eye movements, reflex decorticate posturing of the limbs, primitive oral reflexes such as sucking and grimacing, and apparent sleep/wake cycles. The "awake" periods, however, are not conscious wakefulness, but only the external manifestations of wakefulness, such as opening of the eyes and an alert facial expression, totally without mental content. In spite of the remarkably similar appearance of this body to the original person, it is not the person in a comatose state; the person is in the other corner of the room, conscious of himself through what remains of his body, which is now nothing more than a pair of cerebral hemispheres floating in liquid. If the hemispheres were destroyed, the person would then die. Thus, in naturally occurring cases of persistent vegetative state, in spite of rather complex brainstem functions, the person is still dead, having left behind a cadaver informed by a vegetative soul. As with whole-brain death, this conclusion is also in agreement with that of Thomistic theologian Moraczewski, who, however, regarded it more as a theoretical possibility, without sufficient basis in current neuroanatomical knowledge.

An important corollary of the above considerations is that brainstem death (i.e., selective destruction of the brainstem alone, such as from hemorrhage, tumor, or trauma) does *not* constitute death of the person. It obviously results, however, in permanent coma, unless some neurosurgical stimulation were

performed. though this state would not constitute death *per se*, it would certainly render any life-support systems extraordinary and inappropriate, so that the discontinuation of such support would be just as ethical as in the case of brain death. (It must be emphasized, however, that in actual clinical practice, complete selective brainstem destruction is rare, especially with hemorrhages, which tend to separate rather than destroy nerve fibers, and from which surprising recovery may occur.¹¹³ Physicians, therefore, should not be too quick to conclude that brainstem dysfunction is necessarily permanent. In any case, the person is not yet dead.)

HYLOMORPHISM AND DEMENTIA

Can this line of reasoning be extended still further, so that the cadaver possesses not only vegetative but also nonhuman animal functions as well? In light of all the above, there should be no *a priori* reason why it might not be possible. That which distinguishes man from all other animals is his spiritual faculties of intellect and will. Although essentially immaterial, these powers require the proper functioning of the brain, and it is precisely in this that man's intellect differs from that of angels, according to St. Thomas.¹¹⁴ Man's composite nature requires that sensory information be prepared (through a kind of collation of present experiences, memories, and imaginations) for the abstracting operation of the agent intellect.¹¹⁵ In scholastic terms, this is the function of the "cogitative sense," or "particular reason," one of the four internal senses. Although analogous to the "estimative sense" in animals, it is unique to man because of its intimate relationship with the spiritual intellect.¹¹⁶ The cogitative sense must also have a motor analog, not specifically mentioned by St. Thomas, which has a similar relationship with the spiritual will; i.e., it translates the com-

¹¹³ Plum & Posner [34], p. 163.

¹¹⁴ Aquinas, T.: *Summa Theologiae*. I, q. 75, a. 7.

¹¹⁵ Aquinas, T.: *Summa Theologiae*. I, q. 78, a. 4.

¹¹⁶ Aquinas, T.: *Summa Theologiae* .. I, q. 78, a. 4, ad 5.

mands of the will into specific patterns of neuronal activity which regulate other parts of the brain, such as those which mediate the memory and imagination, or organize the movements of individual muscle groups.

That the internal senses are essential for that power which specifically differentiates man from beast could not have been more stressed by St. Thomas.¹¹¹ It is precisely the lack of these higher senses which led him to conclude that an early human embryo is not yet sufficiently disposed to be informed by a spiritual human soul.¹¹⁸ Whether or not one agrees with St. Thomas concerning the details of embryology (this will be taken up at greater length below), it is clearly in perfect keeping with the mind of the Angelic Doctor that loss of these critical brain structures at the opposite end of life should also render the body incompatible with the human essence, and therefore result in a substantial change, i.e., death of the person.

Although he was acquainted only with the usual cardio-pulmonary manifestations of death, it is clear that his reasons for *why* death results from respiratory arrest apply just as well to brain death and its variations: "The union of soul and body ceases with the cessation of breath, not because this is the means of union, but because of the removal of that disposition by which the body is conditioned for such a union".¹¹⁹ Elsewhere, as we have already seen, he makes clear that the requisite "disposition" of which he speaks is that the organ of the internal senses is able to support the proper functioning of the spiritual intellect. "A body is not necessary to the intellectual soul by reason of its intellectual operation considered as such, but because of the sensitive power, which requires an organ harmoniously tempered. Therefore the intellectual soul had to be united to such a body, and not to a simple element. . . ." ¹²⁰ St. Thomas is therefore almost as explicit

¹¹⁷ Aquinas, T.: *Summa Theologiae*. I, q. 79, a. 4, ad 3; q. 84, a. 6 & 7.

¹¹⁸ Aquinas, T.: *Summa Theologiae*. I, q. 118, a. 2, ad 2.

¹¹⁹ Aquinas, T.: *Summa Theologiae*. I, q. 76, a. 7, ad 2.

¹²⁰ Aquinas, T.: *Summa Theologiae*. I, q. 76, a. 5, ad 2.

as he could be, within the context of the medical knowledge of his day, in suggesting that respiratory arrest results in death, not because respiration *per se* is of the essence of life, but because it leads to necrosis of the cerebral hemispheres.

At the time of St. Thomas, medical men believed that the organ of the cogitative sense was one of the ventricles in the middle of the head.¹²¹ ¹²² Although today we still do not know the exact neuroanatomical substrate for the cogitative sense and its motor analog, at least we do know many brain structures which are *not* necessary for their function, including (alas!) the much beloved ventricles. The work of neurologists during this century has shed a great deal of light on the importance of the cerebral cortex (the outer mantle of gray matter over the convexity of the brain) for the highest sensorimotor and intellectual functions of man. **It** is precisely this structure which is lacking in the brains of lower animals, and which increases in size in proportion to the complexity of the behavior of higher animals.¹²³⁻¹²⁴

A traditional way of subdividing areas of the cerebral cortex is into the so-called "primary," "secondary," and "tertiary" areas, the latter two also being known as "association" areas. The primary and secondary sensory and motor cortices, and their specific thalamic and basal ganglia projections, can be lesioned singly or in combination, without loss of intellectual thought or volition. The primary sensory areas are the first

¹²¹ Aquinas, T.: *Summa Theologiae*. I, q. 78, a. 4.

¹²² Pagel, W.: *Medieval and Renaissance Contributions to Knowledge of the Brain and its Functions*. In: *The History and Philosophy of Knowledge of the Brain and its Functions*. An Anglo-American Symposium [London, July 15-17, 1959]. Oxford, Blackwell, 1958, pp. 95-114.

¹²³ Luria, A. R.: *Higher Cortical Functions in Man*. New York, Basic Books, 2nd ed, 1980, pp. 56-63.

¹²⁴ Rose, S.: *The Conscious Brain*. Harmondsworth, England, Penguin Books, Revised Ed, 1976. Chap. 6, "The Evolution of Brains and Consciousness," pp. 161-181.

¹²⁵ Milner, E.: *Human Neural and Behavioral Development: a Relational Inquiry*. Springfield, Ill. Thomas, 1967.

^{12a} Geschwind, N.: *Disconnexion syndromes in animal and man*. *Bram* SS:237-294, 1965.

relay stations within the cortex for processing sensory information, whereas the primary motor areas perform the last details of assembling instructions for the muscles during voluntary motor activity. Consonant with these functions, it is not surprising that lesions of the primary visual cortex result in blindness, primary auditory cortex in deafness, and primary somatosensory cortex in numbness. Lesions of the primary motor cortex result in paralysis.

The primary sensory areas normally send information to the adjacent secondary sensory cortex, which analyzes and recognizes complex patterns. Analogously, the primary motor cortex receives instructions from the adjacent secondary motor cortex, the role of which is to translate complex motor tasks into instructions for the individual muscle groups, which the primary motor cortex governs. Lesions of the secondary sensory association cortices lead to inability to perceive meaningful patterns of sensory input (agnosia). If the visual area is affected, the patient cannot recognize shapes; if it is the auditory area, he cannot recognize words; if it is the somesthetic area, he cannot appreciate the orientation of the parts of his body in space. Analogously, lesions of the secondary motor cortex lead to inability to "orchestrate" the muscles properly in the performance of motor acts, even in the absence of paralysis (apraxia). In spite of such difficulties with perception and movement, patients with lesions in these parts of the brain still retain normal intellectual functioning on a more global and abstract level. There are many variations on the themes of agnosia and apraxia, depending upon the precise location and extent of the lesion. To review these fascinating disorders is beyond the scope of this paper, but the interested reader may refer to some excellent texts on human neuropsychology.^{127,130}

¹²⁷ Sommerhoff, G.: *Logic of the Living Brain*. New York, Wiley, 1974.

¹²⁸ Hecaen, H., Albert, M. L.: *Human Neuropsychology*. New York, Wiley, 1978.

¹²⁹ Heilman, K. M., Valenstein, E. (eds.): *Clinical Neuropsychology*. New York, Oxford Univ. Press, 1979.

¹³⁰ Dimond, S. J., *Neuropsychology*. Boston, Butterworths, 1980.

Information from the main three secondary sensory areas *Of* the cortex (visual, somesthetic, and auditory) normally converges in the *tertiary* association cortex, which is located midway between them, namely in a region comprising the lateral aspect of the parietal lobe and the posterior/inferior portion of the temporal lobe. Here these sensory modalities are fused into a gestalt perception, but there is a major difference between the roles of the left and right hemispheres. Lesions of the left side interfere with serial processes, particularly the analytic, semantic, or meaning, aspects of language and thought, while corresponding lesions of the right hemisphere interfere with synthetic, holistic, and gestalt appreciations.^{131,185} The analogous tertiary association area for motor functions is the anterior portion of frontal lobe. Bilateral prefrontal lobotomy thus results in impaired sequencing of behavior, uninhibited interference from inappropriate distractions, thoughtless impulsivity in actions, and inability to formulate and carry out long-term goals, all resulting in a lack of moral responsibility.^{186,142} There are rich connections between the motor and

¹⁸¹ Critchley, M.: *The Parietal Lobes*_ New York, Hafner, 1971, Chaps. 10, 11, & 13, pp. 326-377, 391-405.

¹³² Sommerhoff [127], Sect. 9.7 pp. 294-297.

¹⁸³ Joynt, R. J., Goldstein, M. N.: *The Minor Cerebral Hemisphere*. In Friedlander, W. J. (ed.): *Current Reviews of Higher Nervous System Dysfunction*. [Advances in Neurology, Vol. 7] New York, Raven Press, 1975, pp. 147-184.

¹³⁴ Gazzaniga, M. S., Le Doux, J. E.: *The Integrated Mind*. New York, Plenum Press, 1978.

¹³⁵ Wittrock, M. C. (ed.): *The Brain and Psychology*. New York, Academic Press, 1980, Chaps. 4-7, pp. 141-344.

¹³⁶ Warren, J. M., Akert, K. (eds.): *The Frontal Granular Cortex and Behavior*. New York, McGraw-Hill, 1964.

^{1a7} Fuster, J. M.: *The Prefrontal Cortex. Anatomy, Physiology, and Neuropsychology of the Frontal Lobe*. New York, Raven Press, 1980.

^{1a8} Pribram, K. H., Luria, A. R. (eds.): *Psychophysiology of the Frontal Lobes*. New York, Academic Press, 1973.

¹³⁹ Damasio, A.: *The Frontal Lobes*. In Heilman & Valenstein [129], chap. 12, pp. 360-412.

¹⁸⁰ Hecaen, H., Albert, M. L.: *Disorders of Mental Functioning Related to Frontal Lobe Pathology*. In Benson D. F., Blumer D. (eds.): *Psychiatric Aspects of Neurologic Disease*. New York, Grune & Stratton, 1975, Vol. I, Chap. 8, pp. 137-149.

sensory tertiary association areas,^{143,145} clearly facilitating the intimate mutual relationship between understanding and volition.^{146,147}

These two tertiary association areas are therefore logical candidates for the neurological substrate of the cogitative sense. Another strong piece of evidence is that they are the only brain structures which are extensively developed in man but not in higher mammals. Moreover, in higher animals, the evaluative or estimative functions subserved by what scholastics call the "estimative sense"¹⁴⁸ are mediated by a frontotemporal system of the brain, so that the animal analog of the human cogitative sense is fittingly mediated by the analog of the human tertiary association cortex system.

An important aspect of all this which we do not yet know is the relative role of the subcortical gray matter, particularly the thalamus (a large conglomeration of gray matter nuclei situated deep in the middle of the cerebral hemispheres). The tertiary association areas, like the rest of the cerebral cortex, normally function in conjunction with the thalamus and basal ganglia, which communicate with the cortex in a topographic arrangement.¹⁴⁹ It remains to be elucidated whether these latter structures are specifically involved in understanding and volition, acting together with the cortex as an inseparable functional unit, or whether they are merely facilitatory, some-

[4] Blumer, D., Benson, D. F.: Personality Changes with Frontal and Temporal Lobe Lesions. In Benson, D. F., Blumer, D. (eds.): *Psychiatric Aspects of Neurologic Disease*. New York, Grune & Stratton, 1975, Vol. I, Chap. 9, pp. 151-170.

¹⁴² Hecaeen [128], chap. 8, "Disorders due to Frontal Lobe Pathology," pp. 354-378.

Hs Sommerhoff [127], Sect. 10.3, "Evaluating Functions of the Frontotemporal System" pp. 311-320.

¹⁴⁴ Brodal, A.: *Neurological Anatomy in Relation to Clinical Medicine*. 2nd ed. New York, Oxford Univ. Press, 1969, p. 650.

¹⁴⁵ Curtis, B. A., Jacobson, S., Marcus, E. M.: *An Introduction to the Neurosciences*. Philadelphia, Saunders, 1972, pp. 461-464.

¹⁴⁶ Aquinas, T.: *Summa Theologiae*. I, q. 82, a. 4.

¹⁴⁷ Koren [71], pp. 226-228.

¹⁴⁸ Koren [71], pp. 126-121).

¹⁴⁹ Williams, P. L., Warwick, R.: *Functional Neuroanatomy of Man*. Philadelphia, Saunders, 1975, PP. 891-901,

what analogous to the role of the reticular activating system mentioned above.

Regardless of whether the substrate for the cogitative sense is strictly cortical or combined cortical and thalamic (time will tell), there is no question that such a neural substrate does indeed exist and includes the tertiary association areas in an essential way. We can therefore proceed to dissect our unfortunate person's living brain still further, removing all the cortical and subcortical areas which are not required for thought and volition. He will probably not even notice it very much, since he is already blind, deaf, numb, and without muscles to move. That is, we remove all the primary and secondary sensory and motor cortex, along with the parts of the thalamus and basal ganglia which are topographically related to them. We may also remove other uninvolved structures such as the hypothalamus. It is uncertain whether such extensive removals might make it more difficult to form sensory imaginations and memories (the extent of the neuroanatomical basis of these two internal senses is not well worked out yet), but in any event, the person would not thereby be rendered unconscious. He would remain there, thinking about himself and wishing that he were not in such a sorry state, cut off from the rest of the world.

If these removed parts of the brain are now placed back in the vegetative cadaver in the other corner of the room (rather, if they had been left in to begin with) then the cadaver will possess primitive sensorimotor functions. For example, it might be able to walk around the room without bumping into things. Nevertheless, there is no *person* who is aware of the room or making any act of the will to walk around. The cadaver body could move around like a robot, in a sense, except that it would be a "living robot."

Since there are now not only vegetative functions, but also distinctly animal functions, its substantial form must be an animal soul (although not that of any naturally occurring animal), which was *virtually* present in the original human spiritual soul. As soon as nonessential parts of the human

body were removed (i.e., everything but the association cortices and possibly the related parts of the thalamus), they ceased to be informed by the spiritual soul and the virtual animal soul became their life-principle. In the same room, then, is both the original person and a "humanoid" animal, which derived from the person's former body. Clearly, the original person will die as soon as the association cortices are destroyed, regardless of whether the humanoid animal continues to live or not. Therefore, if the same association cortices were to be destroyed through a natural disease process, the result would be the same: the death of the person, even though there is still a humanoid animal body left behind.

Let it be clear that, although I keep referring to the tertiary association cortices as the critical structures for the human essence, my basic point is not a neuroanatomical one but a philosophical one: that death of a person can come about through destruction of only those parts of the brain which are necessary for the proper functioning of the intellect and will. If future research were to demonstrate that the only really critical part of the association cortices is the left hemisphere speech area, then we need only replace the phrase "tertiary association cortices" with "left hemisphere speech area" in the above discussion. The basic concept remains just as valid: that the life and death of a person are dependent not upon the whole brain, but upon only a critical part of the cerebral hemispheres.

Such a situation is not merely far-fetched theoretical speculation. Selective destruction of the higher cortical areas occurs with some frequency in medicine. Alzheimer's disease is a perfect example of a gradual degeneration of the cortex, affecting primarily the prefrontal and parietal tertiary association cortices.¹⁵⁰⁻¹⁵¹ After the disease has progressed sufficiently, there

¹⁵⁰ Cummings, J. L.: Cortical Dementias. In Benson, D. F., Blumer, D. (eds.): *Psychiatric Aspects of Neurologic Disease*. New York, Grune & Stratton, 1975, Vol. II, Chap. 5, pp. 94-103.

¹⁵¹ Benson, D. F., Kuhl, D. E., Phelps, M. E., Cummings, J. L., Tsai, S. Y.: Positron Emission Computed Tomography in the Diagnosis of Dementia. *Trans. Aml. Ne"rol. Assoc.* 106:68-71, 11181,

is severe atrophy in these areas (probably from loss of white matter and synapses, due to loss of the cholinergic cells normally innervating these areas from the nucleus basalis of Meynert,¹⁵²) while the primary sensory and motor cortices remain relatively uninvolved. Patients at this stage of the illness have sensory perception and can move around, but do not speak or show any evidence of intellectual understanding of their surroundings; their behavior is governed totally by primitive impulses. "Dementia" is really an excellent term for this state, since it indicates that the mind is no longer there. The body has been rendered incompatible with the human essence, so a substantial change must have taken place. The spiritual soul must have left the body, so that the person is now in the next life, while an animal which looks like the former person remains on earth.

The following point should be emphasized, lest any room be left for misunderstanding. Because of the functional redundancy within the brain, it is very likely that the extent of brain tissue involved in the *normal* operation of the internal senses is much greater than the extent of a brain lesion just sufficient to render them permanently inoperable. Thus, if it turns out that the thalamus and association cortex do form an inseparable functional unit, then that very unity implies that a large enough lesion in *either* cortex *or* thalamus would undermine their function as effectively as complete destruction of both cortex and thalamus. In other words, the amount of brain which normally subserves the internal senses is not the same as the minimum amount of brain that determines its compatibility or incompatibility with the human essence. Even though neurologic science does not yet know the precise substrate of human consciousness, it matters little for our purposes here; that knowledge is not necessary to be able to state categorically that massive destruction of the cortex alone is sufficient to render the brain unsuitable to support the human soul.

¹⁵² Coyle, J. T., Price, D. L., DeLong, M. R.: Alzheimer's Disease: A disorder of cortical cholinergic innervation. *Science* 219: 1184-1190, 1983.

In summary, then, the minimum sufficient condition for the death of a person is the irreversible destruction of those parts of the brain necessary for the properly human functions of the spiritual soul, namely intellect and will. This is not to minimize the importance of the spirit in these functions, but to emphasize the need to avoid the opposite error of minimizing the importance of the internal senses, resulting in a warped conception of the human soul as a sort of angel, rather than the substantial form of the body. Whether destruction of these critical parts of the brain occurs in the context of destruction of all the cells of the body, as in most deaths, or destruction of the entire brain, as in brain death, or destruction of the cerebral hemispheres, as in persistent vegetative state, or simply in isolation, as in severe dementia-it makes no essential difference. In each case the body is rendered incompatible with the human essence, and the spiritual soul is forced to continue subsisting in an unnatural body-less state, until the final resurrection of the body.

ANSWERS TO OBJECTIONS

Since these bizarre and sad cases are largely a by-product of modern medical technology over the past half-century, it should not be surprising that a rather bizarre thought-experiment, employing the same technology, has been found necessary to clarify the nature of these conditions. There is a strong and perfectly understandable tendency for most nonmedical people (and even many medical people) to think of life and death strictly in terms of its usual cardiopulmonary manifestations. I therefore fully expect that these ideas will meet with initial resistance and misunderstanding by many who are quite legitimately concerned about the general disrespect for life which is evident in our society. Let me, therefore, address in advance some of the major anticipated objections.

One might argue, for example, that, since in Alzheimer's disease the gradual degeneration of the brain is a continuous process, there can be no one moment which clearly demarcates

the presence and absence of the human essence. The same reasoning could be applied, however, to ordinary cardiopulmonary death (only on a shorter time scale), so that one would also have to maintain that there is no clear demarcation between life and death in general, as some actually do claim.^{158,155} There is really no contradiction between acknowledging both a continuum of accidental changes leading to death, and an instantaneous substantial change at the moment of irreversibility. When a lobster is boiled alive, for example, there is a continuum of changes at the molecular level between live lobster and cooked lobster. Nevertheless, there *is* a critical moment, beyond which the organism's homeostatic systems are unable to compensate for the heat, and its integrity is lost. Whether or not a casual observer of the boiling lobster can identify the precise moment of cellular irreversibility is irrelevant to the fact that there is such a moment. There is no conceptual continuum between reversibility and irreversibility of a disturbance of essential functions.

In fact, according to hylomorphism, *all* substantial changes are instantaneous, even though they involve a continuum of accidental change.¹⁵⁶ There is certainly no reason why human death should be any exception. **It** is simply more difficult to identify the precise moment, when the pathological process is slower, as in Alzheimer's disease. Normally the brain has a great deal of redundancy and reserve, so that loss of a small or even moderate amount of brain tissue does not result in loss of function. But after this functional-anatomical reserve has been completely exhausted, any further destruction of tissue must result in a sudden substantial change. Just because we do not know precisely when the brain is rendered irreversibly incapable of sustaining intellection and volition, it cannot be concluded that such a critical moment does not happen.

¹⁵³ Morison, R. S.: Death: Process or Event? *Science* 173: 694-698, 1971-

¹⁵⁴ Korein [11], especially p. 22.

¹⁵⁵ Gilder, S. S. R: Twenty-second World Medical Assembly ["Declaration of Sidney"] *Br. Med. J.* 3:493-494 1968.

^{15a} Glenn [87], pp. 39, 163, 183.

The same conclusion is supported by a mathematical representation of living systems. The type of differential equations which are relevant have solutions only when the variable parameters assume certain discrete combinations of values, known as "eigenvalues." To each eigenvalue corresponds a discrete "eigenstate" of the system. For application to living organisms, Varela has coined the term "eigenbehaviors".¹⁰¹ This is exactly analogous to the quantum mechanical discontinuities of atomic energy states,¹⁵⁸ to which even the non-scientific world has grown accustomed, and it happens for exactly the same reasons mathematically. As a result, even though there may be a continuum of the measurable parameters of an organism (as there is also a continuum in space of possible positions of the electron), the underlying changes of state (which are not seen *per se*) are discontinuous and instantaneous. A *fortiori*, the transition from any state of a living organism to some state which is not in the set of that organism's eigenstates would imply a sudden change to something which is no longer that organism. Such mathematical representations of living systems reinforce the hylomorphic notion of substantial change as an instantaneous discontinuity of substantial form underlying a continuum of accidental changes. Regardless of how slow a terminal illness may be, death is always a discrete momentary event.

Another possible objection to this conception of human life and death might be to misinterpret it as actually based upon a Platonic-Cartesian notion of the soul-i.e., as an immaterial substance independent in its own right, but linked somehow to the body-the only new feature being that the location of linkage is no longer held to be the pineal gland. There certainly are contemporary neuro-philosophers who can rightly be accused of this view, such as Wilder Penfield¹⁵⁹ and Sir

¹⁵⁷ Varela [76], pp. 170-207.

as Saxon, D. S.: Elementary Quantum Mechanics. San Francisco, Holden-Day, 1968.

mo Penfield, W.: The Mystery of Mind. A Critical Study of Consciousness and the Human Brain. Princeton, Princeton University Press, 1975.

John Eccles.^{160,162} The former conceives of the soul (although without actually using the term) as linked through what he calls the "centrencephalon" (the reticular core of the brain-stem and thalamus), while the latter considers it linked primarily through the speech area of the left hemisphere. These neo-Cartesian theories are examples of how human imagination may interfere with abstract thought. Even without realizing it, we all tend to form mental images of the soul, as a sort of ghost, or vapor, or force, even though we know intellectually that it is no such thing. Such subconscious imaginings tend to bend our thought in the Cartesian direction, unless we explicitly acknowledge and resist the temptation. **It** is therefore not surprising that certain great figures in the history of the neurosciences, who are not particularly trained in philosophy, should fall into Cartesianism when arguing in favor of the spirituality of man's soul.

Such is not the Thomistic notion of soul, upon which this paper is based. There is no contradiction in maintaining on the one hand that (1) the soul, as substantial form of the body, informs all of the body, and is therefore totally present everywhere in the body,^{163, 164} and on the other hand that (2) destruction of only an essential *part* of the body renders it incapable of supporting that substantial form. The original substantial form ceases to inform the entire body, even though the critical change takes place in only a part of it. But because that part pertains to the human essence, a substantial change takes place, not merely an accidental one. This is nothing more than an application to living things of a general principle of

¹⁶⁰ Eccles, J. C.: *The Human Psyche*. The Gifford Lectures. University of Edinburgh, 1978-1979. Springer International, 1980, Lecture 2, "Modules of the neocortex and their role in dualist-interactionism," pp. 27-50.

