

REFORMING ONTOLOGY AND LOGIC
IN THE LIGHT OF THE TRINITY:
AN APPLICATION OF VAN TIL'S IDEA OF ANALOGY

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GOD is the all-sufficient Creator and King of the universe (Ps 103:19). We are creatures made in the image of God (Gen 1:26-28). What are the implications of these fundamental biblical ideas for ontology and logic?

Beginning with the Basics

Let us begin with the basics. According to the Bible, the Creator-creature distinction is fundamental (Genesis 1; Isaiah 40; 1 Cor 8:6; Col 1:15-17). There are two levels of being, two levels of existence: the self-sufficient, original existence of God the Creator, and the dependent, derivative existence of creatures.¹ By contrast, non-Christian philosophy pretends that there is only one universal level of being.²

The ontological distinction between Creator and creature has implications for epistemology.³ God's knowledge must be differentiated from the knowledge that creatures have (Isa 40:28). God's knowledge is original and self-sufficient (Isa 40:13-14). Our knowledge is derivative and dependent (Ps 94:10).⁴ Human beings can have true knowledge because they are created in the image of God (Gen 1:26-28). They are "analogical" to God.⁵ Their knowledge is analogically related to God's knowledge.⁶

¹ Cornelius Van Til, *An Introduction to Systematic Theology* (Phillipsburg, NJ: Presbyterian and Reformed, 1974) 12: "Christians believe in two levels of existence, the level of God's existence as self-contained and the level of man's existence as derived from the level of God's existence"; cf. Cornelius Van Til, *The Defense of the Faith* (2d ed.; Philadelphia: Presbyterian and Reformed, 1963) 29.

² Van Til, *Systematic Theology*, 21.

³ *Ibid.*, 12.

⁴ *Ibid.*, 14-20; Van Til, *Defense*, 39-41.

⁵ Throughout our reflections we use "analogy" and "analogical" in the sense that Cornelius Van Til did, namely to express the derivative, dependent, and genuine character of our human knowledge. In talking this way we do not make any specific pronouncement on whether any particular statement about God is literal or figurative. See John M. Frame, *The Doctrine of the Knowledge of God* (Phillipsburg, NJ: Presbyterian and Reformed, 1987) 36.

⁶ Van Til, *Defense*, 39-46. We focus primarily on what is true by virtue of creation. But subsequent to the fall, we make a radical distinction between non-Christians, who suppress the

The Word as Standard

Now let us turn to a specific word of God, namely, "In the beginning was the Word, and the Word was with God, and the Word was God" (John 1:1). Let us consistently apply theistic reasoning, that is, analogical reasoning, to this passage. When we do so, we find that it leads to reforming human thinking about ontology.

The Word is the Second Person of the Trinity, who became incarnate in the fullness of time (John 1:14). What does it mean that he is called "the Word"? In the context of John 1:1-18 there are several allusions to the account of creation in Genesis 1. The contextual allusions to creation make it clear that we are to relate what is said in John 1:1 to the words that God spoke in creating the heavens and earth, as recorded in Genesis 1. According to Genesis 1, God spoke. God *said*, "Let there be light" (Gen 1:3). As Ps 33:6 summarizes it, "By the *word* of the LORD were the heavens made, their starry host by the breath of his mouth." God later spoke to human beings, as in Gen 1:28-30.

By calling the Second Person of the Trinity "the Word," God invites us to see a relation between the Second Person of the Trinity and the speech of God at creation. The two are analogous. God alone fully knows the character of the analogy. But we can understand that he is saying that the two are analogous. We can even see some aspects of the analogy. In both cases the word of God has divine power and divine wisdom. In both cases God expresses who he is in what he says.

Now we may consider how we understand the instances when God speaks to us. He speaks to us in a human language. (In the canon of Scripture God uses the languages Hebrew, Greek, and Aramaic.) We understand the human language and the particular words partly by reference to what those words mean in other circumstances, including circumstances when human beings speak to one another. We all learn our native tongue from human beings who speak to us. The upshot is that we understand God's speaking to us by analogy with human beings who speak to us and who speak to other human beings as well.

God is master of all these analogies, whereas we are not. But we do recognize that they *are* analogies. God himself has told us so, through the way he has spoken to us in Scripture! If there were no analogy, we would not be able to understand the description of the Second Person of the Trinity as the "Word." We also know from Scripture that God, not any human being, is the standard and origin for these analogies. The Word, the Second Person of the Trinity, is the standard for the analogically related word of God to us. The word to us is the standard for the analogically related words of human beings to one another.

knowledge of God (Rom 1:18-21), and Christians, who welcome such knowledge and grow in it (John 17:3).

Naming

We may observe a similar pattern with respect to the area of names and naming. God names himself (Gen 17:1; 26:24 ;49:24; Exod 3:13-14). God gives names to created things (Gen 1:5, 8, 10). Adam gave names to the animals (Gen 2:19-20). Later human beings also bestow names (Gen 25:25-26; 17:5). We use names that have already been bestowed by others.