¹⁶¹ Eccles, J. C.: *The Self-Conscious Mind and the Brain*. In Popper, K. R., Eccles, J. C.: *The Self and its Brain*. New York, Springer, 1977, Chap. E7, pp. 355-373.

¹⁶² McGreer, P. L., Eccles, J. C., McGreer, E. G.; *Molecular Neurobiology of the Mammalian Brain*. New York, Plenum, 1978, pp. 552-565.

¹⁶³ Aquinas, T.: *Summa Theologiae*. I, q. 76, a. 8..

¹⁶⁴ Aquinas, T.: *Quaestiones Disputatae de Spiritualibus Creaturis*, a. 4.

Aristotelian-Thomistic cosmology. At the inanimate level, for example, an entire molecule undergoes a substantial change when only one part of it is involved in a chemical reaction. St. Thomas himself applies this principle to human beings as well, referring specifically to the head as the "seat of consciousness," and stating that "no other external part belongs to the *integrity of the body* in the same way as the head" (underlining mine).¹⁶⁵ My contention that human life and death depend upon the functional integrity of the tertiary association cortices, therefore, has nothing to do with the fallacy of Platonic-Cartesian dualism.

Actually, it may be a touch of the Cartesian fallacy which prevents some well-meaning people from accepting the notion of brain death and its variations. They imagine that the soul's ubiquity throughout the body is that of some sort of undifferentiated ghost. With such an image, it is indeed hard to understand why the soul should not be able to experience visual sensation because of its presence in the eyes, or why destruction of only one part of the body could force it to leave the rest of the body. If, however, one keeps clearly in mind the Thomistic notion of soul as the substantial form, or *unifying principle*, the apparent contradiction between the soul's ubiquity and its spatial heterogeneity of operation vanishes.^{166, 167}

One might also object that the view propounded here would imply that a developing embryo is not human because it lacks tertiary association cortices, and that therefore abortion could be justified. This is not the case, however, for several reasons. First, the immorality of abortion is independent of the philosophical debate over the precise moment of animation of the embryo with a spiritual soul, as stressed by the Sacred Congregation for the Doctrine of the Faith.¹⁶⁸ Moreover, St.

¹⁶⁵ Aquinas, T.: *Summa Theologiae*. III, q. 68 a. 11, ad 4.

¹⁶⁶ Aquinas, T.: *Summa Theologiae*. I, q. 76 a. 5, ad 3.

¹⁶⁷ Aquinas, T.: *Questiones Disputatae de Anima*. a. 9, c. & ad 14; a. 10, ad 17.

¹⁶⁸ Sacred Congregation for the Doctrine of the Faith: Declaration on Abortion. Nov, 18, 1974, Sections 12 & 13, 1; footnote 19,

Thomas, who advocated the theory of succession of souls ("mediate animation") during embryogenesis^{169, 170} (first a vegetative soul, then an animal soul, then a human spiritual soul, as the matter becomes more and more disposed to these substantial forms), would have considered abortion as a serious sin, even if it were not equivalent to homicide.^{171, 172} Furthermore, Ashley, McCarthy, and Moraczewski argue convincingly that St. Thomas held the theory of mediate animation not as a direct conclusion from philosophical principles, but as an application of those principles to the mistaken notion of embryogenesis held by the scientists of his day.¹⁷³ Although the moment of animation with a rational soul is still a matter of controversy among philosophers and theologians,¹⁷⁴ given what we now know concerning genetics and embryology, Thomistic principles are at least perfectly compatible with the notion of animation from the moment of fertilization.

Neither does the notion of death advocated here imply a succession of souls during embryogenesis. What is necessary for the human soul is not the actual functioning of the essential brain structures, but their natural *potential* for functioning. Someone who is asleep is not dead, even though the functions of intellect and will are suspended. This is because they are only temporarily interrupted; there is no *structural* damage to their neural substrate, rendering the brain intrinsically incapable of those functions. Even a comatose patient who has suffered brain damage, but recovers at least some cognitive functioning, obviously did not sustain sufficient damage to result in a substantial change. For the same reasons, a brainless embryo is quite unlike a brainless adult, since the sub-

¹⁶⁹ Aquinas, T.: *Summa Theologiae*. I, q. 118, a. 2, ad 2.

¹⁷⁰ Aquinas, T.: *Quaestiones Disputatae de Anima*. a. 11, ad 2.

¹⁷¹ Dedek, J. F.: *Contemporary Medical Ethics*. New York, Sheed & Ward, 1975 p. 111.

¹⁷² Ashley, B.: *A Critique of the Theory of Delayed Hominization*. In McCarthy & Moraczewski [173], Appendix I, pp. 113-133.

¹⁷³ McCarthy, D. G., Moraczewski, A. S.: *An Ethical Evaluation of Fetal Experimentation: An Interdisciplinary Study*. St. Louis, Pope John XXIII Medical-Moral Research and Education Center, 1976, pp.

F4 pedek [171], pp.

stantial form of the embryo makes its development always tend toward forming those brain structures essential for the operation of the intellect. **It** is only a temporary absence of functioning, with as full a potential as that of a sleeping person. On the other hand, when the critical areas are destroyed in an already formed brain, they cannot be regenerated, and the body is thereby rendered permanently incompatible with the human essence. Thus, what I propose in no way implies that the embryo is not human, much less that abortion should be considered licit.

It could also be objected that this conception of life and death brings with it a tremendous potential for abuse on the part of certain doctors, legislators, and others who lack a respect for human life, and who might use these concepts to justify euthanasia. **It** is certainly true that there is a potential for abuse, just as almost any truth can be twisted and misapplied. But the truth or falsity of a proposition is not determined by abuse potential. Concerning the practical applications of these ideas in daily medical practice, I would make the following observations and recommendations. First of all, it is my experience that the vast majority of doctors do have sufficient respect for life that they would want to give a comatose patient every chance for recovery, even if the chance is slim (this is true even among doctors who condone abortion). Doctors, and neurologists in particular, are in general quite scrupulous about applying criteria for such conditions as brain death; when errors have been made, they have usually been in the direction of an irrational reluctance to declare brain death in spite of the standard clinical criteria having been met.

It should be obvious that the further removed a given case is from ordinary vegetative-level death, the more carefully one must ascertain of destruction of the essential brain tissue. With regard to whole-brain death, accurate diagnostic criteria are already fairly straightforward and standardized.¹⁷⁵ **It** is certainly another matter, however, with persistent

¹⁷⁵ President's Commission. [IO], pp. 159-166. Also reproduced in JAMA 246:2184-2186, 1981.

vegetative state. There are no current criteria by which one can ascertain with certainty whether a given vegetative patient is truly *irreversible*. The medical literature,¹¹⁶ and especially the popular press, cited in Currie, contain rare but dramatic examples of "hopeless" and "irreversibly comatose" patients recovering fully (at least mentally), sometimes after many months of no improvement. In most cases, "irreversibility" is a prediction based upon statistical considerations, rather than an actual diagnosis. The President's Commission for the study of Ethical Problems in Medicine and Biomedical and Behavioral Research has recently studied this issue,¹⁷⁷ and recommended that extensive observation should be made before diagnosing permanent loss of consciousness, and that in cases of hypoxic/ischemic brain damage, at least one month of observation should elapse.

The appropriateness of the one month figure is supported by a number of studies concerning prognosis of patients with non-traumatic coma.^{178, 187} Although there are occasional cases of

ua Rosenberg, G. A., Johnson, S. F., Brenner, R. P.: Recovery of cognition after prolonged vegetative state. *Ann. Neurol.* 2:167-168, 1977.

111 Abram, M. B. et al: Deciding to Forego Life-Sustaining Treatment. U.S. Government Printing Office, March, 1983, pp. 179-180.

us Bates, D., Caronna, J. J., Cartledge, N. E. F., Knill-Jones, R. P., Levy D. E., Shaw, D. A., Plum, F.: A prospective study of nontraumatic coma: methods and results in 310 patients. *Ann. Neurol.* 2:211-220, 1977.

179 Bell, J. A., Hodgson, H.J. F.: Coma after cardiac arrest. *Brain* 97:361-372, 1974.

180 Earnest, M. P., Breckinridge, J. C., Yarnell, P. R., Oliva, P. B.: Quality of survival after out-of-hospital cardiac arrest: predictive value of early neurologic evaluation. *Neurology (Minneapolis)* 29: 56-60, 1979.

u1 Finklestein, S., Caronna, J. J.: Outcome of coma following cardiac arrest. *Neurology (Minneapolis)* 27:367-368, 1977 (abstract).

182 Higashi, K., Sakata, Y., Hatano, M., Abiko, S., Ihara, K., Katayama, S., Wakuta, Y., Okamura, T., Ueda, H., Zenke, M., Aoki, H.: Epidemiological studies on patients with a persistent vegetative state. *J. Neurol. Neurosurg. Psychiatry* 40:876-885, 1977.

185 Levy, D. E., Bates D., Caronna, J. J., Cartledge, N. E. F., Knill-Jones, R. P., Lapinski, R. H., Singer, B. H., Shaw, D. A., Plum, F.: Factors influencing recovery from nontraumatic coma. *Ann. Intern. Med.* 94:293-301, 1981.

184 Snyder D., Itamirez-Lassepas, M., Lippert, D. M.: Neurologic status and prognosis after cardiopulmonary arrest: a retrospective study. *Neurology (Minneapolis)* 27:807-811, 1977.

significant improvement beyond that period, all investigators unanimously conclude that the vast majority of patients reach their plateau of maximal improvement well before one month, and many propose that reliable prognosis may be made in patients with certain constellations of clinical signs long before that.¹⁸⁸ Coma due to head trauma, however, generally carries a much more optimistic outlook, with most studies finding that continued slow improvement up to a year or more is not uncommon.^{189,103} Patients comatose from acute lesions of the midbrain reticular activating system also frequently continue to improve over months or years.¹⁹⁴ Also, almost all investigators agree that the prognosis of coma in children (especially the younger the child) tends to be much more optimistic than *in* adults, regardless of etiology; so much so that not even the standard clinical criteria for brain death can be extended to children much below five years of age.

¹⁸⁵ Snyder, B. D., Loewenson, R. B., Gumnit, R. J., Hauser, W. A., Leppik, I. E., Ramirez-Lassepas, M.: Neurologic prognosis after cardiopulmonary arrest. II. Level of consciousness. *Neurology* (NY) 30:52-58, 1980.

¹⁸⁶ Willoughby, J. D., Leach, B. G.: Relation of neurological findings after cardiac arrest to outcome. *Br. Med. J.* 3:473-479, 1974.

¹⁸⁷ Yarnell, P. R.: Neurological outcome of prolonged coma survivors of out-of-hospital cardiac arrest. *Stroke* 7: 279-282, 1976.

¹⁸⁸ Binnie, C. D., Prior P. F., Lloyd, D. S. L., Scott, D. F., Margerison, J. H.: Encephalographic prediction of fatal anoxic brain damage after resuscitation from cardiac arrest. *Br. Med. J.* 4:265-268, 1970.

¹⁸⁹ Bricolo, A., Turazzi, S., Feriotti, G.: Prolonged posttraumatic unconsciousness: therapeutic assets and liabilities. *J. Neurosurg.* 52:625-634, 1980.

¹⁹⁰ Jennett, B., Teasdale, G., Braakman, R., Minderhoud, J., Knill-Jones, R.: Predicting outcome in individual patients after severe head injury. *Lancet* 1: 1031-1034, 1976.

¹⁰¹ Jeannett, B., Teasdale, G., Galbraith, S., Pickard, J., Grant, II., Braakman, R., Avezaat, C. Maas, A., Minderhoud, J., Vecht, C. J., Heiden, J., Small, R., Caton, W. Kurze, T: Severe head injuries in three countries. *J. Neural. Neurosurg. Psychiatry* 40:291-298, 1977.

¹⁹² Jennett, B., Teasdale, B., Braakman, R., Minderhoud, J., Heiden, J., Kurze, T.: Prognosis of patients with severe head injury. *Neurosurgery* 4:283-289, 1979.

¹⁹³ Mandelberg, I. A. Brooks, D. N.: Cognitive recovery after severe head injury. 1. Serial testing on the Wechsler Adult Intelligence Scale. *J. Neural. Neurosurg Psychiatry* 38: 1121-1126 1975.

¹⁹⁴ Br-endler, S. J., Selverstone, B.: Recovery from decerebration. *Brain* 93:381-392, 1970.

Clearly all studies of coma prognosis based upon clinical parameters allow one only to calculate a rough *probability-not* a certainty-of irreversibility; hence, their criteria should not be used for determination of death in the form of persistent vegetative state. Nevertheless, a very high probability of irreversibility would seem sufficient at least to justify regarding nasogastric feedings, antibiotics, and intensive nursing care as extraordinary means of support, since one of the criteria for the ordinary/ extraordinary distinction is precisely the *likelihood* of benefit for the patient.¹⁹⁵ Although the President's Commission did not pretend to undertake a metaphysical analysis of persistent vegetative states, it too concluded that artificial feeding and antibiotics should not be considered mandatory in such cases.

I would advocate that, in order to make the diagnosis of irreversibility with greater certainty, lack of functional improvement should be coupled with diagnostic imaging studies showing that indeed there is structural loss of essential brain substance. There are no reports in the literature concerning this, since most of the studies of coma prognosis were conducted prior to the era of CT brain scanning, and the more recent studies do not address the issue systematically. However, it is obvious that, in the most severe cases, after the destroyed cerebral hemispheres have been replaced by fluid over the course of weeks, a CT scan would show precisely the absence of hemispheres. In less severe cases, though, it may still be impossible to determine from CT scans alone whether a critical amount of cortical tissue has been lost.

Reports of cases of hydrocephalus ("water on the brain") with massive loss of brain substance but surprisingly preserved function¹⁹⁶ (as well as the potential for restoration of brain tissue with surgical drainage of the fluid, especially in in-

¹⁹⁵Atkinson, G. M.: Theological History of Catholic Teaching on Prolonging Life. In McCarthy, D. G., Moraczewski, A. S. (eds.): Moral Responsibility in Prolonging Life Decisions. St. Louis, Pope John Center, 1981, Chap. 7 pp. 95-115.

¹⁹⁶Lewin, R.: Is your brain really necessary? Science 210: 1232-1234; 1980.

fants¹⁹⁷, should not be interpreted as invalidating the ominous significance of the same degree of tissue loss when caused by hypoxic/ischemic damage. In chronic hydrocephalus the nerve cells of the cortex are relatively preserved, the atrophy being due largely to loss of the myelin insulation around the long white matter fibers which connect the cortical cells with one another, and to some loss of those fibers themselves. Moreover, the slowness of the pathological process permits the brain's "plasticity" to adapt to the changes. In hypoxic/ischemic damage, however, the nerve cells themselves are lost, so that there is nothing left to "plastically" adapt. Perhaps future medical science will discover methods for determining irreversibility much sooner and in a greater number of cases than is currently possible with CT scanning. Until such a time, however, prudence would dictate that comatose or vegetative patients be given every chance to recover, as long as there is any uncertainty concerning their reversibility.

In some types of cases, however, irreversibility can be diagnosed with absolute certainty rather early. For example, persistence of electrical silence on EEG beyond several days would indicate that there are no neurons left in the cerebral cortex (or so few as to have no functional significance). This can be stated categorically, since those patients who have an episode of electrical silence immediately after a cardiac arrest, and who later recover, always show return of EEG activity within a maximum of six hours.¹⁹⁸ Even in cases of drug intoxication severe enough to cause electrical silence, no cases have been reported in which brain activity did not return within two days of admission to the hospital.^{199, 200} A survey of

¹⁹⁷ Sutton, L. N., Bruce, D. A., Schut, L.: Hydranencephaly versus maximal hydrocephalus: an important clinical distinction. *Neurosurgery* 6: 34-38, 1980.

¹⁹⁸ Spehlman, R.: EEG Primer. Amsterdam, Elsevier/North Holland, 1981, pp. 372-373.

¹⁹⁹ Allen, N., Burkholder, J., Comiscioni, J.: Clinical criteria of brain death. In Korein [5], p. 77.

²⁰⁰ Bird, T. D., Plum, F.: Recovery from barbiturate overdose coma with a prolonged isoelectric electroencephalogram. (*Minneapolis*) 18:45q, 460, 1968.

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a large number of electroencephalographers also corroborated this thesis.²⁰¹ Out of 1665 patients with electrocerebral silence, only three recovered, and all three had overdoses of sedative medication. The duration of electrical silence considered necessary to declare irreversibility (thereby absolutely ruling out the possibility of drug overdose as a cause) varied from one electroencephalographer to another, but the vast majority considered 24 hours to be sufficient, while the maximum duration from the entire survey was 48 hours. Given all the above, one could confidently conclude that several days of electrical silence in a vegetative patient would indicate essentially total destruction of the neurons of the cerebral cortex, even if the etiology of the coma were not known.

It should also be obvious that demonstration of absent blood flow to the cerebral hemispheres (by angiography, radioisotope, or any other method) is incompatible with survival of cortical neurons, regardless of preserved brainstem function.

Another condition in which irreversibility of cerebral destruction can be known with certainty is *hydranencephaly* (not to be confused with the much more common and treatable condition called hydrocephalus mentioned above). The term refers to an externally normal-looking infant, which *in utero* suffered a devastating stroke or infection, completely destroying the developing cerebral hemispheres, so that by the time of birth there is nothing but water in the head.^{202,204} Initially these babies behave just like normal infants, because of their intact brainstems. Over time, however, it becomes evident that they

²⁰¹ Silverman, D., Saunders, M. G., Schwab, R. S. Masland, R. L.: Cerebral death and the electroencephalogram. Report of the Ad Hoc Committee of the American Electroencephalographic Society on EEG criteria for determination of cerebral death. JAMA 209: 1505-1510, 1969.

²⁰² Halsey, J. H., Jr., Allen, N., Chamberlin, H. R.: The morphogenesis of hydranencephaly. J. Neurol. Sci. 12:187-217, 1971.

^{20a} Lemire, R. J., Loeser, J. D., Leech, R. W., Alvord, E., Jr.: Normal and Abnormal Development of the Human Nervous System. Hagerstown, MD., Harper & Row, 1975, pp. 251-253.

²⁰⁴ Menkes, J. H.: Textbook of Child Neurology. 2nd ed., Philadelphia, J.B. & S. 1980, pp. 216-217.

are not developing any functions dependent upon higher brain structures, and they end up in a spastic, contracted position similar to older people with persistent vegetative state. The condition can be easily diagnosed at birth by transilluminating the head with a flashlight, by CT scan, or by cranial ultrasound. Even though the baby initially behaves normally, we would have to conclude that the baby had actually died *in utero*, and that what was born was actually an infant "humanoid animal".

If great prudence is required in diagnosing a vegetative state as irreversible, still greater caution and prudence is in order with cases of dementia, given that we do not even know with certainty what the neuroanatomical substrate of the cogitative sense is. Nor do we yet have a technique for determining at what moment the critical degree of brain destruction has occurred. Until such a time when these can be known, demented patients must be given the benefit of the doubt and treated with all the respect and care which any sick human being deserves. Moreover, even were these things known, if a person had become demented to the point of having died, leaving behind a "humanoid animal," this animal should not necessarily be killed, out of respect for the fact that it used to be such and such a person. If there were sufficient reasons, however, it would be justified not only to withhold simple means of life support as antibiotics and intravenous fluids, but even painlessly to put the animal "to sleep," as is sometimes done to beloved pets which are terminally ill. This would not be euthanasia, because we are speaking of some future age when medical technology is advanced enough to determine that the patient has *already died*. I repeat, however, that up until such a time, demented patients must always be given the benefit of the doubt as to their humanity.

An interesting question is whether cerebral atrophy is *intrinsically* irreversible; i.e., whether we can so assuredly rule out the possible development of some future technique of making the nerve cells regrow, or of transplanting nerve cells which will make the proper synaptic connections, etc. The

President's Commission advised that such hypothetical possibilities in the indefinite future should not affect today's decisions concerning life support. While this may be reasonable practical advice concerning extraordinary means, it does not address the quite valid philosophical concern that, if the irreversibility is merely due to present technological limitations, then it would not be true irreversibility, and would therefore not indicate death of the person.

It is true that the brain has a remarkable potential for functional recovery, which is greatest in infants and decreases with age. Recovery may occur by means of a wide variety of possible physiologic including formation of new connections (synapses) between nerve cells, alteration of the sensitivities of existing connections, and utilization of "reserve" pathways for that function, which under normal circumstances remain latent. This functional and microanatomical adaptive reorganization of the nervous system is broadly referred to as *plasticity*, and it is the subject of intense investigation at the present time.²⁰⁵⁻²⁰⁹ It is clearly closely tied with the fact that during the normal development of the infant nervous system,^{210,214} and during learning in general,^{215, 216} ex-

²⁰⁵ Merzenich, M. M., Kaas, J. H.: Reorganization of mammalian somatosensory cortex following peripheral nerve injury. Trends in Neurosciences 5:434-437, 1982.

^{20a} Finger, S., Stein, D. G.: Brain Damage and Recovery. New York, Academic Press 1982.

²⁰¹ Hecaen [128], chap. 9, "Cerebral Plasticity and Recovery of Function," pp. 379-401.

^{20s} Hunt, R. K., Moscona, A. A., Monroy, A. (eds.): Neural Development, Part III. Neural Specificity Plasticity, and Patterns. New York, Academic Press, 1982.

²⁰⁹ Finger, S., Stein, D. G.: Brain Damage and Recovery. Research and Clinical Perspectives. New York, Academic Press, 1982.

²¹⁰ Lund, R. D.: Development and plasticity of the brain. New York, Oxford Univ. Press, 1978.

²¹¹ Kuffer, W. S., Nicholls, J. G.: From Neuron to Brain. Sunderland, Mass. Sinauer, 1976, pp. 373-419.

²¹² Floeter, M. K., Grellnough, W. T.: Cerebellar plasticity: modification of Purkinje cell structure by ditierential rearing in ll)Onl\$eys. Science 229, 1979.

²¹¹ Grouse, L. D., Schrier, B. K., Nelson, G.: Effect of vis"Ual.experience

ternal stimuli have a profound effect upon the formation, maintenance, and modulation of synapses in the brain. Moreover, there is indirect evidence that memories are stored as diffuse patterns of synaptic sensitivities organized holographically,²¹⁷⁻²¹⁸ providing a plausible theoretical basis for the phenomena of diffuse memory storage, association of memories, and comparison of current sensory information with past experience (of obvious importance for the functioning of the human intellect).

All this carries several implications for our philosophical considerations. For one thing, our personality and lifetime of memories are contained in the pattern of synaptic sensitivities in our cerebral cortices. If all the neurons were eliminated and replaced by new ones, whether by transplantation of fetal nerve cells (which has actually been done successfully in animals)²¹⁹ or by dedifferentiation and multiplication of a few

on gene expression during the development of stimulus specificity in cat brain. *Exp. Neurol.* 64:354-364, 1979.

²¹⁴Edds, M. V., Jr., Gaze, R. M., Schneider, G. E., Irwin, L. N. (eds.): *Specificity and Plasticity of Retinotectal Connections*. *Neurosci. Res. Program Bull.*, Vol. 17, No. 2, 1979.

²¹⁵Shepherd, G. M.: *The Synaptic Organization of the Brain*. 2nd ed., New York, Oxford Univ. Press, 1979, pp. 75-76, 243-245, 324-328, 336-337, 363, 386.

²¹⁶McGreer, P. L., Eccles, J. C., McGreer, E. G.: *Molecular Neurobiology of the Mammalian Brain*. New York, Plenum, 1978, pp. 410, 501-535.

²¹¹Pribram, K. H.: *Languages of the Brain. Experimental Paradoxes and Principles in Neuropsychology*. Monterey, CA, Brooks/Cole, 1971, pp. 140-166.

²¹⁸Pribram, K., Nuwer, M., Baron, R. J.: *The Holographic Hypothesis of Memory Structure in Brain Function and Perception*. In Krantz, D. H., Atkinson, R. C., Luce, R. D., Suppes, P. (eds.): *Measurement, Psychophysics, and Neural Information Processing*. Vol. 2, San Francisco, Freeman, 1974, pp. 416-457.

²¹⁹Bjorklund, A., Segal M., Stenevi, U.: *Functional reinnervation of rat hippocampus by locus coeruleus implants*. *Brain Res.* 170:409-426, 1979.

²²⁰Berlow, M. J., Freed W. J., Hoffer, B. J., Seiger, A., Olson, L., Wyatt, R. J.: *Brain grafts reduce motor abnormalities produced by destruction of nigrostriatal dopamine system*. *Science* 204:643-647, 1979.

²²¹Bjorklund, A., Stenevi, U.: *Reconstruction of brain circuitries by neural transplants*. *Trends in Neurosciences* 2:301-306, 1979.

²²²Fray, P. J., Dunnett, S. B., Iversen, S. D., Bjorklund, A., Stenevi, U.: *Nigral transplants reinnervating the dopamine-depleted neostriatum can sustain intracranial self-stimulation*. *Science* 219:416-419, 1983.

incompatible there is death of that person; if it is made compatible again through transplantation of fetal brain cells, or some other futuristic technique, a new soul would be infused. Obviously, if the initial brain destruction were not sufficient to result in the departure of the original soul, the treatment would result in improvement of neurologic functioning of the same person, and the issue of death would not arise.

Another important consequence of neural plasticity is that it highlights the fact that the brain is not just a static network of axons and synapses, like a very sophisticated computer, only one made of organic materials rather than metal and semiconductors. Contrary to the central dogma of faith among most workers in artificial intelligence, the organicity of the brain's components is *not* merely an accidental feature, which could theoretically be duplicated by a futuristic computer. The constant turnover of the molecules in the brain, the continuous remodelling of every square micron of membrane, and the resultant capacity for adaptive self-modifiability are of the essence of the brain's suitability for human intellectual functioning. Obviously, all this is possible only in virtue of the immanent dynamism of a living organism. There are also many other aspects of the brain which distinguish it from computers, but which are beyond the scope and purpose of this paper.²²³ The only point to be made here is that there is no need to be concerned with the hypothetical possibility, which is so much a theme in popular films and science fiction novels, of future technology duplicating a human mind in a computer, as though the brain, like the kidney, heart and other organs, could be replaced by a machine and the person still live and think through his artificial brain.²²⁴ As one prominent advocate of artificial intelligence ironically and unwittingly remarked, " If intelligence involves learning, creativity, . . . a

²²³ Shewmon, D. A.: Book review of Goede!, Escher, Bach: an Eternal Golden Braid, by D.R. Hofstadter [225]. *Computer* 15:158-159, 1982.

²²⁴ Jastrow, R.: *The Enchanted Loom: Mind in the Universe*. New York, Simon and Schuster, 1981, pp. 162-168,

sense of self, then ... it may be that these will only be realized when we have totally duplicated a living brain",²²⁵ a feat obviously requiring an embryologic technique that can be performed only in the laboratory of a mother's womb.

EPILOGUE

Although the President's Commission does not consider persistent vegetative state as actual death, it would not be at all surprising if in another ten years the equivalence were to become generally accepted. While in many aspects public attitudes are evolving in an anti-life direction, with regard to this issue, at least, the trend towards accepting brain death and related states as death is fully justified by a Thomistic conception of the human person, and should not be confused with the lobby for legalized euthanasia.

While there will always be a potential for abuse of these ideas, there are a number of positive consequences which I feel outweigh the negative. The first is that dead people will be treated in an appropriate way. It is simply grotesque to keep a dead person in an ICU or other expensive hospital setting for the sake of maintaining a large-scale tissue culture of his cells. Of course, if one is not sure whether death has occurred yet, it is perfectly appropriate and often mandatory to continue life support; but I am not referring to that situation. Rather, the common misunderstandings concerning brain death and persistent vegetative state all too often lead to unnecessary anxieties of conscience on the part of family members and even doctors, as they contemplate the morality of terminating the "life support" of a patient who is actually already dead. There is also much confused discussion over what constitutes ordinary versus extraordinary support for such patients; but it should be obvious that any support at all is extraordinary. In such cases it is not only morally permissible to terminate "life sup-

²²⁵Hofstadter, D. R.: *Goedel, Escher, Bach: an Eternal Golden Braid*. New York, Vintage, 1980, pp. 572, 573.

port" (vegetative life, that is), but it should be mandatory. In this way the cadaver can be piously buried, and the family can end their anxiety and uncertainty, begin their mourning process, and go on with their lives again.

Another very important reason for improved general understanding of this issue is that it would remove a false dilemma in the minds of doctors—a pseudoproblem which constitutes one of the greatest sources of temptation to disconnect life support prematurely in brain-damaged patients. At the present time, it is generally held that only whole-brain death is death, and that to withhold nutrition or fluids from a neocortically dead patient is tantamount to euthanasia or murder. Once a persistently vegetative patient begins to breathe on his own, most doctors imagine that there is nothing they can morally do but to support the patient indefinitely, at the cost of great disruption to the family and great financial loss to the family or society.²²⁶ Thus, they reason that it would be better for a patient not to live at all than to live in such a state. The only opportunity for avoiding this tragedy, however, is imagined to be the initial few days, during which ventilatory support is temporarily needed. They reason that it is much easier to justify disconnecting the ventilator as extraordinary support than to justify withholding fluids and nutrition later. On the other hand, it is usually impossible during the early phase, when the patients still require ventilatory assistance, to predict which ones will recover and which will not. These contrasting facts often lead to great anxiety of (co)science concerning how to choose the "least evil" course of action: on the one hand, to support everyone through the acute stages, with the resultant increase in vegetative patients whom families and society will have to care for indefinitely; or, on the other hand, to terminate the acute support of those with a statistically bad prognosis, realizing that in so doing some patients destined to recover will die.

²²⁶ Cullen, D. J.: Results and costs of intensive care. *Anesthesiology* 47:203-216, 1977.

What I propose should make these decisions much easier, and reduce the number of inappropriate and hasty disconnections from ventilators. Since it would *not* be euthanasia painlessly to kill a vegetating body, once irreversibility has been determined with certainty (based upon adequate passage of time, EEG, and radiologic imaging studies, as described above), there is no great problem with supporting everyone through the initial stages, letting those recover who are destined to recover, while letting go those who eventually declare themselves as already having died. **If** society and the law came to recognize persistent vegetative state as death, as it has with whole-brain death, then it would be much easier for doctors to give comatose patients every opportunity for recovery.

Moreover, the financial consideration is not at all crass or inappropriate. **It** is improper to assess families, insurance companies, or taxpayers with expensive hospital bills for keeping cadavers warm. **It** is likewise inappropriate to tie up ICU beds and divert the time and effort of nurses and doctors, in order to play medical games with cadavers, when these beds and efforts should be directed toward living patients with a chance of recovery. This is not a mere game of words, as some have misunderstood, in order to justify cost-cutting by redefining living comatose patients as "dead." **If** they really *are* dead, nothing advocated here runs counter to the principles of respect for life. Rather, what I propose is a more realistic acceptance of death, at the time and in the way which the Creator, in His inscrutable Providence, has decreed as best for each of us.

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THE OBJECTIVITY OF MYSTICAL TRUTH CLAIMS

THE PHILOSOPHICAL ANALYSIS of mysticism is completing the turn to the subject. While it has long been recognized that interpretations of mystical experience are mediated by cultural, religious and linguistic factors, until very recently analysts have simply assumed that mystical experience itself is unmediated and transcultural. This assumption is now under siege. It is now being cogently argued that not just mystical interpretations, but mystical experiences themselves are mediated by the traditions within which mystics operate. This is a welcome development. A clarification of the mediated character of mystical experience, by raising new questions, challenging old assumptions and inspiring fresh readings of the basic literature, offers an opportunity for significant advance along new paths in mystical analysis. But there is another side. Where there is new insight, there may be oversight; where new paths are being explored there may be wrong turns into blind alleys; where one false assumption is clarified, another may take its place.

My intention in this essay is to forestall one of the wrong turns. For along with the clarification that a mystical experience is mediated has come the assertion, familiar from other philosophical and theological contexts, that all truth claims which follow from these experiences are by that very fact subjective and without ontological status. To be sure, this assertion has an initial plausibility and in many instances may in fact be true. But it is one thing to assert that a given mystical truth claim is not objective, quite another to assert that all mystical truth claims are in principle without objectivity. Such an assertion is not based on an appeal to the relevant mystical data; it is based upon fundamental assumptions about

the nature of knowing, objectivity and the real. In what follows I will challenge these assumptions and argue that while mystical experience is indeed mediated, this does not in principle preclude the objectivity of mystical truth claims.

To this end I will examine a particular and influential work by a contemporary scholar, Steven T. Katz.¹ Katz makes a clear and forceful case that mystical experience is culturally mediated and argues in consequence that mystical truth claims have no objective status. I will focus on the latter argument and attempt to show that his claim in this regard is based neither on convincing logical argument nor coherent epistemological procedures.² That Katz's position is the rule rather than the exception among scholars who affirm the mediated character of mystical experience makes it all the more important to bring the relevant logical and epistemological issues out into the open, particularly at a time when the philosophical analysis of mysticism is in a state of ferment.³ Before attempting this critique, however, it is necessary to consider Katz's argument in some detail.

Katz's main concern in the lead essay of his book is to frame a critique of what he takes to be the facile assumption that there is a "common core" to mystical experience. For Katz, there is no perennial philosophy. "*There are NO pure (i.e., unmediated) experiences,*" whether mystical or otherwise (p. 26). He documents his case by analyzing selected aspects of the Jewish, Buddhist and Christian mystical traditions and

¹ Steven T. Katz, "Language, Epistemology and Mysticism," in *Mysticism and Philosophical Analysis*, edited by Steven T. Katz (New York: Oxford University, 1978), pp. 22-74. This volume is the work which pioneers the completion of the turn to the subject in mystical analysis. A follow-up volume of essays has recently appeared: *Mysticism and Religious Traditions*, edited by Steven T. Katz, (New York: Oxford University, 1983).

² Katz, "Language, Epistemology and Mysticism," p. 65. All further citations will be noted parenthetically in the body of the text.

³ Cf. Jure Kristo, "The Interpretation of Religious Experience: What Do Mystics Intend When They Talk About Their Experience?" *Journal of Religion* 62 (1982): 23; John Hick, *God has Many Names*, (Philadelphia: Westminster, 1982), pp. 95-99; Robert M. Gimello, "Mysticism and Meditation," in *Mysticism and Philosophical Analysis*, pp. 193-194.

contends that Jewish mystics have specifically Jewish mystical experiences, Buddhist mystics specifically Buddhist mystical experiences, and Christian mystics specifically Christian mystical experiences (pp. 33-42). While Katz's analysis warrants careful consideration, of specific interest in the present context are the epistemological and ontological conclusions he draws from it.

Epistemologically, Katz concludes that the mediating factors appropriated within a particular tradition actively shape and construct the mystic's experience. This conclusion, as one might expect, is inextricable from his understanding of mystical language. Mystical consciousness, as Katz points out, is intentional consciousness (p. 63). Mystics explicitly seek, yearn and search, and thus introduce what Katz takes to be "an obviously self-fulfilling prophetic aspect" to their experiences (p. 59). "The experience that the mystic or yoga has is the experience he seeks as a consequence of the shared beliefs he holds through his metaphysical doctrinal commitments " (p. 58). Thus, Katz contends that " states of experience which go by the names *nirvana*, *devekuth*, *fana*, etc., are not the ground but the *outcome* of the complex epistemological activity" operative within mystical consciousness (p. 62). "As for all of us," he concludes, a mystic " only knows things as they 'appear' to him" (p. 64).

Katz's ontological conclusions follow directly from the epistemological situation just outlined. Since the mystic only knows mystical reality as mediated by his or her tradition, and since the mediating and interpretive factors of doctrine, training and expectation vary from tradition to tradition, Katz concludes that mystics " do not experience the same Reality " (p. 50). The difference, he stresses, is not in *how* something is experienced, but actually in what is experienced (p. 52). For Katz, words such as " God " or " Brahman " are not arbitrary labels referring to a common underlying reality, but descriptions which " carry a meaning relative to some ontological structure" (p. 56). And since the term " God" carries with it ontological characteristics different from the term "Brah-

man," Katz concludes that these terms describe distinctly "different ontological realities" (p. 51). Such is the case not only among historically different religious traditions but within different strands of a common tradition as well (p. 58). For Katz, mystical reality is relative and strongly pluralistic (pp. 65-66), and from this his position on the objective status of mystical truth claims logically follows:

It seems correct to argue that no veridical propositions can be generated on the basis of mystical experience. As a consequence, it appears certain that mystical experience is not and logically cannot be the grounds for *any* final assertions about the nature or truth of any religious or philosophical position, nor, more particularly, for any specific dogmatic or theological belief.... It is not being argued either that mystical experiences do not happen, or that what they claim may not be true, only that there can be no grounds for deciding this question, i.e., of showing that they are true *even* if they are, in fact, true (p. 22).⁴

It is Katz's categorical denial of the objectivity of mystical truth claims that I wish to challenge, but before explicitly doing so it will be helpful to clarify the basic strategy of my critique.

We may begin by noting a fundamental point of procedural agreement. In coming to his position Katz quite properly asserts the priority of epistemological questions over ontological claims. That is to say, Katz argues that before one can legitimately assert that something is in fact the case, one must ensure that one's knowing is objective and that the conditions exist for the possibility of objective knowing. Katz denies the possibility of objective mystical knowing and hence the objectivity of any mystical truth claim. Despite this initial agreement on procedures, however, disagreement on conclusions stems from Katz's failure to make a second procedural

⁴ In the present argument I am following Katz in limiting the conception of mystical claims to propositions concerning matters of mystical fact. It is important to note that mystical claims are also, and perhaps primarily, descriptions of the mystical transformation of consciousness. However, since this distinction does not affect the epistemological and ontological issues raised by Katz it will not be drawn here.

distinction. As Bernard Lonergan has pointed out, just as epistemological questions have priority over ontological claims, so cognitional questions have priority over epistemological assertions. That is to say, before one can legitimately set standards for what constitutes objective knowing, one must have first accurately determined what the process of knowing is.⁵ Katz has failed to attend fully to the cognitional question.

The point is quite simple, but the implications are profound. How can one set appropriate standards of performance if one is implicitly operating with an inaccurate notion of the performance itself? If, for example, I mistakenly assume that swimming is a matter of splashing around in the shallow end of a pool, I will set up standards of performance which will lead me to conclude that those poor people gliding smoothly through the water toward the deep end are sadly deluded in thinking they are swimmers. So it is with knowing. An inaccurate theory of knowing (cognitional theory) will lead to errors in specifying the conditions of objectivity (epistemology) and hence to what will finally count as truly known (ontology/metaphysics). That is, it will lead one to contend that mystics are not knowers and that what they claim is not really known.

It is important to note that the distinction between cognitional theory and epistemology forces one to reverse the familiar sequence of thinking about knowing. Normally, the existence of the real is posited and it is then asked whether or how the real can be objectively known. This is the procedure followed by Katz. Attention to the cognitional underpinnings of epistemology and ontology, however, leads to the recognition that the familiar sequence must be reversed. One begins with an examination of what one does when one knows, then goes on to ask under what conditions such knowing is possible, and

⁵ In Lonergan's terms, this is the "critical function" of what he variously calls transcendental or generalized empirical method. Bernard Lonergan, *Method in Theology*, (New York: Herder & Herder, 1972), pp. 20-21. For a convenient exposition of Lonergan's generalized empirical method, see *Method in Theology*, pp. 3-25.

then specifies what in principle can be known.⁶ This is the procedure, specified by Lonergan, informing the critique being advanced here.

As might be expected, Katz does not make his cognitional theory explicit, but it can be inferred from his epistemological ontological positions as outlined above. For Katz, there would seem to be two components involved in the process of human knowing. He distinguishes experience and interpretation, with interpretation actively shaping the nature of the experience and so precluding an objective experience of the real. The assumption here seems to be that true knowing is a matter of experiencing, and that if pure, unmediated experiencing were a possibility, there would exist the possibility of objective knowing. But because of the interpretive function of human cognition, there is no unmediated experiencing. Therefore, there is no objective knowing. The critique that follows will in consequence ask two sets of questions. First, (a) does human knowing in fact take place in the two-component process of experience and interpretation indicated by Katz, and (b) if not, how does it take place? And second, if Katz's cognitional theory is inaccurate, (a) how has this inaccuracy affected his philosophical conclusions about mysticism and mystical truth claims, and (b) how would an accurate cognitional theory correct those conclusions?

The first set of questions can be best answered by turning from expressly mystical knowing to a more commonly shared arena of human knowing. Katz himself provides an example of such knowing, and although his point in the following quotation is to illustrate the conditioned nature of human experiencing, the example serves well as a test case for the adequacy of his cognitional theory and its epistemological and ontological implications.

Beliefs shape experience, just as experience shapes belief. To take for a moment a non-controversial example of this, consider Manet's

^aOn this reversal and its relationship to the analysis of knowing in Aquinas see Joseph Flanagan, "Lonergan's Epistemology," *Thomillt* 36 (1972) : 75-97.

paintings of Notre Dame. Manet 'knew' Notre Dame was a Gothic cathedral and so 'saw' it as a Gothic cathedral as testified to by his paintings which present Notre Dame with Gothic archways. Yet close examinations will reveal that certain of the archways of Notre Dame which Manet painted as Gothic are in fact Romanesque (p. 30).

How adequately does Katz's cognitional theory objectify this "non-controversial" example of the human knowing process? It seems clear at least that the theory is correct in distinguishing experience from interpretation and in its description of knowing as interpreted experience. This would vindicate Katz's epistemological contention that there is a "self-fulfilling prophetic aspect" to human knowing. Manet expected a Gothic cathedral and seems to have both seen and painted one. Katz's point is that in consequence of prior interpretation reality is known only under appearances. It is plausible, as Katz suggests, that Manet actually 'saw' the archways as Gothic. But the question arises as to what extent his knowing is confined to the "appearances" he purportedly anticipates. Is it not equally plausible that Manet 'knew' some of the archways were Romanesque but chose to paint them as Gothic in the same way that a child 'knows' the sky is blue but 'chooses' to color it green? The questions become more significant, however, upon considering the ontological conclusion Katz draws which is that linguistic and cognitive conditioning leads to the experience of "different ontological realities." Is it plausible to suggest that even if Manet did 'see' Gothic archways throughout, he experienced or knew a "different ontological reality" from a person who 'saw' the archways as Romanesque? Are we to suppose that there are two ontologically different cathedrals, one for Manet and one for someone who 'sees' the Romanesque variations? If both Manet and the other person were to make truth claims about the nature of the cathedral's archways, are we to suppose, as Katz would have us suppose regarding mystical truth claims, that neither proposition is veridical or that there are no grounds for assessing the relative objectivity of either "seeing?"

Quite dearly, the answer on all counts must be "no." Indeed, Katz himself answers "no." In the last sentence of the passage cited above, "close examination will reveal that certain of the archways ... are in fact Romanesque," Katz explicitly asserts that Manet's painting is not as objective as it would be had he examined the archways more closely and painted some of them Romanesque. Katz is not only assessing the relative objectivity of two propositions, he is himself making a statement which he intends us to accept as veridical.

Why do we find Katz here tacitly acknowledging the possibility of objective truth claims about the archways on Notre Dame when he so clearly denies the same possibility with regard to mystical knowing? It is not that he denies the reality of mystical experience; he affirms it. It is not that he thinks mystical knowing is different from other knowing; he affirms this too. It is rather that in his final comment on Manet's paintings Katz has quite naturally presupposed a cognitional theory different from the one he presupposes in his conscious philosophical reflections on mystical knowing. In his final comment on Manet, Katz is implicitly referring to yet a third component in the process of human knowing, a component additional to experience and interpretation, a component present in his own performance of knowing but overlooked in his philosophical analysis of mysticism. The oversight may seem innocuous enough, but the ramifications, philosophically, are great indeed. When that third component is recognized, as it must be, an accurate cognitional theory emerges which entails epistemological and ontological positions quite different from those advanced by Katz and others holding similar positions. The difference in the two cognitional theories is the factor that makes us able to affirm, in a critically grounded fashion, the possibility of mystical reality as well.

What is this third component? Let us refer to it as the act of "judgment." It is the cognitional act undertaken repeatedly by us all, of judging whether or not our previous interpretation of experience is correct. This is the act Katz is referring to in

suggesting that a closer examination of the cathedral would have revealed some significant stylistic differences among the archways. It is thus a cognitional operation quite different in kind from that of interpretation, a difference that can be clearly specified by distinguishing the type of question each cognitional operation seeks to answer. Interpretation provides the answers to the questions we spontaneously ask of our experience: "What is this?" "Why is it?" Judgment provides the answers to the questions we ask with equal spontaneity of our interpretations: "Is it true?"; "Is this so?" Questions for interpretation are answered by insights and formulated in statements, hypotheses, and theories. Questions for judgment are not answered with hypotheses but with the "yes", "no" or "maybe" that expresses one's grasp of the sufficiency of the evidence supporting an interpretation. ¹ Manet *interpreted* Notre Dame's archways to be consistently Gothic. Assuming he was not like the child who colors the sky green, he also *judged* this interpretation to be correct. Evidently, he was wrong. As Katz put it, a closer examination of the evidence would have led to the correct judgment, "no, the archways are not all Gothic," and a subsequent revision of his interpretation. Indeed, if you, the reader, were to take a moment to attend retrospectively to your own conscious performance in reading this essay, you would discern both the intention to ask as well as to answer the two types of questions, questions for interpretation, "What is he saying here?," and questions for judgment, "Is he right?" A cognitional theory which explicitly accounts for the performance of judgment in the process of human knowing would objectify knowing as a threefold process involving experience, interpretation and judgment. ⁸

¹ Readers familiar with Bernard Lonergan will recognize that my "questions for interpretation and judgment" are equivalent respectively to Lonergan's "questions for intelligence and reflection." See, for example, Bernard Lonergan, *Insight: A Study of Human Understanding* (New York: Philosophical Library, 1958), pp. 271-275.

⁸ To avoid misunderstanding it must be noted that the terms experience, understanding and judgment are convenient designations for the basic level.>

The foregoing effort to answer the first question of our critique, "Does human knowing take place in a two component process of experience and interpretation?" was in fact an exercise in the performance of judgment, an exercise of reflective inquiry asking whether or not Katz's interpretation of knowing adequately fits the evidence. The answer is, "No, it does not; knowing includes a third component, namely, judgment." Of course, this judgment may in turn be challenged. It may be objected that, while Katz does not specifically refer to the act of judgment, surely he would not deny that judgments are made. I concede this. The point is that even if Katz were to acknowledge the performance of judgment, if this acknowledgment is not also incorporated in his theoretical reflections on mystical knowing, then, trivial as it may at first appear, this omission significantly misleads his epistemological and ontological conclusions.

It may also be objected that, even if Katz were to incorporate the performance of judgment into his theoretical reflections, he might well contend that such judgments occur only as mediated by a particular culture or tradition, and hence, like interpretation, are themselves also without objective ontological status. In reply, I can only suggest, as I did above regarding the example of Notre Dame, that while this objection is not self-contradictory, it is nevertheless self-destructive. It belies its own performance. I am not contending that judgments are never incorrect. I am not contending that judgments are not culturally mediated. What I am contending is that the performance of judgment itself indicates the possibility, in principle as well as fact, of transcending the limitations of personal

of human cognition which can be specified in greater detail through attention to the various operations which make up each level. Lonergan, for example, lists "seeing, hearing, touching, smelling, tasting, inquiring, imagining, understanding, conceiving, formulating, reflecting, marshalling and weighing the evidence, judging, deliberating, evaluating, deciding, speaking, writing." *Method in Theology*, p. 6. The final five operations listed in fact refer to what Lonergan calls the level of decision, the process of deciding the value of what is known and what action to take in light of that value,

and cultural mediations to grasp what is in fact the case. To object that mystical judgments are culturally mediated and hence without objective ontological status is itself to have made a judgment. More, it is an assertion (if implicit) that one has transcended the limits of interpretation to reach a correct judgment. Indeed, Katz's entire essay is the record of a cognitional performance attempting to supply good reasons and sufficient evidence for why others should judge, as he has, that his interpretation of mystical experience and mystical knowing is the correct one. Here there is no relativism, no pluralism. Instead, there is a strong claim for objectivity. Thus, to affirm with Katz a cognitional theory which either ignores or denies the performance of true judgment is to affirm a position on cognitional theory which, while not self-contradictory, is nevertheless self-destructive. The very performance of judging as true a position which denies the possibility of performing true judgments is self-destructive. It undercuts the position itself and forces it toward the correction of an accurate cognitional theory.⁹ This point will be expanded below.

Thus, the answer to the first set of questions in the critique may now be summarized. Katz's categorical denial that mystical experience can be the basis for objective knowledge of the real is based upon an inaccurate cognitional theory, one which equates knowing with experience and interpretation. An accurate cognitional theory would objectify knowing as a threefold process of experience, interpretation and judgment.¹⁰

⁹ Lonergan, *Insight* pp. 276-277. On the relationship of Lonergan and Kant on epistemological issues, see Giovanni Sala, "The *A Priori* in Human Knowledge: Kant's *Critique of Pure Reason* and Lonergan's *Insight*," *The Thomist* 40 (1976): 179-221; Hugo Meynell, "Transcendental Subjectivity," *The Heythrop Journal*, 21 (1980): 153-167.

¹⁰ It might reasonably be asked, even if one grants that human knowing is a matter of experiencing, understanding and judging, does mystical knowing follow this pattern? This, of course, can only be decided through a careful examination of the relevant mystical texts. It is my contention that a "mystical intentionality" following this basic pattern does become operative in the mystic whose mystical consciousness has become stable and fully differentiated. It is also my contention, however, that

The second set of questions will now be addressed, but, before specifically turning to the issue of mystical analysis, it may be helpful to compare in more general terms the epistemological and ontological implications of the two cognitional theories under consideration.

As indicated in the example given earlier, one's understanding of what the performance of swimming is will directly affect not only the standards for swimming one establishes, but what one considers to be real swimming. The same is true of knowing except that what is at stake is philosophically of much greater moment. At stake is nothing less than one's understanding of reality and the relationship of human beings to it. For Katz, the real exists, but neither a mystic nor anybody else can ever come to know it. Since knowing is understood to be a matter of my interpretation of my experience, it follows that I can never transcend my own interpretations to know the real in itself. It follows, that is, only on the assumption of Katz's cognitional theory.

As it happens, and as can be verified by anyone who attends to the concrete performance of their own knowing, I can and do transcend my own interpretations every time I correctly perform an act of judgment. To be sure, as Katz points out, knowing begins within the subject. Experience is my experience, and understanding is my understanding, and both are mediated by the cultural and linguistic world in which I live. But I can move outside of myself, so to speak, when I affirm through judgment not what I think to be the case, not what I have been taught to be the case, not what I would like to be the case, but what in fact is the case. Again, if some of the archways on Notre Dame are in fact romanesque, I can in principle transcend an initial interpretation which understands

consciousness rather than consciousness-as-intentional is the analogy most adequate for explaining the nature of mystical consciousness and its relationship to mystical knowing. Since Katz's concern is exclusively with consciousness-as-intentional, I have not introduced the notion of consciousness-as-consciousness in this essay. For a clarification of this distinction and an examination of its implications for the philosophical and theological analysis of mysticism, see my "Bernard Lonergan and the Foundations of a Contemporary Mystical Theology," *Lonerpan Workshop*, forthcoming 1985.

them to be uniformly Gothic. Knowing, in other words, is quite simply the sometimes quite difficult matter of correctly understanding what is so. From this it follows that human beings, mystics and non-mystics alike, are not by the nature of their cognitional processes cut off from knowledge of the real, but rather are by those very processes intentionally oriented toward knowledge of it. It follows also, therefore, that only inattention, or failure in interpretation, or insufficiently critical judgment will subvert that cognitional intentionality.¹¹ With these general considerations in mind, it remains now specifically to consider both how Katz's cognitional theory has misdirected his philosophical analysis of mysticism and to suggest how his epistemological and ontological conclusions can be corrected by attention to a more accurate cognitional theory.

In his descriptions of the epistemological conditions of mystical knowing, Katz points out that mystical consciousness is intentional consciousness, that mystical goals are shaped by mystical traditions and that a principal vehicle of this shaping is language in the form of metaphysical doctrine. In short, a mystic's experience is mediated by meaning, and as Katz clearly points out, not all mystical meanings are the same. On these points there is no disagreement. Disagreement lies in Katz's understanding of the real and its relationship to meaning, a disagreement based in differences of cognitional theory.

For Katz, human beings in general and mystics in particular live in a world of meaning, a world of interpreted experience. As noted, the fundamental problem is that our interpretations do not disclose the real in itself; they filter and distort it by culturally mediating it. In terms of the cognitional theory advanced here, however, to speak of the real is not to speak of unmediated experiencing, but to speak of apprehending true meaning.¹² Interpretation does not, in principle at least, dis-

¹¹ See Bernard Lonergan, "The Subject," in *A Second Collection*, edited by William F. J. Ryan, and Bernard J. Tyrrell, (Philadelphia: Westminster, 1974), pp. 69-86, esp. pp. 70-71.

¹² See Bernard Lonergan, *Method in Theology*, pp. 57-99, esp. pp. 74-76, and "Dimensions of Meaning," in *Collection*, edited by Frederick E. Crowe, (New York: Herder and Herder, 1967) pp. 252-267.

tort experience; rather, it grasps the intelligibility inherent in it. True meanings, therefore, are interpretations of experience affirmed to be true through the performance of correct judgment. Of course, this is not to say that false meanings cannot be and are not also often affirmed. These, however, are affirmations of what is in fact not the case and so do not belong to the real.¹⁸ The problem of objectivity, then, is not the problem of perceiving unmediated experience; it is the problem of making correct judgments. Thus, with Katz, it can be acknowledged that mystical knowing is mediated by a mystic's tradition, but the epistemological conclusions which follow from that acknowledgment will of necessity be quite different from those advanced by Katz.

For instance, if objective knowing is reached by the person who can make correct judgments, epistemological attention must be focused principally on the knower, not on what is to be known. It follows that the person who will most consistently make correct judgments is the one who is willing to entertain and satisfactorily answer all relevant questions which might emerge to qualify or overturn a present interpretation. Such a person will be committed to the truth, whatever its cost, and therefore committed to transcending all the levels of the bias-personal, social, religious, cultural-which thwart that commitment and distort the performance of judgment. Objectivity, understood this way, is authentic subjectivity.¹⁴

A simple distinction may help to clarify this point, for standards of objectivity are typically thought of as external or internal. A measuring stick is an example of an external standard; it can be used to obtain the measurements of a range of objects. If however, one turns from the measuring stick to the care and attention with which a measurement is made, the standard of objectivity is internal. A measurement is in fact as accurate as the one who measures is attentive and careful. My contention is that making correct judgments is like mak-

is Bernard Lonergan, *Insight*, pp. 499-502, 672-673.

H Lonergan, *Method in Theology*, p. 265.

ing accurate measurements. The knowledge claim is only as valid as the individual is open, intelligent, critical and responsible. The objectivity of the knowing depends on the authenticity of the knower.

Thus, from this perspective it can be asserted that, while objective knowing is in principle possible, it cannot be assumed. About certain areas of knowledge one can of course be rather confident, such as which bus to take home or where to find the milk in the corner store. Mistaken judgment in these matters is readily and spontaneously self-correcting. But when one moves into areas of knowing in which the facts that are affirmed are also facts simultaneously affirmed as of significant or ultimate value, areas involving, for instance, one's commitment to one's family, or to one's country, or to one's God, then objective knowing becomes much more elusive and precarious and the various levels of bias much more subtle and potentially dominant.¹⁵ Mystical visions and experiences may be regarded by a given individual as self-authenticating, but the authenticity of that individual is itself not a given. For this reason mystical traditions have always put great stress on the practice of discernment. Nevertheless, it must also be emphasized that it is within the context of a religious life, a life oriented explicitly toward transcendent values, that the highest levels of human authenticity are attained. Only from a thoroughgoing perspective of transcendent value can the commitment to root out all levels of bias be undertaken, sustained, and in even greater degree attained.¹⁶ Indeed, to focus the issue more precisely, if controversially, a strong case could be made that it is within explicitly spiritual and mystical tradi-

¹⁵ It must be noted that for Lonergan, the drive of human consciousness toward knowledge that leads from experience to understanding to judgment finds its terms in a sublation of all three levels in a fourth level of consciousness associated with value. From such a perspective, a full and proper analysis of mystical knowing could not be accomplished without explicit attention to the function of values within mystical consciousness. See Lonergan, *Method in Theology*, pp. 36-41; 105-107; 115-117.

¹⁶ On this point see John F. Haught, *Religion & Self-Acceptance: A Study of the Relationship Between Belief in God and the Desire to Know*, (Washington, D.C.: University Press of America, 1980), pp. 143-173.

tions, committed as they are to rigorous disciplines of physical, mental, emotional and spiritual transformation, that the highest levels of human authenticity are attained.¹¹

The standard of objectivity, then, is not uninterpreted experience, but the authenticity of the knowing subject. The objective standard employed by the Zen master in judging his disciples is nothing less than the depth and authenticity of his own enlightenment. And of course this is true not only for mystics, but mystical analysts as well. The objectivity of any philosophical analysis will be inevitably related to the analyst's own level of understanding and to the degree of his personal authenticity.

Turning now from epistemological considerations to the ontological issues which logically follow, it will be recalled that for Katz mystical doctrines both shape and mirror the experience of different ontological realities. All are held to be equally valid; none can legitimately be regarded as an objective truth claim. As indicated, if knowing is taken to be solely a matter of experience and interpretation, these conclusions inevitably follow. However, if the possibility of correct judgment is acknowledged, then the distinction between correct and incorrect legitimately comes into play and a different set of ontological conclusions emerges.

Beliefs, interpretations and understandings quite clearly shape our world. A Manet may paint all of Notre Dame's archways as though they were Gothic, a son may conclude his father does not love him and behave accordingly, a woman may devote her life to a particular understanding of Christianity. These understandings are very real in the proximate sense that they affect one's painting, one's family life, one's religious practice. But under the natural and spontaneous pressure of

¹¹ For an example of this type of argument see John Henry Newman, "Love the Safeguard of Faith .Against Superstition," *Sermons, Chiefly on the Theory of Religious Belief* (London: Rivington, 1843). For an example of how this claim might be worked out in terms of Lonergan's thought, see James Robertson Price, "Conversion and the Doctrine of Grace in Bernard Lonergan and John Climacus," *Anglican Theological Review*, 72 (1980): 338-361.

the human mind to ask the question for judgment "Is it true?", each individual can, in principle, attend more carefully to his or her experience, understand it more fully, judge it more adequately and as a result repaint the cathedral, effect a reconciliation with his father, or reform her religious tradition. The rival sets of understanding which result from revised judgments cannot be and are not regarded as of equal validity any more than the Ptolemaic theory of the universe either is or can be regarded as possessing a scientific validity equal to the rival explanation offered by Copernicus. To be sure, the emergence of further relevant questions can never be absolutely ruled out. Nevertheless, it is in principle possible to make an objectively valid statement about the archways of Notre Dame, about one's relationship with one's father, and about mystical reality as well.¹⁸

Of course this is not to imply that mystical knowing in all traditions is the same. About this, Katz is surely quite right. It is to imply, however, that, to the extent that the various mystical traditions legitimately pursue correct interpretation, their mystical knowledge will tend to converge or overlap. Thus a precision is necessary regarding Katz's contention that mystics from different traditions know different ontological realities. On the one hand, it can be affirmed with Katz that mystics from different traditions may know different realms of mystical reality, just as Eskimos know glaciers and Pueblo Indians know deserts. But on the other hand, against Katz, it can also be affirmed that mystics from different traditions may know the same mystical reality, and that their respective linguistic and cognitive predispositions do not preclude the possibility either of objective knowing or mutual understanding and correction. Thus, were an Eskimo and a Pueblo Indian both to experience New York City, they could be presumed because of their differing cultural backgrounds to understand it and describe it in quite different ways, but this

is for a consideration of this issue in relation to the theories of contemporary sociologists of knowledge, see Hugo Meynell, "On the Limits of Epistemology of Knowledge," *Social Studies of Science*, 7 (1977) : 489-500,

would not preclude objective knowledge of Manhattan by either of them individually, or, given the requisite effort, the mutual communication, correction and expansion of their understandings through dialogue.

The implications of this for the cross-cultural study of mysticism are readily apparent. Cross-cultural analyses will clearly require major collaborative efforts, and, given the explicit recognition of the mediated character of mystical experience, levels of analytical care and sophistication not generally exercised heretofore. Nevertheless, the cognitional theory advanced here leads one to reject Katz's categorical assertion of a strong pluralism among the world's mystical traditions. Instead, it leads one to assert, in a critically grounded fashion, the possibility of a qualified pluralism among mystical traditions, and to affirm not only the validity but the necessity of cross-cultural studies. It offers, in fact, the foundations for a critically grounded *philosophia perennis*.

By way of conclusion, it is important to stress again that the completion of the turn to the subject within mystical analysis is a significant and welcome development, and that in this Katz and others are performing an invaluable service. The intention here has been to join them in their effort to advance the philosophical analysis of mysticism but also to forestall a possible wrong turn in that advance. For, if the recognition of the mediated character of mystical experience can eliminate the facile presumption of a perennial philosophy, so the recognition of an adequate cognitional theory can eliminate the wrong turn that leads not only to the easy assumption of a radical pluralism among the world's mystical traditions, but to the categorical denial of the objectivity of mystical truth claims, and to the effective foreclosure of an important avenue of interreligious and cross-cultural dialogue. This is a wrong turn that must be avoided.¹⁹

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¹⁹ This essay is an expansion of part of a paper
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at Regis College,
" "

ON HEIDEGGER AND THE RECOURSE TO POETIC LANGUAGE

XONG THE CONCERNS which link the earlier work of Martin Heidegger (the lectures, articles, and books culminating in the publication of *Sein und Zeit* in 1927) and the later works (beginning, roughly, with the *Wom Wesen der Wahrheit* of 1933-34, and the *Einführung in die Metaphysik*, lectures given in 1935), none has proved more important or controversial than the question of "poetic" language: its nature, and its place in Heidegger's idiosyncratically original later philosophy. Partisans of either of Heidegger's "styles" of philosophizing may justifiably defend their preferences; but too frequently we are left with the impression of a philosopher who broke with earlier concerns only to embark on a "poetic" career unrelated to philosophy. In the paragraphs that follow, my concern is to sketch certain continuing preoccupations in Heidegger's career which brought him to seek a "poetic" language. The conception of language as inherently "poetic," which informs the later work thematically and stylistically, can be seen as a development of questions already posed in *Sein und Zeit*. There, Heidegger is already convinced of the non-analytical nature of human language. In the later work, the notion of a poetic language, which he places in its stead, is entwined with his re-reading of the pre-Socratic philosophers; it is central to his own "poetic" style of thinking. It is this conception of philosophy as poetry which has, however, proved so controversial among his critics. Only the most trenchant among them (e.g. Theodor Adorno) have seen that a rejection of the "later" Heidegger must perforce entail substantial disagreement with the problematic raised in *Sein und Zeit*.

In that book, Heidegger speaks of the need for "re-establish-

ing the science of language on foundations which are ontologically more primordial " than those which dominate Western thought.¹ He is referring specifically to the " basic stock of 'categories of signification'" (ibid.) which have been central to philosophy since the ancient logos became synonymous with assertion (*Aussage*). This "basic stock," these "categories of signification," are fundamental to modern analytic philosophy, which takes language as a symbolic form, a "representation " of the world to the mind. If philosophical inquiry was to meet the challenges of which the phenomenologists were already aware, if it was to inquire into "'the things themselves' and attain the status of a problematic which has been cleared up conceptually " (SZ, 166), then it ought to alter its notion of language in some radical ways. "Attempts to grasp the 'essence of language,'" Heidegger says in *Sein und Zeit*, "have always taken their orientation from one or another of these items ... the ideas of 'expression,' of 'symbolic form,' of communication as 'assertion,' of the 'patterning ' of life. Even if one were to put these various fragmentary definitions together in syncretist fashion, nothing would be achieved in the way of a fully adequate definition of 'language.' We would still have to do what is decisive here-to work out in advance the ontological-existential whole of the structure of discourse on the basis of the analytic of Dasein " (SZ, 163).

The above reference is crucial because it points up the connection between the ontological-analytical project of *Sein und Zeit* and the linguistic question it raises: that a definition of language "from the outside" is not possible, and that even if it were, we would not be unburdened of the need to inquire into Dasein. This is the primary task outlined in the book, an inquiry into the nature of Dasein. But that project would perforce be inhibited, Heidegger's work bears out, by a conception

¹ I cite *Sein und Zeit* (hereafter, *SZ*) from the standard English translation by John Macquarrie and Edward Robinson, *Being and Time* (New York: Harper and Row, 1962), by reference to the original (German) pagination, noted in that edition; here: *SZ*, 195. ..

of language as a logical-analytical instrument of representation; "meaning," as conceived in analysis, is in fact antithetical to the nature of meaning which attaches to Dasein. "Meaning is an *existentiale* of Dasein," Heidegger says, "not a property attached to entities, lying 'behind' them, or floating somewhere in an 'intermediate domain'" (SZ, 151), as analytical philosophy would conceive.

References like this to the language of logical analysis are not infrequent in Heidegger's work, both before and after *Sein und Zeit*. In an essay on "Heidegger and Symbolic Logic," Albert Borgmann traced a concern which runs throughout Heidegger's career, from an early report on "Recent Research in Logic" (1912) to such late works as *What Is Called Thinking?*² In *Unterwegs zur Sprache* (1959), he says that the "essence of language refuses to come to language (i.e. be capable of expression through language) in the assertions (*Aussagen*) we make concerning language,"³ which echoes *Sein und Zeit*. Analytical philosophy and the language of symbolic logic represent a case of the over-estimation of the "categories" into which the authentic (poetic) logos has degenerated: "Only because at one time the call to thought became event as *Mythos*, symbolic logic today is developing into the planetary organizational form of every presentation." •

Analytical philosophy and the language of symbolic logic are exemplary of this over-estimation of the categories of thought and of the degeneration of the ancient logos because they rest on the notion of language as a wholly logical form capable of atomistic analysis and sovereign totalization, a com-

² Albert Borgmann, "Heidegger and Symbolic Logic," in *Heidegger and Modern Philosophy*, ed. Michael Murray (New Haven: Yale University Press, 1978) pp. 3-22.

³ See David A. White, *Heidegger and the Language of Poetry* (Lincoln: University of Nebraska Press, 1968), p. 20, who cites and discusses the line.

⁴ *Was Heisst Denken?*, 2nd ed. (Tübingen: Max Niemeyer Verlag, 1961), p. 102. The standard translation is *What Is Called Thinking?*, trans. J. Glenn Gray and F. Wieck (New York: Harper and Row, 1968). I use Albert Borgmann's rendering of this passage, which gives "symbolic instead of logistics."

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complete representation of the world. The later "poetic" project is directed against these notions and toward the restoration of the logos in its original (poetic) guise, not as science and logic have transmitted it to us. But already in *Sein und Zeit* we find the basis for a reevaluation of the nature of language in Heidegger's acute awareness of the proximity of Dasein and human linguisticity. He devotes special attention to the spatial, temporal, and historical properties of Dasein which belong also to human language. Most important, if our notion of human language is to do justice to understanding, which attaches integrally to Dasein, the analytical notion of language must be rejected. Yet there are limits to the degree to which language can be reevaluated within the framework of *Sein und Zeit*, with its phenomenological and neo-Kantian remnants (e.g. the turn "*zu den Sachen*"). If the problems outlined in *Sein und Zeit* were to be adequately developed, and the history of philosophy changed in their light, the transition to a "poetic" idiom was important.

We can say with Heidegger, especially in his later works (and with the pre-Socratics, Parmenides and Heraclitus, in the Heideggerian interpretation), that the practice of philosophy must restore the ancient sense of the logos in its ontological dimension. This requires a repudiation of the language of "assertion," of propositional statement, of "communication," if it is to be complete. Thus Heidegger's later works offer a model for doing philosophy *as* poetry, in a language responsive to the ancient sense of the logos (i.e. before it became synonymous with logical assertion). It is widely known that Heidegger found unparalleled resources in Sophocles, Trakl, Holderlin, and Rilke, devoting important works to them. His message is that we must learn a new relationship to language, to be responsive to it, rather than ask that language do the work of logical representation and assertion for us. The question which this philosophy must of course face, and to which Heidegger has been subjected, is whether thinking can in fact become poetry and still remain itself, still conserve its attentiveness to primordial questions (e.g. Being). Heidegger would, answer

resoundingly that the history of philosophy in the West has in fact grown insensitive to the meaning of Being *because* it has divorced itself from poetic language. His critics would reject him on precisely this ground.

In the later work, Heidegger would go considerably beyond the statement that language and philosophy somehow interpenetrate one another, an awareness which was present in *Sein und Zeit*. Language, as he sees it, is not something of concern to philosophers alone, but is itself primordial to Being. Should philosophy overlook the centrality of language to Being, it will necessarily have strayed from the fundamental question: Why is there? i.e. Why is there not nothing? Language is essential to all that exists: "words are not wrappings in which things are packed for the commerce of those who write and speak. It is in words and language that things first come into being and are."⁵ What has happened, though—presumably after the pre-Socratics—is that man has abused language, has made cheap sloganism of his luminous gift of speech. Consequently, his poetic language is exhausted. The theme is, in its own right, the tuning-fork of modern sensibility, and I will return to it in connection with Adorno and Schoenberg (think of Moses's sluggish, droning cry at the conclusion of *Moses und Aaron*: "O Wort, du Wort, das mir fehlt!"). Our everyday language is, as Heidegger said, "a forgotten and therefore used-up poem."⁶ And all this would, in a sense, be the very least, had the corrosion of language not started a deeper, inner rot, a general neglect of Being. The human problem is that man has forgotten Being. His relationship to the world has lost its authenticity: "the misuse of language in idle talk, in slogans and phrases, destroys our authentic relation to things;" we must seek to "regain the unimpaired strength of language and

⁵ *An Introduction to Metaphysics*, trans. Ralph Manheim (New Haven: Yale University Press, 1959), p. 13; based on lectures given in 1935.

⁶ "Langmlge," in *Poetry, Language, ...*, trans. Albert (New York: Harper and Row, 1971), p. 208.

⁷ *An Introduction to Metaphysics*, p. 13.

Heidegger must be taken absolutely to the letter-or ignored as an eccentric-when he finds in the pre-Socratic philosophers a mode of thinking "more *authentic*" than anything known to the tradition from Plato to Nietzsche.⁸ His reading of the pre-Socratics is "strong," and notoriously selective, concentrating on Heraclitus, Parmenides, and the Anaximander fragment, to the neglect of Pythagoras, Protagoras, Empedocles, and Gorgias. Heidegger sees in the pre-Socratics the possibility of a thinking and of a speaking so authentic that it leads to an astonishing re-encounter with what we have since left to oblivion or neglect: the fact of Being, i.e. that there *W*anything at all. He sees in the pre-Socratics an anchor of the now divergent masses of language and thinking. The very conception of such a point serves to infuse substantial reserves of hope in the practice of philosophy, insofar as that practice is necessarily language-bound. Heraclitus and, especially, Parmenides are for him the inaugurators of all philosophy; calling them "pre-Socratic;" he says in *What is Called Thinking?* is our skewed interpretation of the past, the same as calling Kant a "pre-Hegelian." They represent a thinking which was, in actual form and in root sensibility, "poetic," i.e. authentically responsive to things, reflective rather than scientific.

This re-reading of Parmenides is in particular important because it allows a recovery of language for philosophy without falling into the trap of "negative ontology" which the Sophists had laid. In a work like *On Nature or on the Non-Existent* (now lost, hut recuperable on the key points) Gorgias argued that language is our prison-house; *because* we cannot get outside of our language, so to speak, we cannot know that anything exists: "I say that nothing exists; then that if it exists it is unknowable; lastly, even if it exists and is knowable, nevertheless it cannot be directly communicated to anyone else."⁹

⁸ Heidegger's most important essays on the pre-Socratics are collected as *JJarly Greek Thinking*, trans. David Farrell. Krell and Frank A. Capuzzi (New York: Harper and Row, 1975). The important discussion of Parmenides is in *Was Heisst Denken?*, Part II.

⁹ In Mario Untersteiner, *The Sophists*, trans. Kathleen Freeman (Oxford: Blackwell, 1948), p. 145.

Since in speech we communicate words themselves, and since these are not the same as what exists, he said, (since speech and things are perceived by different organs), we could not hope to communicate anything except speech, and we could never know if anything except speech exists.

Parmenides was uncompromising with such sophistical arguments, and this is one reason that Heidegger regards him so highly. He rejected the vacillating position on both sides of the question of Being; he affirmed that Being *is*. As Heidegger knows, and says in *What Is Called Thinking?*, the claim is notoriously difficult to make meaningful for us; this is why Parmenides's arguments, and Heidegger's, should be seen against the background of the Sophists' claims. Parmenides's refutation of them is clearly stated: "I debar you from that way along which wander mortals knowing nothing two headed [*in two minds*], for perplexity in their bosoms steers their intelligence astray, and they are carried along as deaf as they are blind, amazed, uncritical hordes, by whom To be and Not To be are regarded as the same and not the same, and (*for whom*) in everything there is a way of opposing stress" (fr. 6; cf. Heraclitus: "that which is in opposition is in concert, and from things that differ comes the most beautiful harmony" fr. 8).¹⁰

Heidegger reads Parmenides to show that we may affirm (*pace* Gorgias, the sophistical perverter of language) Being over non-Being *and* recognize the rightful, central place of language in philosophy. Heidegger is as dismayed as Socrates at "idle chatter" (*Gerede*); he is as outraged at overblown eloquence as Socrates in the *Gorgias*; and he proposes a radically simple solution. The idea that language should be able to describe the world, and re-present it to man, which stretches from the philosophy of Gorgias to that of the Vienna Circle, is at fault. Instead, we must find a way to re-fashion our understanding of the fact that human linguisticity and existence belong together, as he already knew in *Sein*

¹⁰ I cite the pre-Socratic fragments according to the translation of Kathleen Freeman, *Ancilla to the Pre-Socratic Philosophers* (Oxford: Basil Blackwell, 1948).

und Zeit. The key insight for the later work, developed in this light, is that man is not simply the language-user but the speaker: "For to be a man is to speak. Man says yes and no only because in his profound essence he is a speaker, the speaker" (*Introduction to Metaphysics*, p. 82). In his quality as speaker, as Heidegger means it, man is also poet.

Heidegger's re-reading of the pre-Socratics is important because he finds the reintegration of philosophy and language to be possible under the aegis of poetry, rather than rhetoric; this is where he differs from Socrates (at least in the *Gorgias*), who identified rhetoric with sophism, the counter-image of philosophy. And this is where he differs in major ways from his major critics, especially Adorno. Adorno's rejection of Heidegger draws on a broad base, only pertinent parts of which I will discuss here, but it rests on certain fundamental differences in their respective conceptions of the relationship between language and philosophy. This shows up particularly well in Adorno's recuperation of language for philosophy through the rhetorical rather than the poetic tradition.

The idea of philosophy as a form of "negative" (i.e. non-conceptual) dialectics, which Adorno develops in his major late work, *Negative Dialectik* (1966) draws on dialectics as meaning "literally: language as the organon of thought." ¹¹ Dialectics," he says, "appropriates for the power of thought what historically seemed to be a flaw in thinking: its link with language, which nothing can wholly break" (ibid.). This is the point which Gorgias took as the basis for his argument in *On the Non-Existent*, and it is the point which Heidegger restates poetically through Parmenides; indeed, it was the awareness of the linguisticity of human existence in *Sein und Zeit* which led Heidegger to dissatisfaction with attempts to "describe language wholly, in terms of" expression, "communication," and "assertion." I think Adorno misstates the intentions of phenomenology when he says that "It was this link [of thought and language] that inspired phenomenology to try-naively, as always-to make sure of truth by

¹¹ Theodor Adorno, *Negative Dialectics*, trans. E. B. Ashton (New York: Seabury Press, 1979), p. 56.

analyzing words" (*ibid.*), yet certainly one could say that phenomenology gave the impression that truth could be certified by the development of a terminology. As I will mention below, this was one of the main problems of *Sein und Zeit*: the expression of a dissatisfaction with the analytical basis of philosophical language, coupled with a style that gave the appearance of being the quintessence of analysis.

Adorno seeks to reinstate language in philosophy by a correction of common conceptions of rhetoric. This means relinquishing the notion that words are somehow tied to things as representations or imperfect resemblances of them; "we cannot ignore the perpetual denunciation of rhetoric by nominalists to whom a name bears no resemblance to what it says, nor can an unbroken rhetoric be summoned against them" (*ibid.*). Nor can we flee from the brute fact that language is central to thinking and hence to philosophy by taking refuge in science ("The alliance of philosophy and science aims at the virtual abolition of language and thus of philosophy, and yet philosophy cannot survive without the linguistic effort;" *ibid.*). In (negative) dialectics, Adorno places rhetoric "on the side of content" rather than form (e.g. persuasion); hence its "negative" capabilities, its resistance to conceptualization, for which nominalists could fault it. Heidegger's retort might be that language in Adorno's "negative dialectics" is still separated from ontology, from the simple fact of Being, that there *is*. Adorno's strategy would appear as an inversion of the tradition rather than as a recuperation of its origins.

Under the early influence of Walter Benjamin, it was conceivable that Adorno might have come to formulate something resembling Heidegger's refashioning of philosophy along poetic lines, because they shared an awareness of the problematical place of language in philosophy (in *Negative Dialectics*, Adorno chastizes Benjamin: "Benjamin's concepts still tend to an authoritarian concealment of their conceptuality," p. 58). But there were factors, even in the early years, which precluded any eventual rapprochement of Heidegger and Adorno.

Not least among them was the publication, in 1927, of *Sein und Zeit*. At that point in his career, after a *Habilitationschrift* on Kant and Freud (he later wrote one on Kierkegaard, when this was not accepted), Adorno had formulated his own critique of Kantian idealism and had begun to implement his materialist philosophy in works of practical criticism. Having moved away from Kant, Adorno was hardly well-disposed toward *Sein und Zeit*, with its notoriously idiosyncratic neologisms, its endless pile-up of prefixes, its ceaseless conversion of substantives into verbal forms. All this suggested the "analytical" jargon which Adorno associated, in *Negative Dialectics*, with phenomenology. Adorno's conversations with Benjamin in Königstein in 1929, and a speech made to the Kantgesellschaft at Frankfurt in 1932, show that there were other significant reasons for the rejection of *Sein und Zeit*¹², having aligned himself to a materialist conception of history, for instance, it was difficult if not impossible to accept Heidegger's version of the problem of history, based on the consubstantiality of *Sein* and *Zeit*. But Adorno saw Heidegger's language as a new philosophical jargon reflecting a dissatisfaction with the old and a neglect of the tradition. In an essay of this period, Adorno says that the language of *Sein und Zeit* represented an attempt to account for the historicity of human existence in an ahistorical language of abstractions: "Heidegger's language takes flight from history, yet without escaping it.... The traditional terminology, no matter how shattered, is to be preserved, and new words of philosophers arise today solely out of changing the configuration of the words which stand within history, not by inventing a language."¹⁸

Adorno's distaste for Heidegger's idiom was a constant concern of his career, from this early essay to the much later *Jargon der Eigentlichkeit: Zur deutschen Ideologie* (1964). **It**

¹² See Susan Buck-Morss, *The Origin of Negative Dialectics* (New York: The Free Press, 1977), pp. 52-54.

¹⁸ Theodor Adorno, "Thesen über die Sprache des Philosophen," in *Gesammelte Schriften*, I, ed. Rolf Tiedemann (Frankfurt am Main: Suhrkamp Verlag, 1973), p. 368, cited by Buck-Morss, pp. 93-94.

is particularly important because it is worked out in tandem with his critique of Heideggerian metaphysics in *Negative Dialektik*. In the early years, it was fueled by Walter Benjamin's critical essays, books, and conversations. In the "Epistemo-Critical Prologue" to the *UrS'[J]rung des deutschen TrauerS'piels* (published in _____ but written in 1924-25 and, as Benjamin says, conceived in 1916), which makes no explicit reference to Heidegger, Benjamin says that "philosophy is—and rightly so—a struggle for the representation of a limited number of words which always remain the same. . . . In philosophy, therefore, it is a dubious undertaking to introduce new terminologies which are not strictly confined to the conceptual field, but are directed towards the ultimate objects of consideration. Such terminologies—abortive denominative processes in which intention plays a greater part than language—lack the objectivity with which history has endowed the principal foundations of philosophical reflections. These latter can stand up on their own in perfect isolation, as mere words never can." ¹⁴

Benjamin's rejection of the idea that language could be conceived as the representation of an ultimate or totalizing universe is clear enough; it is rooted in his acute historical sensibility, which is why he so values the specific work of art in his writings; (the epigraph to the *UrS'pl'Ung*, taken from Goethe, is telling: "Neither in knowledge nor in reflection can anything whole be put together, since in the former the internal is missing and in the latter the external; . . . Nor should we look for this in the general, the excessive, but, since art is always wholly represented in every individual work of art [in the sense that each work is historical, carries with it the 'natural history' of art, so to speak] so science ought to reveal itself completely in every individual object treated," p. 27; Benjamin takes his critical writings on culture and history to be this "science"). But his statement, in the Prologue to the *Ursprung*, that language should be "confined to the *conceptual* field" (he also says that philosophy is a struggle for "the

¹⁴ Walter Benjamin, *The Origin of _____ Tragic Drama*, trans. j?hn Osborne (London: NLB, 1977), p. 37.

representation of ideas," p. 87), is not immediately apparent and warrants further comment.

The claim to have "conceived" the *Ur.<rprung* as early as 1916 is in part justified by an early essay "On Language in General and on the Language of Man as Such." Here we find notions which are recalled in the opening and concluding sections of the *TrauerS'piel* book, and an explanation of Benjamin's "philosophy of language" which filters down into his remarks about the "representation of ideas" and the "conceptual field." These are emphatically not what an analytic philosopher, someone concerned to describe language as it serves symbolic logic, with its propositions and "assertions" about the world, would mean-to refer to some of the concerns that Heidegger voiced in *Sein und Zeit*. When Benjamin asks What does language communicate? in that essay (a question which would have been equally possible for the Heidegger of *Sein und Zeit*), he answers "[Language] communicates the mental being corresponding to it ... It is fundamental that this mental being communicates itself in language and not through language . . . The answer to the question 'What does language communicate?' is therefore 'All language communicates itself.' The language of this lamp, for example, does not communicate the lamp (not the mental being of the lamp itself), but the language-lamp, the lamp in expression." ¹⁵ In distinct contrast to the concept of language as a sovereign representation of the world to the mind, Benjamin sees language in terms that relate him to the *later* Heidegger, as a medium through which objects "speak themselves."

Had Heidegger been writing in his "later" style already in the late when Benjamin and Adorno were watching, their relationship would surely have been different, and the course of modern philosophy would have been altered significantly. In Benjamin's early essay, and in Heidegger's later work, there is a common ground which unites them-German Romanticism-and it is conceivable that their affinities for the

¹⁵ Walter Benjamin, "On Language as Such and on the Language of Man," in *Reflections*, ed. Peter Demetz, and trans. Edmund Jecott New York: Harcourt, Brace, Jovanovich, 1978), pp. 315-316.

poetry of the previous century might have brought them closer together. As it stands, the language of *Sein und Zeit*, so unpoetic, along with Heidegger's resolution of the historical-ontological question in that book, were major factors that divided Heidegger from the thinkers who gathered at or around Frankfurt.

This is especially to be lamented, for there are broad cultural phenomena and interests which link them beyond their disputes. Benjamin, Adorno, and Heidegger alike reap huge profits from the disjointed, the splayed, the *Unheimlich*. Like Freud, Heidegger saw that we are brought to encounter the authentic being of things often when they are wrenched free of their habitual associations, when they are taken out of their customary contexts. His effort, from the first to the last, was to find a language capable of expressing things which we have simply "forgotten," over centuries, how to say (such as the fact that Being and time interpenetrate one another, or that thinking and Being belong together). In the early work, particularly in *Sein und Zeit*, he sought to do this through the invention of a new terminology; in the later work he looked to the existing language, especially to poetry, simply in order to make us "hear" what our language was saying. Adorno's admiration for certain veins of modern music is animated by a similar concern. Given the fact that we live amidst the ceaseless caw and mechanized banter of industrial urbia, under constant "aesthetic" siege, how are we able to *hear* sound? Our hebephrenia is symptomatic of nothing so much as a general "rationalization" of culture. Adorno admires the work of Schoenberg, Berg, Anton von Webern, and Kurt Weill for their attempt to reinstate before our sensibilities the simple fact and logic of musical sound. As a return to the free relationship among sounds, unencumbered by the structures which have been imposed on them throughout the history of Western music, the invention of the tone-row parallels Heidegger's return to an original "poetic" language in his later work.

This "poetic" language has proved so difficult and controversial, however, that it is reasonable to ask if there is not

some other way that Heidegger might have completed the project outlined in *Sein und Zeit*. Some who object to the terminology of that book and who resist the analysis of the structuredness of Dasein, and yet who cannot accept the later work as philosophy in any meaningful sense of the word, would look to the existential phenomenology of a Merleau-Ponty as an alternative. Rather like Benjamin and Adorno, Merleau-Ponty's awareness of history shows up in his attention to the works of human culture. With him we do philosophy through Cezanne, through the drawings of children, through the novel, through Machiavelli and Montaigne.

Much of what Heidegger details about the relationship between Dasein and Others in *Sein und Zeit*—to take one example—is explained by Merleau-Ponty in a style unencumbered by jargon or neologisms. It could be charged that Heidegger devotes too little attention to this particular problem in the later work, and that he obscures it unnecessarily in *Sein und Zeit*. He devotes the first portion of the book to an analysis of Dasein itself, of the structures of Being-there. This Dasein seems to exist in a world of inanimate things; when the question of Others is finally raised, in fact, Heidegger must announce that they are not also things: "The Others who are thus encountered in a ready-to-hand, environmental context of equipment, are not somehow added on in thought to some Thing which is proximally just present-to-hand" (SZ, 118). On the contrary: the Other solicits our concern because he is not just a thing, another tool. Merleau-Ponty describes the Other as a "replica," a "wandering double which haunts my surroundings more than it appears in them." This Other has a specific personal gravity as another *body* which leads an existence between "I who think and that body, or rather near me, by my side."¹⁶ The Other is one with whom I am "together" and to whom I can entrust myself. He is the embodiment (as Merleau-Ponty would be the first to underscore) of concrete possibilities for Being.

¹⁶ Maurice Merleau-Ponty, "Dialogue and the Perception of the Other," in *The Prose of the World*, ed. Claude Lefort and trans. John O'Neill (Evanston: Northwestern University Press, 1973), p. 134.

The case of Heidegger's description of the Other in *Sein und Zeit* and in Merleau-Ponty's *La Prose du monde* is only an instance of a contrast between them which might be drawn at further length; but it is of particular importance here because it points up Merleau-Ponty's reevaluation of language as a form of expression and communication between myself and others. We have already seen that Heidegger was dissatisfied with the ideas of expression and communication in *Sein und Zeit*, and that he linked these to the notion of (logical) assertion, to the making of statements for the purpose of representing the world. Merleau-Ponty retains those notions, but he does so within a different ontological context, that is, with a different sense of the essence of existence. For him, that essence is given in human embodiment, which is in turn a sign of man's necessary relations with others—of his resemblance to others and of his separation from them. The principal work of language, which attaches to this ontological situation, lies in the mediation of self and other. Language is the aperture of communication against a background of silence. Speech is a possible dialogue between self and other: "In speech we realize the impossible agreement between two rival totalities not because speech forces us back upon ourselves to discover some unique spirit in which we participate but because speech concerns us, catches us indirectly, seduces us, trails us along, transforms us into the other and him into us, abolishes the limit between mine and not-mine, and ends the alternative between what has sense for me and what is non-sense for me, between me as subject and the other as object" (p. 145).

This passage is remarkable for the transformation of broadly Heideggerian concerns and their redirection toward the conception of a dialogic, rather than a poetic, language. The awareness, in *Sein und Zeit*, that Dasein is faced with the task of understanding in an essential way, in order to make sense of itself, of what is possible for Being ("Understanding is the existential Being of Dasein's own potentiality-for-Being; and it is so in such a way that this Being discloses itself in what its Being is capable of" *SZ*, 144), is problematic because of the

virtual isolation of Dasein from others. If we are defined essentially *in* our possible relations with others, constituted of them so to speak, though, there is a context in which we ourselves make sense, viz., in those relations with others. This is possible in (dialogic) language. The sense that language "concerns us, catches us indirectly, seduces us, trails us along" is that in speech or "communication" we ourselves are spoken in relation to others. The phrasing here recalls the "poetic" notion of language which a Benjamin extracted from the German Romantics. In Merleau-Ponty, it indicates the oblique "expression" that we make through an investment in the dialogic situation. Whereas Heidegger saw "expression" as an incomplete or insufficient idea of language (and meant "poetic" language to be something quite different, something in fact closer to religious language) Merleau-Ponty sees the languages of human culture-music, painting, verse (to distinguish it from Heidegger's "poetry")-as forms of "indirect communication," that is, forms in which we silently bridge the gap of our outsideness to others, their silence to us, and solicit dialogic concern of them.

In Merleau-Ponty's work, and in that related to it (e.g. Georges Gusdorf, *La Parole*), the notion of language as "commerce" which was held in suspicion by Heidegger, early and late, is given an important reevaluation. Language is commercial in the literal sense of the word, that is, relational: "It is between; it expresses the relational being of man."¹⁷ This language is potentially adequate to the ontological essence of man because he is, on this view, essentially a relational being, defined in terms of his possible openness to others. In language as dialogue or communication, he has the means to express his being "for others" rather than "for himself": "The more I communicate, the less I express myself; the more I express myself, the less I communicate" (*Speaking*, p. 52). The communication which language makes possible, the commerce which it serves, is a communing of the self and others. What is

¹⁷ Georges Gusdorf, *Speaking*, trans. Paul T. Brookelman (Evanston: Northwestern Press, 1965) p. 48.

communicated in language, so conceived, is not words as such, or their meanings (nothing "lying 'behind' them, or floating somewhere in an 'intermediate domain'", to use Heidegger's words again), but human value as realized in relations: "To speak demands of us that we pass from the materiality of words to their value-meaning" (p. 68).

I do not want to leave the impression that Merleau-Ponty or other French existential phenomenologists saw their work as an alternative to Heidegger's, although that may have been true of Sartre. Among the German thinkers, the claim has already been advanced for Adorno.¹⁸ And I do not want to suggest that Merleau-Ponty's work and that which resembles it is the sole alternative to the development of a "poetic" language for philosophy in order to come to terms with the ontological issues. Martin Buber's approach, his understanding of the dialogic relationships between the *ich* and the *du*, has been widely influential, particularly in the development of a religious language in the place of philosophical discourse; that is an alternative which I will not take up here. I emphasize the work of an existential phenomenologist like Merleau-Ponty because he was dealing with a problematic closely related to Heidegger's in *Sein und Zeit* and saw a viable solution to it in the form of a reevaluation of the same traits of language which Heidegger rejected (expression, communication, etc.). Like Heidegger, Merleau-Ponty repudiated the notion of language as logical assertion; meaning and communication are not forms of analysis, but aspects of relational value. The Heideggerean objections to the then dominant conception of language are met, but language and philosophy do not become poetry. The poetic language and style of Heidegger's later writings was his unique solution to the combined ontological-language questions outlined in the earlier work.

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¹⁸ See Susan Buck-Morss, *The Origin of Negative Dialectics*, p. 239, n. 56. She refers to a letter from Adorno to Benjamin (17 December, 1934), which speaks of setting Heidegger "on his feet."

DUMMETT ON FREGE: A REVIEW DISCUSSION*

IT IS BY HIS EXPOSITION and development of Frege's thought that Michael Dummett may well turn out to have won a permanent place in the history of philosophy. For Frege is unquestionably the greatest logician and philosopher of logic since the days of Aristotle and the Stoics; and as an interpreter of Frege's thought Dummett stands absolutely without a rival.

A proper appreciation of Frege did not come till many years after his death. Many of his technical achievements soon entered into the common stock of logicians; but few writers in the field gave due credit to Frege-Quine in his *Mathematical Logic* is an honorable exception. It took much longer for people to study Frege's philosophy of logic, which underlay his technical work, and to appreciate Frege in his own right and not just as a forerunner. During the last thirty years there have been many articles and not a few books devoted to Frege's philosophy; but a good deal of this material has been written by logically and philosophically incompetent authors, or else by people (like Church and Carnap) who have been so possessed by certain ideas of their own that their image of Frege's thought was quite distorted.

Dummett's exposition of Frege is a mighty achievement; he must know Frege's works almost by heart, and he is almost invariably faithful to Frege's letter and spirit. When he purports to be developing Frege's thought rather than expounding it, what he writes bears the mark of an authentic development. As we shall see, he has his faults, but as an expositor of Frege nobody can compete with him in scope and accuracy and acumen.

* Michael Dummett, *Frege: Philosophy of Language* (Cambridge: Harvard University Press, 1981); *Truth and Other Enigmas* (Cambridge: Harvard University Press, 1979); *The Interpretation of Frege's Philosophy* (Cambridge: Harvard University Press, 1981).

The Interpretation of Frege's Philosophy is largely devoted to polemic against other interpreters. We may well regret this diversion of Dummett's energies; he has postponed the completion of a volume on Frege's philosophy of mathematics in order to refute misconceptions about Frege's general philosophy of language. When Aquinas had finished one Aristotelian commentary, he began another, without turning aside to castigate other commentators; Dummett might well have followed this example. In particular, Dummett had no need to expound and refute in detail the work of men who plainly despise Frege; their books will soon pass to the limbo of the cheap bookstore, where I have seen other books of this genre, e.g. one 'proving' that Plato was a charlatan.

Dummett's work on Frege has one great negative fault; he virtually ignores the light thrown on Frege by Wittgenstein's *Tractatus*. Some of Frege's deep insights were to be presented anew in the *Tractatus*, more sharply and clearly than Frege had presented them, and without certain errors (e.g. about the relation of sentences and names) that affected Frege's mature work. On some points, indeed, where Frege and Wittgenstein disagree, one might well prefer Frege's views; even so, the criticism of Frege in the *Tractatus* can never safely be ignored. Dummett hardly ever alludes to the *Tractatus*, and when he does so he gives us weak objections based on manifest misunderstandings.

I have space only to discuss one particular example: negation. Wittgenstein pointed out the possibility of passing from a given language, say English, to an alternative language, let us call it Unglish, by the following rule: any English sentence *S* has as its Unglish translation a sentence spelled the same way as an English sentence *contradictory to S*. We need not content ourselves with this rule for whole sentences: we could easily construct an English-Unglish/Unglish-English dictionary conformable to this rule, so that the translations always worked out the right way; it would be a matter of what modern logicians call duality. Now without considering further how such a dictionary would work, a very little thought shows that

the English for 'not' would be 'not'; for in English as in English, 'Snow is white' and 'Snow is not white' (or any other such pair) will be contradictories, so that 'not' must have the same role in both languages. Dummett has plainly not taken the trouble to think out Wittgenstein's point, admittedly expressed very succinctly in the *Tractatus*; he actually infers that in such an alternative language as English would be, 'not' would be represented by the *absence* of 'not'. Thus he quite misunderstands the *Tractatus* doctrine of negation, and accordingly also misunderstands the whole doctrine of truth-functional operators in that work, which he ventures to call 'fundamentally confused'. In Dummett's presentation, the *Tractatus* doctrine on this matter does indeed look embangled (see Frege: *Philosophy of Language*, pp. 321-325); but that really is not Wittgenstein's fault. The *Tractatus* doctrine of truth-functions is not technically very different from what we get in contemporary logic books; a *beginner* could learn from the *Tractatus* how to use truth-tables to recognize tautologies (I know somebody who actually did).

Dummett, however, finds Wittgenstein's account of negation 'incoherent': a modish word, of which he is far too fond. (When an author says 'This is incoherent', one often does not know whether he means (a) 'This is inconsistent' or (b) 'This is nonsense' or (c) 'I don't understand this'; very likely he himself does not know. In case (a) the inconsistency may need to be brought out, in case (b) there is needed the less technical skill of reducing latent to patent nonsense; but 'incoherent' seems to let people off such mental effort.) To borrow a word from Orwell's *1984*, Dummett unbellyfeels the *Tractatus*; that is why for him the law of double negation is a questionable principle. Here he consciously departs from Frege, who expressly tells us that double negation does not change the thought expressed in a sentence. Ramsey, who often read the *Tractatus* with insight, pointed out the possibility of a logical notation which would of itself show what is spelled out in a rule for cancelling double negation: a sentence would be negated by rotating it around a horizontal axis (this can in fact be done).

'optically with a suitable lens) so that no special negation-sign would be needed and a sentence would just *be* the negation of its own negation. (The expensiveness of printing such an expressive notation is quite irrelevant.) Somebody who has entered into the spirit of the *Tractatus* will think rejection of the double-negation law to be just not proper; Dummett finds' incoherent 'this very notion of truth-functional operators as the *Tractatus* presents it, and for him doubt of the double-negation principle has been obsessive, particularly in his non-expository writings.

The problem whether every properly asked question admits of a *yes* or a *no* answer is indeed a serious one, e.g. with regard to vague predicates (though not in that case alone); In his essay 'Wang's Paradox' Dummett shows how hard such problems are. But vagueness, with which Dummett is there concerned, does not bring in question the law of double negation; for the vague concepts *bald* and *not bald* (say) have a shared borderland, and there is no call to distinguish *bald* from *not bald* (nor does Dummett suggest this).

Intuitionist philosophers of mathematics notoriously do reject the law, with Dummett's approval; I have not worked enough on intuitionist logic to express a view as to the possibility of a program essentially similar to intuitionism but not involving this rejection. But this is anyhow by no means all that is wrong with intuitionism as developed by Dummett. As regards propositions in general, not only as regards mathematical propositions, Dummett would have us divert our attention from the truth-conditions to the conditions that would warrant us in making an assertion. Here he distinguishes between warranted assertion of a proposition and warranted rejection of its contradictory; and moreover he holds that we are warranted in asserting a disjunction just in case it has one or another disjunct that we are warranted in asserting, and warranted in asserting a 'some' proposition just in case there is some corresponding singular assertion that we are warranted in making. He supports these views with curious statements about how we *learn* (I presume in infancy) to use 'not', 'some', and

'or'. These theses of child-psychology are not supported: from his writings, and are anyhow irrelevant; as both Frege and Wittgenstein would say, what matters is not some story of the learning process but the test for *having* learnt. Moreover, whatever Dummett may say, a small child who is told the story of the Three Bears can perfectly well understand what each bear meant when he said 'Somebody has been sitting in my chair'; and the child need not take it to be part of the story that the bear was in a position (or thought he was) to say *who* had been sitting in the chair.

Of course many intuitionists would say that in mathematics the use of disjunctions and of 'some' propositions differs essentially from the use of grammatically similar propositions in ordinary life; e.g. 'Some odd numbers are perfect' would be essentially different from 'Some bald men are deaf'. But Dummett has not left this way open to himself; he has a *general* program for the 'dethronement' of truth in favor of warranted assertibility, not treating mathematics as a special case. Despite a certain suspicion he has that this program may be 'ultimately incoherent' (*Truth and Other Enigmas*, Preface, p. xxxix), he has for many years been constructing theories on this basis, often with bizarre results.

For example, by a theory of past-tense propositions that Dummett views with some favor, my warrant for asserting them would have to be my recognition of certain conditions that hold good in the present. Here he counts present memories as among such 'conditions'. But here he quite misunderstands the role of 'I remember'. Suppose I say 'In his last days Wittgenstein spoke of Frege with deep admiration'. If when challenged I reply 'I remember him speaking that way', I am *not* claiming to recognize a peculiar experience I am now having, and offering *this* as a warrant for my past-tense assertion (in the way that recognising the aura of an epileptic fit might warrant a man in giving the warning 'I shall shortly have a fit'); on the contrary, I am *declining* to give my hearer any warrant, other than my word as a witness, for what happened.-It is no wonder that with such a view of past-tense

statements, even provisionally entertained, Dummett should also think we *might* try, and even manage, to bring about a past state of affairs. Orwell's *1984* again comes to mind: the Party claims to control what memories and records of the past people have, and *therefore* to control the past. Dummett does not appeal to such a possibility, but he could hardly fault this 'therefore'.

Dummett is liable to be wildly inaccurate about writers other than Frege whose views he expounds. We have already seen this about Wittgenstein's *Tractatus*; living victims must often be justly enraged. I shall give just one example; I could give many others. In the middle of an otherwise excellent essay, 'Nominalism', Dummett suddenly switches from discussing Nelson Goodman's *The Structure of Appearance* to discussing Quine's well-known paper 'Identity, Ostension, and Hypothesis'; he clearly sees no significant difference between the two works, on the contrary he so far conflates them as to find in 'the earlier Quine' a general denial of the existence of classes. Readers may easily verify that Quine's essay expresses no such view; but Dummett tells us in his preface (p. xli) that he wrote his essay after many personal discussions with Quine! In short, be cautious whenever Dummett tells us about what some author other than Frege says; readers simply cannot trust him without checking; his attributions are not just inaccurate, but sometimes positively fictitious.

This is a grave failing; happily it does not affect Dummett's expository work on Frege; for the second edition of *Frege: Philosophy of Language*, all of Dummett's quotations from and attributions to Frege were very carefully checked by other eyes and it turned out that only very minor changes were needed. As an expositor of Frege, Dummett is unsurpassed and indispensable.

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BOOK REVIEWS

Twentieth-Century Religious Thought: The Frontiers of Philosophy and Theology, 1900-1980. By JOHN MACQUARRIE. New York: Charles Scribner's Sons, 1981. Revised Edition. Pp. 429. \$19.95.

Since its original publication in 1963, Macquarrie's text has rightly established itself as one of the best versions of the as yet untold story of twentieth century religious thought. Although he restricts "religious thought" to "all serious reflection of a philosophical nature on the central themes of religion" in "Western culture" (pp. 15-16), his expositions and criticisms are remarkably fair to a broad spectrum of religious thinkers. This judiciousness extends into the postscript on the last two decades added for this revised edition.

Macquarrie is, I believe, more successful dealing with individual thinkers than with social movements-and more successful at noticing massive social transitions than sorting out the conceptual complexities involved. There are reasons for these weaknesses. But first it is important to note how his strengths enable him to tell his tale in several stages. The initial stage extends into the twentieth-century ideas already developed in the nineteenth century (pp. 18, 116). It is characterized by optimism, an interest in evolution and substance, an aim at systematic comprehension, and theism (pp. 19-21, 116-117). It is exemplified in various idealisms (Chapters 2-3), philosophies of spirit (Chapter 4) and value (Chapter 5), positivism, and naturalism (Chapter 6). The second stage yields new movements which reached their zenith by 1960 (pp. 18, 118-119). It is characterized by realism if not pessimism, a concern with process over substance, an aim at modest analytical or phenomenological goals, and is philosophically non-theistic (pp. 18, 118-119). This stage is exemplified in philosophies and theologies of history (Chapters 8-9), sociological (Chapter 10) and pragmatic (Chapter 11) readings of religion, philosophies of personal being (Chapter 12), phenomenology (Chapter 13), New Realism (Chapter 14), and a New Physics (Chapter 15). The third stage deals with movements which held the field in the early 1960s (p. 18). It is characterized by battles with and between metaphysical and anti-metaphysical "schools" (pp. 253-56) and is exemplified in realistic metaphysics (Chapter 17), neo-Thomism (Chapter 18), logical empiricism (Chapter 19), and various theologies of the Word (Chapters 20-21), existentialism, and ontology (Chapter 22).

In his new postscript, Macquarrie contends that the last two decades "resume the immanentist, humanist trend of nineteenth century theology,

after its interruption by the Barthian period in Protestantism and the Thomist revival in Catholicism" (pp. 380, 410). This, it seems, is precisely the direction he hoped for in his first edition when he expressed his preference for Heidegger, Bultmann, and Tillich over other religious thinkers (p. 374). It is, in any case, the "new humanism" with which Macquarrie is sympathetic (p. 420). The current stage of things is characterized by the death of Protestant theological giants (the Niebuhrs, Tillich, Barth, etc.), Vatican II in Roman Catholicism, neo-Marxism in philosophy, and various changes in science and technology. The last two decades are exemplified philosophically in various neo-Marxists (Bloch, Marcuse, and Habermas), existential phenomenologists (Gadamer, Ricoeur), and transcendental Thomists (Lonergan) (pp. 381-90). Theologically, Macquarrie surveys Continental (JYioltmann, Pannenberg, Ebeling, Ott, Gollwitzer, Jungel) and Anglo-American (Robinson, van Buren, Cox, Gilkey, etc.) Protestant theologies, Roman Catholic thinkers (Bouyer, Schillebeeckx, Kiing, Haring, Metz), and groups with "special interests" (liberation, feminist, and black theologies).

But, although very successful in matters of exposition and criticism, this text is less successful when it comes to "the ultimate purpose" of the book: "to bring some clarification to the problems [of religion] themselves," e.g., to help the reader "see what the current issues are and what seem to be promising ways of tackling them" (pp. 13, 18). Macquarrie's subject matter is the frontier or boundary between philosophy and theology (p. 15). He aims to work out "a philosophical basis for religion that makes sense, is contemporary, comprehensive, and capable of further development; and, further, it is a philosophical basis which readily allies itself with the traditional Christian teachings that have inspired Western civilization from its beginnings, revivifying these teachings and making intelligible for our time their abiding truth" (p. 374). It is the even-handedness of this strategy that largely accounts for its continued attraction, despite the developments of the last two decades. Traditional Christian teachings, it is thought, need and can find a philosophical "foundation"; the philosophical basis is one which is true philosophy only in alliance with theology. The *via media* requires one to walk a judicious line between various individuals and schools, philosophies and theologies, -isms and -ologies. For example, God is said to be active in the world, yet not just one entity among others and therefore most aptly called "being itself" (pp. 355, 367, 370, 411). This has the advantage of enabling Macquarrie to take different theologians and philosophers who speak of "God" to be saying different things about the same topic. It has the disadvantage of downplaying the possibility that we have not so much been predicating different attributes of the same thing as predicating similar things of very different subjects. The same option for &"eneralio/and commonality .over particularity and conflict Qc-

curs in the handling of other key concepts. Religion is said to be "an attitude of the whole personality" (p. 372), yet there is little analysis of the particular and diverse "attitudes" fostered by particular religious communities. Similarly, there is little analysis of how "religious thought" is encountered concretely as Scriptures are used, rituals are celebrated, laws are applied, church buildings are erected..._all done more or less thoughtfully. The result is that the subject matter of the book—"religious thought"—is too quickly abstracted from the concretions of religious life. Whether it is an apt abstraction or not we will only know once we have a tale of all the varieties of religious thought. Thus, the story—if there is a coherent story—of twentieth-century religious thought has yet to be written. But those interested in the topic will find Macquarrie's treatment of various figures, movements, and issues nothing short of indispensable.

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Einführung in Die Fundamentaltheologie. By HARALD WAGNER. Darmstadt: Wissenschaftliche Buchgesellschaft, 1981. Pp. xiii + 132. DM36.

Wagner's book is part of a series of introductions to the object, methods, and results of the various theological disciplines. As such it provides a helpful, if at times sketchy, introduction to the basic task of fundamental theology from a Catholic perspective. The main contributions of the book can be found on two levels.

First, Wagner presents a historical and typological survey of the development of the discipline of fundamental theology. Of particular note is a suggestive summary of the contents and tenor of traditional (Vatican I) Catholic fundamental theology (18-24). Also helpful is a brief survey of four major contemporary Catholic approaches to the discipline: Heinrich Fries's transcendental approach, Eugen Biser's hermeneutical approach, Peter Knauer's ecumenical approach, and Johann Baptist Metz's practical approach. Finally, Wagner introduces briefly the recent Protestant attempts to appropriate and develop fundamental theology, especially the work of Gerhard Ebeling and Wolfhart Pannenberg.

The second major contribution of Wagner's book is the model it presents in itself of the dominant post-Vatican II Catholic approach to

fundamental theology. This approach, drawn heavily from Karl Rabner, has rejected the old method of trying to prove abstractly, on the basis of reason alone, the *truth* of Christian faith. Instead, it focuses on showing the credibility or desirability (*Glaubwürdigkeit*) of Christian faith itself, but in a manner understandable to those on the "outside" (40). According to Wagner, such an approach to fundamental theology would involve three basic tasks (51ff). First, there would be the need to clarify the fundamental components of Christian faith. By this he means a phenomenological reflection on the Word of God, the nature of humanity as believer, and the nature of the church as believing community. Second, there would be the attempt to confirm or establish these fundamental components of Christian faith as credible and desirable. This would be done on two fronts: a) through a reflection on and validation of the methods used to determine these components and b) through an attempt (by correlation) to make these components understandable to those on the outside. Finally there would be the task of apologetics which would directly address objections to the basic Christian worldview.

Wagner's book is a helpful introduction to a particular conception of fundamental theology and is worthy of translation into English. Its most significant problem is that it has not dealt adequately with the recent alternative conceptions of the discipline which would focus more attention on issues of theological method (Sohnung, Joest) or would argue that apologetics is *not* part of fundamental theology (Stirnimann, Knauer). An adequate introduction to the discipline per se should have dealt more with these alternatives.

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Liberation Theology in Latin America. By JAMES V. SCHALL, S.J. San Francisco : Ignatius, 1982. Pp. x + 402. \$10.95.

In this compact volume, Schall offers a valuable summary exposition and critique of liberation theology, backed up by a selection of critical articles and some highly pertinent documentation. In a lengthy preliminary essay he surveys the European origins of that theology and their adaptation to the concrete particularities of deprivation and oppression long indigenous to a conventionally Roman Catholic Latin America, where the Church had for long been too comfortable in her master's house, too complaisant in the presence of careless wealth and hopeless poverty. He details the factors which produced the current

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theological recoil from this apathy : the ready-to-hand Marxist social analysis; the *ressentiment* toward the United States, the decision to place the poor at the center of a new Christian spirituality following close upon the conviction that traditional Catholicism was constitutionally inimical to progress, and that a change in religion was necessary. Out of this arose a new religion, which Schall characterizes, quite correctly in this reviewer's opinion, as a Christological heresy, eccentric precisely in its displacement of the risen Christ as the source and cause of all liberation. Liberation consequently takes on the east provided by a new historicism, in which an inevitable process drives the proletariat from poverty to dependence to exploitation to conscientization to revolution and finally to the establishment of a sacral socialism, one whose lineaments refuse description. It is this reduction of politics to sacred necessity which is the focal point of the criticism which Schall's essay provides, which a dozen articles then corroborate written by theologians such as H. U. von Balthasar and Jean Galot, by political scientists such as Jeane Kirkpatrick and Michael Novak, and by more general commentators on public affairs such as Dale Vree and John O'Donahue; particularly valuable are two articles by Roger Heckel, S.J., of the Papal Commission on Justice and Peace. The book concludes with a collection of seven diverse "documents"; these include the Pope's initial address to the Assembly of Latin American Bishops gathered at Puebla in 1979, the "Message to the People of Latin America" delivered by the bishops at the close of the Puebla meeting, and another address, given to a general audience by the Pope immediately upon his return from Puebla. The Papal addresses particularly are to be very carefully read, particularly in view of the tendency, practically universal in the media, to reduce their religious message to a political one, in which the Pope either condemns or enlists in the revolution. Such simplicities obviously must be foregone, but what then remains is not easy to pin down. Some things are quite clear: any identification of the Church, its message, and its mission with a political statement or program must be rejected summarily; Christ must be recognized as the one liberating reality in the world and its history; the Church's unity embraces all humanity and cannot permit the divisions of class warfare and the Marxist social analysis of the causes of oppression, nor the deformations of "justice" which its disjunction from charity must entail. These, and much more, Schall shows to be the data of any Christian and Catholic theology of liberation; John Courtney Murray gave them a classic integration in the years before the Second Vatican Council. However, reading such expositions now, one is struck by their civic optimism; one need only remember the changes run upon the connotations of a word such as "secular" in the twenty years since the Council, from the clear approbation of *Gaudium et spes* to the contrasting usage by the Right to Life movement today. At the time when the

Council was meeting, the center still held; Harvey Cox had just warranted the secular city, Watts was still serene, and the war in Vietnam still lived on the rhetoric of John Kennedy's inaugural address. Since then, the innocence which contemplated things as they are and found them good has vanished; it is no longer enough to understand; for one must *act* to bring about a better world. This is the challenge of Marxism and its jargon of praxis; granted that it is predicated upon a perennial despair, Marxism still represents a summons to some kind of actuality, even if a ruinous kind, and to some kind of community, however securely limned. It recognizes; as a more authentic piety has often failed to recognize, the family of man; however often the rebellion is betrayed, the summons is still evocative, and its symbols retain their power. Intellectually, Marxism is moribund; concretely, it has succeeded only in the institutionalization of faceless tyrannies; it is only as a pseudo-religion that it lives, and upon this enthusiasm liberation theology has fed, and sickened. It stands in need of a reconversion to the New Covenant by which alone we are freed, and to a new sustenance, by which alone hope in the future may be fed.

Catholic political theology may justly be charged with that folly of "the base Indian" who "threw a pearl away Richer than all his tribe." For centuries the Church has seen in marriage the foundation of society, to the extent that this fundamental, even radical, has become a banality. Yet in this most just structure, grounded in the worship of the Church, in the New Covenant itself, it is the praxis, the conversion, which the liberation theologians insist upon so adamantly, so properly. Because it affirms, as worship, the qualitative distinction and the mutual equality in dignity, in authority, in sacrifice, of the husband and wife, it is a standing rejection, historically actual, of every political rationalization of the human condition in history: all such rationalizations are monist interpretations of authority, which identify obedience with servility. Only a Trinitarian-based worship can avoid this: only there is freedom consonant with order; only there is history actual, and community free. A mass of negative testimony supports this assertion: practically without exception, utopian thought, rooted in monist notions of authority, is anti-marital; for Marx, marriage is founded on that qualitative distinction, the division of labor, which his monism found intolerable. Such an analysis refutes itself, but is nonetheless illustrative. A Christian society lives on that most radical political praxis which is marriage, the rationally absurd self-donation of a man or a woman to a qualitatively different other whose responsive self-donation rests upon his or her irreducibility to oneself. This is covenantal existence, covenantal liberation; it is also the worship of the Lord of the Covenant, by whom alone are we freed.

The recent writings of the present Pope are full of this theme; it is time that its political content received some recognition, some exploration. It is in this context of a re-birth of a truly Catholic emphasis upon liberation, not in some angelic and contemplative guise, but in public life in this world, that Schall's book should be read. His stress upon the papal initiative is essential; it does not seem that any other major Catholic figure has seen so deeply into the needs of our time, or has prescribed for them with such precision. *Familiaris Consortio* is a political document far more radical than the so-called Social Encyclicals, from *Rerum Novarum* on, which treat *ex professo* of labor and capital, and of political and religious freedom, for it deals with the indispensability of that absolutely basic praxis in which all human dignity is discovered and celebrated, in a love which is worship, which is history, which is liberation.

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An Introduction to the Philosophy of Religion. By BRIAN DAVIES, O.P.
Oxford University Press, 1982. Pp. x + 144. \$17.95 cloth; \$6.95 paperback.

This book is a short introduction to the philosophy of religion intended for the general reader and for students with little or no philosophical background. It begins with some old problems about religious language, then turns to the problem of evil and proofs of God's existence, moves on to discuss divine attributes and the connection between religion and morality, and finishes with a consideration of miracles and life after death. There is a selective but useful bibliography, and the book is generally free from typographical errors except for p. 86, which is grossly misprinted. In general, it is a bold and interesting book, especially because the author is thoroughly familiar with contemporary analytic philosophy and also with the philosophical theology of Thomas Aquinas and tries to combine the two approaches. The effort is laudable, in my view, but the resulting amalgam in Davies's book is not satisfactory.

The difficulties can be seen clearly in his discussion of the problem of evil. After briefly presenting Hick's and Swinburne's attempted solutions, Davies rejects their work, claiming that they exonerate God by referring to the good consequences of the evil God allows, but "many people would say that consequences do not always justify actions" (p. 19). This objection, weak as it is, surely misinterprets Hick and Swinburne.

Neither of them tries to justify God's permitting evil on the basis of the good consequences of that evil; instead, both of them argue that of the actions available to God the one which includes permitting certain evils is in itself the best action open to God. In different ways both Hick and Swinburne claim that the evils in the world are a necessary means to a good which, even in conjunction with those evils, far out weighs the other goods God might have brought about.

Davies summarily rejects Plantinga's work on the free-will defense because it depends on the notion that God does not cause free acts. Davies thinks that, according to classical theism as represented by Thomas Aquinas, God is the cause of everything, including all actions of the human will, and so the free-will defense is *incompatibfo* with classical theism. The spectacle of a Catholic maintaining theological determinism against a Calvinist arguing on the basis of free will should not blind us to the historical and philosophical implausibility of Davies's claim. Davies believes that Thomas and classical theism are committed to the view that God is the cause of each and every human action, including actions which are sinful. If this is indeed Thomas's view, then the best that could be said for Thomas is that he is blatantly inconsistent because, to take just one of many examples, he assigns praise or blame to humans for their actions when in fact those actions are brought about by God. And I think a credible philosophical justification of God's goodness becomes virtually impossible if we are told that God is the initiator of rape, murder, torture, and genocide. But I do not believe that either Thomas or classical theism is burdened with such a hopeless position as Davies assigns them. Davies quotes *Summa theologiae* IaIIae, q.79, a.2 to support his view of Thomas as holding that God is the cause even of sinful actions. But in the immediately preceding article of that question Thomas says explicitly,

" God cannot be directly the cause of sin, either in himself or in another because every sin is a departure from the order which is in God as in an end. . . . Similarly he cannot be the cause of sin indirectly either And in this way it is evident that God is in no way the cause of sin."

In the passage Davies cites, Thomas is taking a position more complicated and reasonable than the one Davies attributes to him. Thomas claims that God is the cause of every act of sin insofar as it is an act but *not* insofar as it is a defective sinful act. The power to act comes from God; the defect which is sin comes from man :

".A sin denotes . . . an act with some defect. The defect is from a created cause namely, free will. . . . Hence, the defect is not attributed to its cause but to free will, just as the defect of limping is attributed to a crooked leg as its cause and not to the motive power, which nonetheless causes whatever motion there is in the limping. .Accordingly, God is the cause of the act of sin, but he is not the cause of the sin . . ." {IaIIae, q. 79, a. 2).

But such a distinction is all the free-will defense needs; on this issue, I think, Thomas would have been on Plantinga's side.

Davies's own solution to the problem of evil depends on claiming that God cannot be a moral agent and that therefore the problem of evil is a "pseudo-problem". His position raises two questions. First, why should we think God is not a moral agent? And secondly what difference does the claim that he is not a moral agent make to the problem of evil?

Davies gives three reasons for thinking that God is not a moral agent, (1) God is not a being, and all moral agents are beings, (2) God cannot have duties and obligations, but "it is commonly said that a moral agent is someone able to do his duty, someone capable of living up to his obligations" (p. 23). (3) A moral agent is someone who can succeed or fail, but God cannot succeed or fail. I think all three of these reasons are eminently rejectable. To start with the weakest, (3) is question-begging. To define a moral agent as someone who can fail to do what he ought to do, of course, rules out God as a moral agent, but why should we accept such a definition of moral agent? Classical theism is full of attempts, such as Anselm's in *De libertate arbitrii*, to show that God has free will even though he cannot do evil. Why should we not accept an account of free will such as Anselm's and then define a moral agent as someone who has free

If there are reasons why we must define a moral agent in such a way as to exclude God, those reasons need to be given. (2), on the other hand, seems to me just false. For example, when Moses asks God what his name is (Exodus 3:13) and God chooses to answer him, I think it is manifest that God has a duty and an obligation not to lie to Moses, not to give his name as Ashtoreth or Baal. (If Davies objects that God cannot lie and that no one can have a duty or an obligation to avoid doing what it is impossible for him to do, then his (2) becomes just another version of (3)). Finally, (1) appears to embody a serious confusion. According to Davies, in classical theism God is the source of all beings and so cannot be a being himself (p. 23). But there are two ways for something to fail to be a being. One is by falling short of the criteria for a being. Understood in this way, a thing which is not a being is presumably not a being because it does not exist. Clearly, anything which is not a being in this sense cannot be a moral agent (leaving aside worries about fictional and mythological characters), but this is obviously not the sense Davies has in mind when he claims that God is not a being. Another way for something to fail to be a being, however, is for it exceeded the criteria for a being. In this sense, classical theism does understand God not to be a being. It takes God not as one being among others, but rather as being itself, existing in three persons while remaining one substance. But if this is the way

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in which God fails to be a being, I do not see why his special ontological status should preclude his being a moral agent. I can see reasons for thinking that anything which is not a being in the first way cannot be a moral agent, but none of those reasons applies to God.

I think it is false, then, that God is not a moral agent. But suppose for a moment that Davies's claim is after all right and that God is not a moral agent. What follows for the problem of evil? Davies thinks that if God is not a moral agent, "the problem of evil . . . cannot even get off the ground" (p. 22). I think that if God is not a moral agent, the problem of evil does not need to get off the ground because Davies has already given the proponents of the argument from evil everything they want. If God is not a moral agent, he is *a fortiori* not morally perfect. In that case there is no entity which is omniscient, omnipotent, and morally perfect; and this is just what proponents of the argument from evil seek to show. So it seems to me that Davies's treatment of the problem of evil begins with an inadequate appreciation of contemporary work and a misunderstanding of Thomistic thought and ends with his own implausible solution which would be a Pyrrhic victory for theism if it succeeded.

Davies has a good grasp of current philosophical literature and an awareness of the complexities of classical theism. That there is much to disagree with in the book should perhaps be laid to Davies's credit, because he has boldly tried to bring together these two different traditions into what should be a fruitful union. I do not think he has succeeded—the difficulties I find in his chapter on the problem of evil are representative of difficulties throughout the book—but I think his approach is the most promising one for contemporary philosophy of religion.

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The Foundations of Knowing. By RODERICK M. CHISHOLM. Minneapolis:
University of Minnesota Press, 1982. Pp. viii + 216. \$29.50. (cloth);
\$10.95 (paper).

The author has collected papers representative of his views in theory of knowledge; these set out and defend the foundationalist position: that some beliefs are to be held on their own authority and that the ultimate account of the authority upon which beliefs rest is in terms of the self-

authorising. The final section of the book is a lucid and perceptive discussion of the history of epistemology in the United States.

Central to the author's claim is his definition of knowledge as justified (true) belief and its dependence upon self-authorization for the account of justification. Here the reviewer finds two disquieting difficulties. Firstly, in the author's view whatever is known has a non-defective evidence base appropriately related to it. For an evidence base to be non-defective in the author's sense, it can make evident no falsehoods which might mar its power to confer warrant. Yet it may be questioned whether any evidence base does not authorise the acceptance of some such falsehoods save in the case of what is, in the author's sense, directly evident. Descartes optimistically thought not and blamed doxastic error on the will. But neither he nor the author offers a proof, and so the question remains, in the reviewer's opinion, an open one.

Secondly, if the author's special account of knowledge is correct, then the belief we all hold of our own persistence through time cannot be certain-i.e., cannot possess the author's highest degree of epistemic warrant-unless we assume that whatever exists persists through time; and surely God on the traditional theistic view would be a counterexample here. Yet if we cannot be certain of our own persistence, what can it mean for us to be certain, as the author allows, that we are now in given affective or sensory states, or that specific *a priori* axioms are true?

Otherwise the volume is well written and a model of concision. Occasionally the (publisher's?) convention of alternating gender in personal pronouns seems confusing but, on the whole, the text suffers no violence from it.

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The Philosophy of History with Reflections and Aphorisms. By JOHN WILLIAM MILLER. New York: W. W. Norton & Company, 1981. Pp.192. \$17.95.

In academic circles, the question "What has he published?" is often an inquiry about a colleague's worth as a thinker and as a scholar. Yet it should be obvious that publication may be a defective measure of thought and scholarship. John William Miller published relatively little during his 36 years as professor of philosophy at Williams College. By the standard of publication, he was a minor figure. However, shortly before his death in 1978, he got *The Paradox of CatUse and other Essays*

(Norton, 1978) into print; and two years later *The Definition of the Thing* (Norton, 1980) was published. Both books revealed him to have been a philosopher of depth and learning and a writer of grace and subtlety. The present volume on the philosophy of history was drawn from notes and letters assembled after his death, and it takes up many issues discussed in the other two.

Miller argues in *The Definition of the Thing* that the main work of the philosopher is indeed defining the thing, the object of both everyday knowledge and science. At first glance, it is an assignment which narrows the scope of philosophy in a manner familiar from linguistic analysis. But defining, for him, is "associating without stint or limit" and to be a thing is to have explicitness, distinctness, and specificity. Since the associations are temporal and cultural, the definitions and the thing itself are necessarily historical. The philosopher can, then, hardly avoid the philosophy of history. Philosophy, though, has more often than not been the pursuit of an ahistoric ideal of explanation; and Miller devotes considerable attention in all three works to the history of this pursuit from Parmenides and Plato through Augustine and the medievals to the Freudians and the behaviorists. He himself argues that there are no such ahistoric explanations, no unchanging patterns, no abiding essences or natures, and that Ortega y Gasset was perfectly right in saying "man has no nature, only a history." Consequently, the patterns of history are unpredictable. What is more, predictability and scientific law are themselves the results of the "free act proposing systematic consequences." This *free* proposal of *systematic* consequences is enough to explain the swing back and forth between the historical and the ahistorical modes in the development of Western thought. It is the historical which must in the end take precedence.

The historian enters the picture for Miller because the originality of human choices and actions is not pure. We always take up a challenge which has been laid down for us by our past. As we sort out the challenge, we formulate a story which involves not only our present purposes but also the unique character of past choices and actions. The historian takes the residue of these past choices and actions in documents and monuments to give the account systematic form. He negotiates between "present willfulness" and the constraints placed on belief by the evidence left by our predecessors. Miller is an historical realist in that he conceives of the historian's work as controlled by what really happened, but his sense of science as a creative activity makes him leery of talking too easily about "the facts" and "the truth." Neither confronts the historian apart from his own enterprise of telling a story in which he is himself engaged. Objectivity in this case lies in identifying with people who lived no less than we but who did not necessarily live by our standards. These people were agents in history insofar as they built and sn,,s-

tained a world, and the moral significance of historical study is in repossessing and re-constructing the world we have inherited.

The Philosophy of History is an engaging book, and I find myself in sympathy with its fundamental direction. Miller's emphasis on "free act proposing systematic consequences accounts for both the originality of historical undertakings and the limits to this originality. And, in considering the historian, he keeps a balance between creative story-telling and proper fidelity to the past. Two failings mar the book, however. In many instances, I yearned for definitions of fundamental terms like *truth*, *fact*, *cause*, *motive*, and *action*. Obviously such terms are forever slippery, but it should be possible to make them clear enough to avoid misunderstanding. The other problem is that many essays in the book make sense only as responses to authors who would disagree with its positions. These opponents are never presented in detail—a weakness which has a bearing on clarity and effectiveness. Frustration with these aspects of *The Philosophy of History* was what led me initially to look into the other two books, where definitions and contexts are much more in evidence. Professor Miller would almost certainly have brought *The Philosophy of History* to a similar completion had he lived, and it is regrettable that we no longer have access to his abundant wisdom.

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The Goethezeit and the Metamorphosis of Theology in the Age of Idealism.

By DONALD J. DIETRICH. Las Vegas: Peter D. Lang, 1979. Pp. 261.

No price given.

Because there are so few studies available in English of Roman Catholic theological ideas and currents in the nineteenth century, this book is a welcome contribution. The author sets for himself the period—roughly the *Goethezeit*—from the late 1700's to 1848. The author recognizes that this period has more than purely historical interest, and he occasionally points out theological connections with Vatican II and with the theologians of the Council and the postconciliar period.

The book begins with the discussion of how Roman Catholicism can enter a period of renewal, a period both stimulated by and in opposition to the Enlightenment. It then goes on to treat people—Hermes, Sailer, Drey, Moehler, Staudenmaier, Kuhn, Hircher, Guenther—within the framework of large theological issues: God and the ways of knowing,

ecclesiology, revelation, and theology and politics. The book contains a wealth of information. The notes are extensive and present new published and unpublished works. Dietrich works at explaining the religious background of the figures and has had to acquaint himself with the highly speculative theological systems of a half-dozen difficult Teutons. Some sections are quite enlightening, for instance, a comparison of Moehler and Staudenmaier on tradition.

The book was originally a dissertation and like most dissertations it has its limitations and its exuberances. There is a certain lack of feeling for exactly how the German intellectual world after 1795 differed from the world before it. Dietrich rightly understands that this period was "romantic idealism" and that it not only flowed out of certain aspects of Enlightenment but replaced them. The title has a nice ring to it, but is it really helpful to characterize this period in Catholic theology as having to do with the great philosopher-poet who was very unsympathetic to the new union of romanticism and Roman Catholicism? True, the period extends over Goethe's professional lifetime but it does not really represent very much that is derived from him.

Sometimes the author seems to wander geographically and chronologically: it is difficult to study both Austrian and German figures in the same book; Hermes is treated before Sailer notwithstanding the fact that intellectually Hermes belongs to a world existing after Sailer (though admittedly he has Kant as his intellectual mentor). I agree with the author's delineation of how romanticism and idealism (with Roman Catholic and Enlightenment roots in the background) form this period. Nevertheless, at times an older interpretative framework intrudes itself, namely one that makes Schleiermacher central. The author tends to identify Schleiermacher with normal romantic theology. (This is precisely what the history of _____ has done for a hundred years.) Often we are given the impression that Schleiermacher stands behind the Tübingen theologians in ways that he probably does not; yet the author can point out cases where a Tübingen theologian is decisively distancing himself from the north German theologian. This point only suggests that we do not yet fully understand the relationship of Schleiermacher to the Catholic theologians in Tübingen and Munich. Kuhn wrote in the introduction to the second edition of his *Catholic Dogmatics* (1846) that he "proceeded in opposition to the widely held Schleiermacherian grasp of religious faith, [to emphasize] the objective character of faith, not to push only the formal side into the foreground (the *fides qua credimus*) nor to let the *fides quam credimus* fade into the background." Akin to selecting Schleiermacher as the dominant figure in nineteenth century theology is the listing of typical characteristics of romantic theology, all centering around the world of feeling. In fact for the Roman Catholic theologians feeling has almost nothing to do with their theological sys-

terns; rather it is precisely through Schelling and through his partner, Franz von Baader, that the specifically Roman Catholic synthesis for Romanticism emerges, namely one drawn from the new natural sciences and from the older medieval and baroque mysticisms.

Ten years ago Dietrich's book would have stood alone as a rich and helpful guide in this period of Roman Catholic theology. In the past decade there has been considerable growth in interest in the previously unknown terrain of the centuries of Catholic theology since Trent. Scholarship in Germany has moved on, having left the field of nineteenth century theology to pursue that of Catholic Enlightenment figures. Even now Dietrich's book is a welcome guide and a rich source for anyone interested in what he suggests is the theological background of the contemporary theological renewal of Roman Catholicism.

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Johann Georg Hamann. By JAMES C. O'FLAHERTY. (Twayne World Authors Series.) Boston: Twayne, 1979. Pp. 199. \$14.95.

The author of this monograph is America's leading Hamann scholar. The fact that he is also one of the very few American Hamann scholars, if not indeed almost the only one, attests to the limited attention accorded the "Magus of the North" on this continent. For this there are good reasons. Hegel, one of his first serious critics—he wrote a long review of Roth's edition of Hamann's *Schriften* (1821-25)—called his writings an "exhausting enigma," a judgment in which anyone who ventures to try to read them will heartily concur. Yet Hamann is eminently worthy of our serious attention, as O'Flaherty has been telling us ever since he first published his Chicago doctoral dissertation, *Unity and Language: A Study in the Philosophy of Hamann* in 1952 (reprint 1966). In 1967, he published with the Johns Hopkins Press a translation and commentary of the *Socratic Memorabilia*, continuing his work of enlightenment for the English-speaking reader. Aside from this, however, the only things Englished from Hamann's writings seem to be those in the book by Ronald Gregor Smith, *J. G. Hamann 1730-1788: A Study in Christian Existence* (1910). But an important study of Hamann's theology, *God and Man in the Thought of Hamann*, by Walter Leibrecht, has been translated into English by J. H. Stamm and M. H. Bertram (Philadelphia: Fortress Press, 1966).

Who was Hamann and what was he up to? Born 1730 in Königsberg in East Prussia as the son of the city "Bader" (barber-surgeon), he entered the local university at the age of 16, studying first theology, then law. Upon leaving the university without a degree after a three year course of study, he became, like many indigent young scholars of the day, a private tutor of children of the nobility. In 1756, the wholesaling firm of Berens, in Riga, with whom he had friendly connections, sent him on a journey to London for reasons that are still unclear. He arrived in the British capital in April, 1757, and attempted to carry out his mission (it had something to do with the Russian embassy), but it seems to have been shrugged off with amusement. Hamann was near despair at his failure and sought to drown his sorrow in dissipation. He remained in London, falling in with a fast crowd (homosexuals from all indications) and gradually slipped into quite desperate straits. His inveterate bookishness was his salvation. Closeted in his room, he read the English Bible from cover to cover and then read it again. In it he saw the record not only of the history of Israel but also of his own life. He felt himself directly addressed by the Word, a sinner, "the fratricide of God's only begotten Son," who was now offered salvation through faith. God, he thought, had spoken to him, and he answered: "Here I am." This experience decided the course of his career as a writer by making him see his age, the era of Enlightenment, to whose ideas he had up to then willingly subscribed, from a wholly new angle. It was this angle and its concomitant revaluation of all values that was to make Hamann the kind of writer he became, causing him to attack reason in the name of reason-not, as is still sometimes said, in the name of irrationality. The primary difference between Hamann's view of reason and that of the Enlighteners lay in his denial of the *autonomy* of reason: it was for him an imperfect light, though the only one we have. Its light must be coupled with, not merely supplanted by, faith.

Hamann did not take this position lightly. He believed he had a firm basis for it in his central insight-biblically derived-that reason is dependent on *language*, which is its "womb." But language in turn is fundamentally the human version of the divine Logos, the creative Word. In speaking, man responds to the Word that was in the beginning. There is a *communicatio* of divine and human *idiomatum*.

The language in which God addresses us is threefold: Nature, the Scriptures, his Son. In all three of these forms God, though he remains utterly transcendent, *condescends* to man, speaking to him in a language he can understand, a lowly, "natural" language that appeals not only to reason but above all to the senses. It is a literally "figurative" language, poetry.

The philosophers, men like Mendelssohn and Kant, strive to rid their works of such language. They want to "purify" it, make it abstract,

,with the that they no longer speak of creation (no longer respond to the virtue 'Logos), but merely of relations. The appeal to the senses fails; poetry is lost. But it is language which after all has the last word. For language refuses to disappear; it remains the *sine qua non* of reason and thus reason itself must remain "impure." Autonomy is impossible.

If the rationalists were right, O'Flaherty explains (pp. 35 ff.), and there were no need for faith in order to come to some knowledge of God, man, and nature, if reason alone were enough, then "the love of wonder," which is, in Hamann's words, "deeply ingrained in our nature and the sinew of all poetic and historical powers" as well as Scripture and revelation itself must be discarded. Man would no longer need to respond to the divine Word. The epistemological consequence would be that we could really know nothing. This would be, in O'Flaherty's phrase, "the road to nihilism." In actuality, however, it is a road we cannot take, at least not to the end: language prevents us. Through faith, which means response to the Logos, which means language, which gives birth to reason, we come to know what we do know. Even the rationalist, though he may have lost his faith, is finally dependent on this language.

What we know may not be very much. A trinitarian-eschatological scheme underlies all of Hamann's thinking: "After God had spoken exhaustively through nature and the Scriptures [Father/Holy Ghost] . . . , he spoke to us through his Son-yesterday and today! until the promise of his future--no longer in the form of a servant-should be fulfilled." And: "The Poet at the beginning of days is the same as the Thief at the end of days." Only then, at the end of days, will we truly know. Until then we know only "in part."

This same scheme naturally shapes Hamann's view of history. The theology of history is older than the philosophy of history, and our Western idea of history is basically a secularization of the Christian scheme of salvation, which is governed by the experience of our own and the world's historicity. Creation, according to the Bible, is the founding of finiteness by God and at the same time his self-implication in finiteness. It is also a *creatio continua*, that is, for as long as it may please God to continue to create. Such a sense of history is unmetaphysical, there is nothing general or necessary about it; it always deals with the particular, with this or that event at a certain moment. For this reason, however, all that happens can be meaningful: events and historical figures can refer beyond themselves, there can be prefiguration, and typological interpretation becomes possible. Hamann is a confirmed typologist. It is the belief in the *eschaton* that sets the pattern.

This of course flies in the face of his age, which believed in perfectibility and infinite progress, was trying to free itself from a historically determined view of the world, and, by ridding itself of tradition and

vetus opinio, to establish unconditioned thinking as the foundation of its philosophy. But, once more, Hamann could always reply, that as long as we think by means of language, we cannot bracket our historically conditioned existence. As Karlfried Grunder puts it in his study of Hamann's view of history (*Figur und Geschichte*, 1958): Man stands in history at least to the extent that he stands in language, that is, inescapably.

Hamann's writings appeared in minuscule editions and were never collected during his lifetime. They were, in effect, more like pamphlets than books. All are polemical in nature, most of them being written in response to specific works by contemporary Enlighteners. Thus the *Aesthetica in nuce* (1762) takes the field against the Göttingen Orientalist J. D. Michaelis and his lack of understanding (in Hamann's eyes) of the essentially poetic nature of Biblical revelation; a whole series of writings—*Hierophantic Letters*, *Konxompax*, *Aprons of Fig Leaves--attack* J. A. Starck, a neologist who wrote on church history and Freemasonry (and who was, strangely enough, Hamann's personal confessor!); *Gol-gatha and Scheblimini* (1784), which Hegel considered Hamann's most important work, and *A Flying Letter to Nobody, the Notorious* (1786) are in reply to Moses Mendelssohn's effort to reconcile Judaism with Deism in his *Jerusalem* (1783); the brief but important *Metacritique of the Purism of Reason* (not published in Hamann's lifetime) is in response to Kant, his Königsberg neighbor. Most of these writings, as well of course as the *Socratic Memorabilia* (1759), with which Hamann launched his career as an author as an ironic reply to his friend Christoph Berens and to Kant, who were trying to counteract his London conversion, and 'on which O'Flaherty is especially expert, are examined and explicated, necessarily rather briefly, but almost always illuminatingly and with the sure insight of one who has spent a scholarly lifetime in the service of Hamann.

Since the appearance of the now-standard edition of Hamann's works in six volumes, edited by Josef Nadler (Vienna: Herder, 1949-57) (the correspondence has been edited by Walter Ziesemer and Arthur Henkel in six volumes, Wiesbaden: Insel, 1955-75), there has arisen a very considerable and highly competent body of *Hamann-Philologie*, almost all of it in German. Particularly notable is the series published by the Bertelsmann Verlag called *Johann Georg Hamanns Hauptschriften erklärt*, by such scholars as Fritz Blanke, Elfriede Büchsel, E. J. Schoonhoven, Erwin Metzke, and others. These are line by line commentaries on Hamannian texts. Without a commentary Hamann, except for short stretches, cannot be understood by ordinary mortals. And even with a commentary he is exceedingly difficult.

At the close of his chapter on Hamann's notorious style O'Flaherty remarks, with nice understatement, that it is "Hamann's consistency in undertaking to express abstract conceptions metaphorically which make il-

him more difficult to understand than, for instance, Plato or Nietzsche" (p. 111). Metaphor, to Hamann's way of thinking, is the basis of the force of "natural" language; through metaphor it appeals directly to the senses. The language of the rationalists, on the other hand, is abstract, desiccated, lifeless, airless, dry bones, in short, all that is anathema to Hamann. The rationalists do not speak that one may "see" them as must those who rely more on an intuitive mode of cognition than on an abstract, purely logical one. Intuitive reason manifests itself linguistically, O'Flaherty explains in Chapter 5, through concrete images, argument from analogy (on which Hamann relies almost exclusively), paradox, multiple levels of meaning, and the presence of affective terminology. Yet one could conceivably write (and reason) in this fashion without becoming as obscure as Hamann. Kierkegaard, his greatest admirer, did.

To my mind, the chief difficulty in penetrating Hamann's writings lies in his excessive use of a highly allusive cento style. (*Cento* from *kenton*, a patchwork garment.) Hamann knew a number of languages (including, it seems, enough Arabic to read the Koran) and he quotes in at least six of them, usually without translation. The cento is an old tradition, but Hamann's use of it, O'Flaherty notes (p. 106), is radically different from the traditional practice, which essentially merely presents the familiar in a new form. "Hamann, on the other hand, employs the device to create, as it were, a dialogue between individuals often remote from each other in time, place, and philosophical or theological orientation. [...] the cento is involved in the *substance* of Hamann's discourse as well as in its *form*." A pastiche of quotations from the Bible, from Homer, from Plato, from Horace, Francis Bacon, Luther, from anyone and anything the omnivorous and retentive reader Hamann may have read, and these quotations sometimes parodied, distorted, disguised, or only referred to indirectly, all of them, however, used to forward an argument whose thesis is not always directly stated, this can make even the sympathetic reader throw up his hands in despair. Furthermore, Hamann is purposely obscure. "[...] if I could think and record my thoughts in ever so orderly a way," he writes to a friend, "ever so rationally and conclusively, God grant me the grace to divest myself of that ability as far as possible." His prayer was granted, and with a vengeance. Yet it is still not easy to see the reason for such purposeful and often self-defeating obscurity. Is it mistrust of the *Systemgeist* that ruled his age? Was it that he wished to involve the reader, making sure that he would have to study his text with all the powers at his command? In any event, Hamann's style is fundamentally creative quotation, just as language itself, one must add, is, in Hamann's view, a quotation of divine language, i.e. its "translation" into terms comprehensible to man. Quotation is also a way, of calling attention to language per se; a way, if it were, of saying, took, this is all we have, this re-

flection of the divine Logos. It is our life : " Am farbigen Abglanz haben wir das Leben."

A principal reason for Hamann's extensive quotation from Greek and Latin authors is his conviction that God revealed himself to all, not only to Jews and Christians (though our main light comes from the Jews): "godly men existed among the heathen [and] we should not despise the cloud of these witnesses, [which] heaven has anointed as its messengers and interpreters, and consecrated precisely to that vocation among their people which the prophets had among the Jews."

Quotation is furthermore a means of insisting upon the historicity of man: just as there can be no thought apart from language, so also can there be no supra-historical or non-historical reason. The Danish scholar Sven-Aage Jprgensen rightly calls Hamann's style "hermetic, learned, rhetorical, and in the fullest meaning of the word traditional : it presupposes a tradition, appeals to it, and can be understood only on the basis of it." Paradoxically perhaps, Hamann is a radical thinker *because* of his grounding in tradition. The new sense of order of which he became aware upon his conversion he recognized as the creational order intended from the beginning. ,Ours is a world with a beginning and an end, made possible by a *creatio continua*, a world that speaks to us if we will listen, and, if we will not, we must remain dumb: "[...] the creation is speech to the creature through the creature, for day unto day uttereth speech, and night unto night showeth knowledge. There is no speech nor language, where their voice is not heard." Thus Hamann could see the relation of reason and faith in a light quite at variance with that of the Enlighteners, though in fundamental harmony with that of the Pietists and the "awakened." The great difference between them and Hamann lies, above all, in the latter's hermetic, ironic presentation of his views, and in his theory of the nature of language. .

O'Flaherty discusses a number of other aspects of Hamann's thought besides those I have touched on. True to his earlier insights, he consistently interprets his author from the standpoint of the primacy of language in his thought.

Hamann spent most of his life as a minor customs official in the government of Frederick the Great. He never married, though he did enter into a "marriage of conscience" with an uneducated peasant girl who was nursing his invalid father. To this unequal but harmonious union four children were born. Hamann was always poor. A friend contributed money for the education of his children. But, aside from his constant vexation and running skirmishes with those in power (O'Flaherty devotes a chapter to "Hamann *contra* Frederick the Great," whom the Magus regarded as the Anti-Christ and his capital Berlin as Babylon, though he also admired his King as "demonic" character), Hamann does not seem to have led an unhappy life. He had many friends; above all, the

philosopher F. H. Jacobi, with whom he conducted a large and important correspondence, and J. G. Herder, his life-long disciple. At the end of his life he was invited by the Princess Amalia von Gallitzin to visit her and the "Miinster Circle" (Hemsterhuis was a member) in Westphalia. It was here that he died in June, 1788, and was buried in the garden of the townhouse of the Princess.

Goethe, whom Herder introduced to Hamann's writings, retained a life-long admiration for the Magus. Hegel respected him greatly, and the passionately anti-Hegelian Kierkegaard revered him as he hardly revered any other thinker. Surely, then, he merits our notice.

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A Bonhoeffer Legacy: Essays In Understanding. Edited by A. J. KLASSEN. Grand Rapids: William B. Eerdmans, 1981. Pp. 382. \$18.95.

At the time of its publication, A. J. Klassen's *A Bonhoeffer Legacy* was the third major collection of essays on the life and work of Dietrich Bonhoeffer to appear in English. The first such collection, edited and introduced by Martin Marty, was published in 1962. *The Place of Bonhoeffer* presented critical expositions of Bonhoeffer's major writings with the twofold aim of introducing Bonhoeffer to the English-speaking world and indicating the "problems and possibilities in his thought." Then in 1967 Ronald Gregor Smith's *World Come of Age* featured a predominantly European forum on Bonhoeffer's theology. Here the implicit issue was whether Bonhoeffer was at bottom a Barthian or a Bultmannian.

During these same years, a new generation of scholars was beginning to delve more deeply into Bonhoeffer, moved by a critical interest in determining what he actually thought before assigning him a place amidst the prevailing theological currents and camps. There has emerged from this work a portrait, still unfinished, of an original figure in twentieth-century theology. Although Bonhoeffer was a student of many, he remained to the end a disciple of none.

Now some of the leading figures of this new generation have been gathered together in one volume by Klassen. Long known to Bonhoeffer specialists, all the authors represented in this collection have written dissertations, books, or significant articles on some aspect of Bonhoeffer's thought. In many cases, their contributions are either drawn directly from or based upon those works. Along with essays by North American,

French, Swiss, and English writers, the volume includes English-language debuts by such notable German Bonhoeffer interpreters as Ernst Feil, Hans Pfeifer, Rainer Mayer, and Tierno Rainer Peters. If the list of twenty-three contributors represents a veritable "Who's Who" of the International Bonhoeffer Society, the themes they treat provide a good indication of the substantial range of recent work on Bonhoeffer. For these reasons *A Bonhoeffer Legacy* could be viewed as a compendium of the most noteworthy trends and developments during the past two decades of Bonhoeffer research.

The golden thread that unites these diverse papers may be glimpsed in the concluding words of Eberhard Bethge's introductory essay, significantly entitled "Bonhoeffer's Assertion of Religionless Christianity—Was He?" Already in this title Bethge raises the question concerning the shape and durability of Bonhoeffer's legacy. His conclusion is suggestive: "It may be, then, that Bonhoeffer's analyses—or those that others after him have developed and modernized—are not behind us but still before us" (11). Many of the pieces included in this book could be said to confirm Bethge's hypothesis. Indeed, that is why they are called "essays in understanding." To understand Bonhoeffer's legacy requires more than the effort to identify the formal contours and conceptual pillars of his theological work. In addition, it involves an appreciation (or even personal appropriation) of a posture for doing theology, a posture shaped by the confluence of inherited doctrine, the present historical situation, and attentive listening to God's Word. It is the exemplary quality of Bonhoeffer's theological posture, more than any particular methods, phrases, or insights, that constitutes the real heart of his legacy. Thus, despite the considerable divergence of views advanced in these pages regarding the most salient features of Bonhoeffer's legacy or the genuine key to his theology, all the authors seem to share a common intention. Perhaps this intention was best expressed by Bonhoeffer himself in his conclusion to a critical review of Karl Heim's *Glauben und Denken*: "I think the most honest way to express real gratitude for a great work is with all the resources at one's command to take up the questions it poses. Even if one comes to divergent conclusions, the appreciation for the work is surely not lessened" (cited by Tom Day, 231).

What are the questions taken up here? The volume's six main sections are devoted to the following aspects of Bonhoeffer's work: Theological Method-Hermeneutic; History; Christology and Discipleship; Church and World; Religion and Secularization; and Ethics. Within these categories, readers will find discussions of such issues as the doctrine of justification and its structural significance in Bonhoeffer's theological endeavor (Hans Pfeifer), Bonhoeffer's reception and incorporation of theological liberalism (Carl-Jürgen Kaltenborn), his political ethics (Tierno Rainer Peters), Bonhoeffer's understanding of transcendence

(Jprgen community (Tom Day), the world (Ernst Feil), reality (Andre Dumas), freedom (Donald Bachtell), and his later understanding of the church (John Wilcken). Of particular interest, in light of this book's concern with Bonhoeffer's legacy, are the questions surrounding Bonhoeffer's well-known comments about the "end of religion," his theological ethics, and the implications of his thought for dialogue with other religious traditions.

More than half the scholars in this volume address themselves to the meaning of Bonhoeffer's prison reflections on the "end of religion" and the need for a "non-religious interpretation of biblical concepts in a world-come-of-age." Among the most tantalizing treatments of these themes one would need to include the papers by Clifford Green, Tom Day, and Larry Rasmussen. Green deftly shows the affinities between Bonhoeffer's and Freud's criticism of religion. In so doing, he invites the reader to consider the methodological implications of Bonhoeffer's later thought for the relation between psychology and theology. Day's contribution to the discussion is marked by a reading of Bonhoeffer shaped by considerations drawn from the sociology of knowledge. Day argues that it is less the conceptual continuities in Bonhoeffer's thought than the social location and intention of his ideas that offer the key to their interpretation. He then suggests that Bonhoeffer's reflections on the "end of religion" and the maturity of the "world-come-of-age" reflected primarily the experience of "his own social stratum of academic aristocrats," and "shared their propensity to analyze the history of ideas without sufficient attention to their social context and impact" (229). Day and Green should be read in conjunction with Larry Rasmussen's piece on "Worship in a World-Come-Of-Age." Rasmussen links the psychological and historical-sociological dimensions of Bonhoeffer's criticism of religion through the concept of 'consciousness,' which he defines as "that configuration of values, knowledge, feelings, judgments, and opinions that makes up the picture of reality or the 'sense' of reality of any given individual or group" (271). Rasmussen's use of this concept is important because it provides room for Day's view while still affording Bonhoeffer's diagnosis a wider historical-cultural significance than Day seems to allow.

Bonhoeffer's remarks on the "end of religion" and the maturity of the world are closely related to his theological ethics. One of the marks of Christian life in the "world-come-of-age" is the assumption of responsibility for others and, as Bonhoeffer put it, "doing justice among men" (*Letters and Papers From Prison*, 1972, 300). Tierno Rainer Peters establishes the context for these ideas in his valuable treatment of Bonhoeffer's political ethics. Carefully and succinctly, Peters traces the increasingly nuanced presence of the political dimension through Bonhoeffer's writings. Peters demonstrates that from the beginning, the

political bears an intrinsic relation to Bonhoeffer's entire theology through his developing views of the Kingdom of God and his original insight that sin manifests itself socially as "individual social atomism." Moreover, Peters helps us see in Bonhoeffer's much-interpreted doctrine of the mandates a creative, dynamic synthesis of conservative protest against the fragmenting tendencies of modern technological societies and a prophetic vision of Christ's universal lordship. Peters underscores the point that the church's witness to this lordship represents a profoundly political intervention in forms of society increasingly dominated by the tightly woven nets of interlocking institutions.

Given the broadly political orientation of Bonhoeffer's ethics, it remains to be determined what criteria shape the individual Christian's ethical action. This issue is taken up by James Laney in his analysis of Bonhoeffer's ethical contextualism. Although Laney raises some important questions about the specificity of Bonhoeffer's ethical criteria, his conclusions finally are weakened by an apparent failure to appreciate the full significance of Bonhoeffer's Christology for his ethics. Hence, Laney sees discontinuities where others (notably, Pfeifer, Peters, and Feil) discern dialectical unities (for example, in the relation between the ultimate and the penultimate) (310-11). Hans Pfeifer's discussion of Bonhoeffer's doctrine of justification provides a necessary counterpoint to Laney's reading of Bonhoeffer.

Finally, several scholars broach the methodological issue of Bonhoeffer's thought as a basis for Christian encounters with other religions. Paramount among these explorations is Geoffrey Kelly's substantial essay on Bonhoeffer's theology of history and revelation. Kelly is interested in moving toward a concept of revelation more universal than the traditional "orthodox" Christian view would seem to permit. To this end, he adduces evidence to support the proposal that Bonhoeffer himself would have "come to recognize that revelation itself is a far broader concept than its particularization within the Christian religious experience" (120). In this remark, which prefaces Kelly's effort to enlist Bonhoeffer in the search for a broader concept of revelation, we must note a subtle shift of ground away from Bonhoeffer's decidedly Christocentric understanding of revelation toward a more anthropocentric view ("Christian religious experience"). Similar tendencies to relativize Bonhoeffer's form of Christocentrism (one of his most fundamental theological debts to Karl Barth) appear in Douglas Bowman's "Bonhoeffer and the Possibility of Judaizing Christianity" and Donald Bachtell's "Freedom in Bonhoeffer" (see 81-84, 341-42, respectively). It is difficult to discern strong continuities between the speculations offered in these papers on the directions Bonhoeffer might have pursued or the uses to which his thought lends itself, and Bonhoeffer's own affirmation that "The more exclusively we acknowledge and confess Jesus· Christ as our Lord, the

more fully the wide range of His dominion will be disclosed to us" (*Ethics*, 1955, 58). This observation suggests that one of the challenges of Bonhoeffer's legacy remains how to combine, in our own time and place, an "orthodox" Christology with a humanism as genuine and capacious as Bonhoeffer's.

The plurality of themes and conclusions in this volume will require readers to engage in their own efforts to understand Bonhoeffer's legacy. But this will mean a return to the writings of the man whose spirit enlivens these pages. If *A Bonhoeffer Legacy* serves to encourage and inform such a return to Bonhoeffer himself, then it will indeed stand as an "appropriate tribute" (vii) to his life and work.

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The Diversity of Moral Thinking. By NEIL COOPER. New York: Oxford Press, 1981. Pp. x + 303, including bibliography and index. \$45.00.

The ambitious scope of Cooper's book, combined with his careful but imaginative thinking, makes it an impressive and worthwhile contribution in spite of some troubling defects. Cooper tries to provide a rigorous and morally neutral definition of morality, an explanation of why it seems to be objective, an explanation of why it cannot be objective, and an extended argument to the effect that various logical, structural, and factual constraints substitute for objectivity in providing guidance for moral thinking. Indeed, he concludes with an argument that these constraints justify traditional altruistic morality, permitting him to end the book with that triumphant quotation from Berkeley's Philonous: "Just so, the same principles which at first view lead to scepticism, pursued to a certain point, bring men back to common sense" (291).

The first of three sections tells us "what a morality is," and seeks to do so in a morally neutral way while exposing and explaining the biases of alternative accounts. Cooper argues that a rigorous logic of morals may restrict the *form* or the *topic* of moral judgments but not their *message*. The temptation to be a "restrictivist" of the latter type is endemic to ethics, he thinks, partly because people do not distinguish between a morality (be it an individual or a social morality) and what he calls an "anchored morality" (Morality). The former can be given a neutral definition (the "logic of morals") but not a content; the latter cannot be defined but can be given a content. Anchored moralities are what others call "moral traditions," an example being our Judea-Christian morality which emphasizes the amiable virtues such as altruism as opposed to the

heroic virtues of Homer. Confusion results when philosophers focus on a particular feature of their own anchored morality and make it a defining characteristic of any morality. This parochialism is an occupational hazard best avoided by using the human sciences and fiction writers (which Cooper does frequently and well) rather than *ad hoc* examples invented by philosophers (which Cooper thinks fertilize too much of Anglo-American moral theory).

What then is Cooper's neutral analysis of a morality? It is "a body of settled normative beliefs which a person or group considers to be most important for guiding their lives" (116). One might worry about the neutrality of this definition. What about those who seem to live as if art, or money, or etiquette, or religion, or the state is the most important thing in their lives? It turns out that they are subordinating Morality to their own morality; their art or greed or patriotism or manners is their morality, whether they call it that or not. One is reminded of Tillich's claim that all who have an overriding concern, especially atheists and moralists, are religious believers whether they know it or not. Could Cooper's "conceptual analysis" be itself anchored in a value-laden world view that cannot understand a teleological suspension of the ethical? One might agree with Cooper's definition, in spite of its reversing what some "fanatics" think is their morality, while noticing that it is no more rigorously neutral than some "message restrictions." Indeed, if Cooper is right in thinking that rational criteria can apply to moralities even though they have a normative rather than a descriptive character, it is not clear why philosophers need worship the ideal of rigorous neutrality. Being aware of one's biases and subjecting them to rational constraints could be more fruitful than pursuing an impossible dream.

Of course Cooper might worry that the rational constraints must flow from a neutral analysis if we are to avoid a vicious circle. This worry would be consistent with his interesting analysis of "normative direction of fit." Factual beliefs have a "descriptive direction of fit, the onus is on them to match the world" (50). But normative beliefs essentially involve desires, which means that the onus is on the world to match them (or, better, the onus is on the believer to desire that the world match them, and to act accordingly). This analysis is used by Cooper to explain why many moral judgments seem objectively factual—many non-basic ones have a descriptive direction of fit in that claims about obligations often are descriptively true given certain fundamental moral beliefs. But he argues that every morality has foundational beliefs with a purely normative direction of fit, something that he seems to think is not the case for empirical theories. He seems to assume, in other words, a correspondence theory of truth combined with a foundationalistic epistemology. Justified empirical claims are based on a foundation that seeks to correspond to the world, while normative claims are based on a foundation

that calls the world to correspond to it (and calls the believers to act accordingly). For this reason, empirical claims are objective while moral claims are not. This analysis not only rubs coherence and pragmatic theories of truth but puts the book into a pre-Kuhnian paradigm. Perhaps Cooper believes that the neo-pragmatists like Richard Rorty are faddish or misguided, but one can wonder about the wisdom of building a central thesis of a book on an assumed dichotomy that is under relentless attack. Even if Cooper thinks this attack is unworthy of rebuttal, explicit recognition of the controversial character of his epistemological assumptions would make his book more useful. Meanwhile, many readers will find his analysis of "the demise of objectivity" (the title of the book's second section) both less original and more far-reaching than Cooper does.

After the analysis of the first section and the deconstruction of the second, comes the reconstruction of the final section, which I found the most interesting. Even if we go beyond Cooper and believe that the demise of objectivity infects science as well as morals, it is clearly false that in either realm "anything goes." Cooper tries to show that the objectivists are misguided if they think that only factual correspondence stands between rationally justified morality and sophomoric relativity. He does this by arguing that various logical, structural, and factual constraints substitute for the descriptive direction of fit in limiting what counts as a rational morality. The logical and structural constraints flow from an analysis of kinds of impossibility, which suggests three meta-moral principles: a judgment is irrational if (A) it prescribes what is impossible to perform, or (B) cannot be made use of in deliberation, or (C) commends what cannot be desired by members of the moral community. These three meta-moral principles yield ten constraining principles such as teachability, consistency, discussability, sufficient guidance, and realism. These constraints add up to the "common sense" that we usually find operating in moralities and even legal systems.

Cooper is swift and bold in stipulating and deducing constraints, but modest about what he has accomplished, sometimes too modest. He thinks of his list as part of a dialectical process: it may be either too liberal or too stringent and, in any case, he may have neither the best arguments for nor the best applications of the list. This modesty is becoming, and it properly extends to his observation that conflicting moralities are compatible with his constraints. Indeed, I fear that not only reasonable people of good will could disagree while accepting his structural constraints, but that Hitler might be able to accept them (though he would, I think, have to reject one of the upcoming factual constraints). But Cooper goes on to argue that showing that a morality is rationally unacceptable is not to show it is morally unacceptable, any more than showing that a scientific theory is irrational shows that it is false. I find this confusing:

it may be that an irrational theory is compatible with scientific *truth*, but the analogy should be used to ask whether it is compatible with scientific *acceptability*. Cooper's non-objectivism may force him to substitute "moral acceptability" for "moral truth," but this just shows the limitations of the analogy he chooses. I think the most he should say is that rational defects in a morality are compatible with its yielding moral judgments that coincide with those of a rationally acceptable morality, which view *perhaps* is consistent with his cryptic statement, "[my structural principles] will enable us to determine not what people ought to do but what a morality ought to be" (203).

Until the final two chapters, Cooper's book is a sophisticated explanation of a non-cognitivism that does justice to the rationality of moral discourse; I think he shows that one need not hold to intuitionism, naturalism, or a divine command theory in order to avoid relativism, and that one need not avoid relativism at the price of refusing to recognize legitimate diversity in rational moral thinking. I do not find his arguments against objectivism to be any more persuasive than those regularly rebutted by objectivists. And his use of "direction of fit" and "structural constraints" to show the ways in which moral judgments are and are not assertions (they are "semi-quasi-assertions") is elaborate, but no more persuasive or problem-free than those lists of criteria for moral theories or restrictions on what is a "moral judgment" that we find in any number of contemporary writings. What I do find very helpful is his using his conceptual apparatus in ecumenical, sensitive, and wise discussions of such issues as the extent to which morality is retrospective (theoretical; for appraisal) and prospective (practical; for persuasion), and the way in which morality involves vision as well as precepts, and reason as well as emotion. This is all done with an insightful and delightful use of sacred and secular literature and anecdotes. The dialogue between the prophet Nathan and King David is used to illustrate moral instruction: avoid abstract preaching but use a concrete example that is distanced from the pupil (a rich man steals a poor neighbor's lamb) and let the pupil see the morally relevant parallel (David's taking Bathsheba from Uriah) that causes self-condemnation. Not all the examples are as heavy: after distinguishing between *una facie* desiring and summary desiring (what one desires all things considered), Cooper illustrates that what one desires all things considered is not always the strongest desire: As a Catholic priest and Methodist minister were passing a pub, the priest suggests they go in and have a drink. The shocked minister says "I'd sooner commit adultery," to which the priest retorted, "Who wouldn't?"

Many readers will be most interested in the final two chapters, where Cooper uses the structural constraints, three factual constraints, and "the prisoner's dilemma" to argue for the rationality of the altruistic core

of the Judeo-Christian anchored morality. The prisoner's dilemma involves two prisoners held incommunicado, one of whom must confess before there would be enough evidence for conviction. If only one confesses, he will go free while the other gets ten years; if both confess, they each get five years; if neither confess, both get one year. The optimal outcome is for neither to confess, but lack of assurance that the other will not confess makes it self-interestedly rational for each to confess: if the other does not the confessor goes free and if the other does confess the confessor gets five rather than ten years. But they would be better off seeking the cooperative goal that results in only one year for each. It turns out that life is like the prisoner's dilemma except that three factual constraints modify the situation in a way that makes it rational to cooperate, thus allowing the rational course of action to result in the optimal outcome. These factual constraints are, first, that most persons have cooperative goals (goals desired by each agent such that cooperation with other agents is necessary and sufficient for their achievement), second, that human life is long enough for similar situations to recur, and third, that most persons do not know when they or others will die. Although I find implausible Cooper's belief that the latter constraints amount to a "veil of uncertainty" that renders superfluous any "veil of ignorance," I do think he does an impressive job of arguing that even the rare exceptions to the factual constraints are compatible with the conclusion that almost all rational persons should internalize altruism. To the objection that it would be rational to internalize it in others but only act as if it is internalized in oneself, he replies with a rather persuasive use of "the assurance problem," though some will not be convinced he has justified the "truly" in his claim that the best way for others to be assured that I will cooperate is "by their believing truly that I have internalized the rule" (279).

At any rate, the argument is plausible enough that I think he is justified in his worry whether what he did is "squalid." If it is self-interestedly rational to be altruistic, does not that eliminate the possibility of altruism? No, because altruism can grow on you. Even if what he calls "prophylactic morality," (which I think neatly overlaps what Edward O. Wilson calls "softcore altruism"), with its virtues of honesty and justice, is motivated by prisoner's dilemma considerations, it does, after all, really get internalized, and then the orbital leap to true altruism involves playing the morality game for its own sake, leading to that transformation of heart explored by writers, moralists, and preachers. In other words, once we internalize the taking of a stand outside ourselves, morality takes on its categorical character, in spite of the fact that its internalization can be hypothetically defended. Cooper admits that some of this moves beyond argument into speculation, but he is alert to the difficulties and has plausible responses to many of them. He concludes with a thought-pro-

voking speculation on theological ethics: the internalization of taking a stand outside oneself ("critical ethics") requires imagination above all. Here not only the historian, artist, and novelist can help the moralist; but, in a religious morality, God can provide a focus for judging oneself and others. And He can do this not by what He commands but by His vantage-point, which takes into account all relevant interests. "This is why many people find it possible to reach moral judgments by dialogue with their God" (289).

So in spite of its inflated price, its ignoring much of the current debate about the rationality of science, its belabored way of making unoriginal points during some of the first two parts, I found the book insightful and thought-provoking. I suspect that it will get frequent references in future writing, and I strongly recommend it.

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Sex, Marriage and Chastity: Reflections of a Catholic Layman, Spouse and Parent. By WILLIAM E. MAY. Chicago: Franciscan Herald Press, 1981. Pp. 170. \$9.00.

In his latest book, William E. May of Catholic University has brought together the essential notes of the Catholic tradition on sexuality and marriage, along with his own penetrating insights into the basic logic behind the controversies which now rage in this vast and complex area. With the mark of May's clear and careful manner, this is a concise compendium, tightly written in a very readable and unambiguous style. It is therefore eminently suited for the wider public as well as for the theological community.

The work is defensive in character, as May expectedly takes a positive view of more recent pronouncements of the magisterium on matters sexual. He is swimming against a strong current of Catholic theological opinion, which for sometime has rejected the magisterial teaching in regard to contraception, pre-marital and homosexual relations, the indissolubility of marriage, and sex therapy. Plunging headlong against this tide, May defends the long tradition of Catholic sexual norms as thoroughly reasonable and liveable.

From the outset May characterizes his approach as both a "Catholic and catholic understanding" of human sexuality. That is to say it is "Catholic," as it is consistent with the constant tradition of moral reflection and doctrine in the Church, stretching through the Scriptures, St.

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Augustine and other fathers, St. Thomas Aquinas and other medievals, to the more recent developments in *Gaudium et Spes*, *Humanae Vitae* and the statements of Pope John Paul II. It is "catholic" as well, since May ardently and cogently defends the Church's sexual norms as both universal and objective. These norms arise not from the way we happen to perceive sexuality, nor from how we choose to use it. They are indeed "catholic" because they issue from the very constitution of man and woman as all at once human and sexual. His argument is basically rooted in the tradition of natural law, which recognizes universal precepts of behavior inscribed in an immutable human nature.

This sharply distinguishes May from the vigorous strain of Catholic moral theology which has radically revised the heritage of natural law in recent years. Their arguments turn on the metaphysical question of the mutability of human nature. They contend that cultural, environmental and technological factors have changed human nature. This is warrant for the modification of moral norms. This reasoning has proved generally convincing among theologians, philosophers, as well as among ordinary Catholic men and women. May states the basic questions at issue, clearly draws the lines of the controversy, and offers arguments in support of the tradition from a Thomistic perspective. The purpose of this book is not to probe the complex and intricate metaphysical and epistemological underpinnings of the debate. This May has done elsewhere. His concern is rather to argue in a mode which intelligent Catholics can grasp and understand; those for whom these are not simply quodlibetal questions, but the very stuff of daily moral life.

The keystone to the entire work is May's distinction between two fundamentally contradictory approaches to human sexuality among contemporary Catholic moralists. Careful attention should be paid to the boundaries he draws between the "integralist" and "separatist" camps. Those who have rejected many of the traditional norms of Catholic morality, Charles Curran, Philip Keane, Richard McCormick, and Anthony Kosnik-with-contributors prominent among them, he calls "separatists." They are willing to sever the procreative and unitive dimensions of human sexuality. Behind their view May uncovers a latent gnostic dualism. They see the reproductive aspect of sexuality as sub-personal. It is an aspect of our bodiliness or animality, which is endowed with "personal" value when it is assumed into consciousness.

The tendency to define "person" in terms of consciousness is a common turn in modern thought and quite pervasive among Catholic moralists. Some of the deleterious consequences of such a view are to depreciate the meaning of the human body, to adopt a modified "ghost in the machine" approach to man, and to question the personhood of the fetus, the comatose, the severely retarded and senile. The separatists leave us with a layered and somewhat fragmented schema the human

person. The body and its physiological functions are of instrumental value. The body is somehow separate from the person, which for them consists primarily in consciousness. From such a perspective it becomes increasingly difficult to uphold any sort of objective morality.

The "integralist" understanding strives to express a more intimate union between body and person. The body is constitutive of our personhood. We indeed are our bodies. As bodied beings we are necessarily sexual, complementarily constituted as man and woman in deeply psychological and spiritual ways. A further consequence of this "integrity" which May expounds is the infrangible link between the unitive and procreative purposes of human sexuality. Both are personal goods, and neither can be compromised without at the same time undermining the very nature, dignity and sanctity of human persons. Throughout the book, as he treats the various issues of the meaning of sexual coition, the definition of marriage as human and Christian, the uniqueness of conjugal love, and chastity for the married, single and celibate, May illustrates the consequences of both the separatist and integralist mentalities: He argues convincingly that the integralist approach offers the only true "Catholic and catholic" understanding of human sexuality. One of his greatest strengths is his ability to burrow deeply into the logic of an argument, uncovering a concatenation of implications and deductions that do not manifest themselves on the surface of much of the current writing on the subject.

Of particular importance is his discussion of contraception. This is the arena where the contest between the two sides began, and where their differences are most clearly seen and best summarized. May's defense of the doctrine of *Humanae Vitae* and subsequent magisterial statements is comprehensive, lucid and quite fair to his adversaries. Those whose opinions on this matter have already hardened should give careful consideration to May's arguments. He also provides a very helpful commentary on Pope John Paul's series of Wednesday audience talks on the theology of the body. These have regrettably received scant attention up to now from Catholic journalists and theologians, although they represent some of the most creative Catholic thought to date on the meaning of the human body. May's abundance of notes at the end of each chapter is an invaluable and rich resource. They are an extensive scan of the literature, both classical and contemporary, covering all sides of the debate.

This reviewer highly recommends the book. It should be made readily available to intelligent Catholics seeking clarification in this expansive and often entangled area of human life. It is a must for married couples, pastors, seminarians, students of theology and college students generally..

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From Chaos to Covenant. By ROBERT B. CARROLL. New York: Crossroad, 1981. Pp. viii+ 344. \$14.95.

Described by its author as a work in progress, *From Chaos to Covenant* is a preliminary work which will find its culmination in a full-blown commentary on the book of Jeremiah to be published no earlier than 1985 in Westminster's Old Testament Library series. As such the conclusions of the present book are advanced as "tentative rather than with "much thought, analysis and research" remaining to be done" (p. 2). Carroll, who is Lecturer in Old Testament at the University of Glasgow, devoted ten years to the study of Jeremiah before presenting this book for publication as the "firstfruits" of which the forthcoming commentary will be the harvest. He expects the commentary to be an improvement on the present work, reflecting a change of view on certain issues and a modification or extension of some its arguments.

A central thesis of *From Chaos to Covenant* is that we really cannot discover what the historical Jeremiah was like, since the depiction of the prophet in the Book of Jeremiah is clearly the product of the tradition which shaped the book in its present form. It seems inevitable that Carroll will build his commentary on this conviction—a "conviction" in the sense that this view is not patient of proof by any presently available means.

The character of this work can be illustrated by the following summary observations about it. First, previous literature on Jeremiah—carefully scrutinized—plays a prominent role in Carroll's book, revealing the impressive range of his acquaintance with the vast field of Jeremiah studies. Secondly, as the book's chapter headings make clear, issues which have become landmarks in the study of Jeremiah serve as the chief organizing principles of Carroll's work. Finally, the work is devoted to a presentation of the results of scholarly research in a primarily academic vein with little direct attention to the ways in which the book of Jeremiah might serve devotion to God.

As he works on the biblical material in the light of the central thesis mentioned above, Carroll uses familiar critical tools. An example is his treatment of the temple sermon, 7:1-5, with a parallel in 26:2-6.

Carroll first points to differences between the form of the sermon in chapter 7 and that in chapter 26. He deduces that redactors have produced these two varying texts. Then he refers to the poetical passages in Jeremiah which embody the original tradition. Nothing in these passages deals with the temple. Therefore, he concludes, the best way to account for these temple sermons is to attribute them to the verbiage of the deuteronomists. Shoring up this conclusion, Carroll finds that the deuteronomists and Jews during and after the exile did have an interest in,

the temple. This would have motivated the fabrication of the two versions of the temple sermon.

It is interesting to compare how Rudolph, in the *Handbuch zum Alten Testament* commentary on Jeremiah (2nd ed., Tübingen, 1958), treats the temple sermon. He thinks it most probable that we have here genuine words of Jeremiah which have undergone editing by the deuteronomists (p. 47).

Again and again Carroll proves to his own satisfaction that the overlay of editing in the book of Jeremiah is so thick that nothing of the historical Jeremiah can now be identified as such. He is aware that this will-o'-the-wisp search for the historical Jeremiah parallels the much earlier scholarly search for the historical Jesus (p. 25). Granting the similarity between the two enterprises, one cannot but wonder what is the present state of the search for the historical Jesus, and whether Jeremiah will forever remain shrouded from our eyes and the eyes of scholars such as Carroll.

Another main point repeatedly stressed is that neither Jeremiah the invisible man or the book bearing his name can honestly be made relevant for our times. Carroll gives an example from World War II of a man who tried to draw a message from Jeremiah, and came up with conclusions which Carroll thinks were completely misguided (p. 276).

Can Jeremiah then have any relevance for today? Carroll answers in this way:

If the message of the book of Jeremiah is, as I see it, something like this: 'There is not, and cannot be, any permanent security, whether in God, theology, ideology, nationalism, patriotism, ritual, ancestry, history or whatever' and 'We must always relate to the past and be open to the future in constantly changing ways' - then his message may be useful for and transferrable to our own times. To get this concession I have had to ignore what the prophet said or what the tradition has done with his sayings in order to translate the sense of the book into some rather simple principles which might provide guidance for modern communities. (p. 277.)

If this is the relevance of Jeremiah for today, it comes in the sterile package of general principles which can be found often and elsewhere. We hardly need to struggle through critical sifting of the book of Jeremiah to come up with these pearls of truth.

A further question comes to mind. If the tradition could and did adapt and fabricate Jeremiah material for the sake of having something authoritative to say to its own generation, why then fault modern traditionalists who make Jeremiah relevant creatively in much the same manner? Carroll's projected commentary ought not settle this issue, but he might speak to the point elsewhere in print.

Still another question. What readers could benefit from this book? Several groups come to mind. For instance, students who need to learn

what is going on in Jeremiah research, if only for the benefit of teachers who want them to know it. Further, professional scholars who are interested in the latest scholarly publication on Jeremiah. Also, fundamentalists who may desire to have another *bete noir* to castigate. Finally, any who want to have at hand bibliographical references to studies and commentaries on Jeremiah will profit from Carroll's work. On the other hand, readers seeking evangelical fervor had better look elsewhere. *From Chaos to Covenant* will neither bolster their faith nor cause it to falter.

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