This truth already suggests that *every* name or term in human language is ultimately mysterious. We understand any term whatsoever only by analogy with God's understanding of the term. And we understand God's understanding of the term only by analogy with his understanding of his own name. God's name is ultimately mysterious because he is self-sufficient and self-defining (Exod 3:13-14; Judges 13:18; Exod 34:5-6; 33:19-20). Yet God has not left us in complete ignorance of his name. When Jesus commands us to make disciples, he speaks of ". . . baptizing them in the *name* of the Father and of the Son and of the Holy Spirit" (Matt 28:19). God's name, revealed climactically through Christ, is Trinitarian.

Aspects of God's Self-Revelation in John 1:1

Let us pursue this mystery a little further, by returning to John 1:1. We focus particularly on some of the features of this text that offer a foundation for our thinking about particulars and universals, or better, things and the larger groups to which they belong.

"In the beginning was the Word." The Word "was." The Word existed. How can we possibly understand this language? We understand the language because we know of other instances of similar uses of the word *was*. The temple of Solomon once "was." We are working with an analogy between the existence of created things and the existence of the Word. Created things exist for a time, temporally. The Word exists eternally. He always "was." There is a distinction between two types of existence; but there is also, unavoidably, an analogy. We can use this language, with the words *was*, *exists*, and so on, because there is an analogy between the existence of the Creator and the existence of creatures. Apart from some analogy, there is no reason why these words of John 1:1 should be used instead of any other words, or instead of no words at all (mere silence). The Word exists in his specific particularity. He is a particular Person. By analogy, created things are particular things. They remain, even in their dependent existence, self-identical through time.

"And the Word was with God." The Word is who he is not only in his particularity but in fellowship with God. As John 1:18 says, the One and Only "is at the Father's side." There is a fellowship of love and communion between the Father and Son. This relation is expressed in a rich multitude of ways elsewhere in the Gospel of John. "The Father loves the Son" (John 3:35). They shared in glory "before the world began" (John 17:5).

They indwell one another (John 17:21). Again, we understand this language by analogy. We have experience of loving other human beings, of being beside them and with them, and so on. The relation of the Father to the Son is described by analogy with human relations. Jesus even makes the analogy explicit when he prays that his people may be one "*just as you are in me and I am in you*" (John 17:21). As usual, in this analogical relation, the being of God has the primacy. People exist in association with other people because first of all and primarily, the Word exists in association with God the Father. Human words exist in association with other words because, first of all, the eternal Word exists in association with God.

"And the Word was God." In view of the testimony elsewhere in John and elsewhere in the rest of the Bible, we know that this assertion does not mean that the Word is to be identified with the Father, in a modalistic or mathematical sense. According to the Bible as well as later orthodoxy, the Father is God, and the Word is God. But the Word is distinct from the Father, as the preceding clause already reminds us: "The Word was with God." Hence, in the assertion "The Word was God," the Word is classified as God. Likewise the Father and the Spirit, though distinct from the Word, are classified as God. We understand such statements by analogy with other statements in human language. For example, when we say, "This liquid is water," we do not mean that this liquid is the only thing that is water. We may also say, "That other liquid is water." By analogy, we say that the Word is God and the Father is God.

Nevertheless, as usual, the relation here involves analogy rather than identity. Distinctions must be made as well. Any particular piece of water is a part of all the water in the world. But the Word is not a "part" of God. The mutual indwelling of the Father and the Son assures us that "in Christ all the *fullness* of the Deity lives in bodily form" (Col 2:9). There is then an analogy between the plurality of Persons in the Trinity and the plurality of created things of the same kind. In this analogy, the Creator has primacy. There is a plurality of things that are water, a plurality of apple trees, and a plurality of human beings because first of all, preeminently, there is a plurality of Persons in the Trinity.

A Triad of Attributes

We can conveniently summarize our results so far in terms of three attributes or perfections belonging to God and to the Persons of the Godhead. First, there is particularity or individuality. God is particular. The Word is particular. Each Person of the Godhead is particular. Let us call this particularity the *instantiational* aspect. Each Person is an instantiation of God. Second, God exists in fellowship and communion. The Persons of the Godhead exist in association with other Persons, in context of fellowship with other Persons. We may call this aspect the *associational* aspect. Third, the

Persons of the Godhead are all God. They are classified using the category "God." We may call this aspect the *classificational* aspect.⁷

The *classificational* aspect expresses the fact that the three Persons share common attributes and are all God. Thus it is closely related to the *unity* of the three Persons in one God. The *instantiational* aspect expresses the particularity of each Person, and in this way is closely related to the *plurality* of Persons in the Godhead. But of course each Person is one Person, with unity. And the one God is three Persons, with diversity. Unity and diversity are "equally ultimate," as Van Til reminds us.⁸

We understand these three aspects only through God's revelation to us. God speaks John 1:1 and other words of the Bible to us in order that we may understand. In this process of revelation, we understand analogically. For example, we understand the associational aspect of mutual fellowship and indwelling within the Trinity, because God consents to have fellowship with us through the work of Christ and the Holy Spirit. Preeminently, God the Father sends the Holy Spirit to us to dwell in us (Rom 8:9-11). Through the Spirit Christ dwells in us (Rom 8:10) and the Father as well (John 14:23). The indwelling of the Father and the Son is analogically related to the indwelling of the Holy Spirit in us (John 17:23). Thus, the associational aspect is closely related to the work of the Holy Spirit.

We also understand instantiation analogically. The Word is eternally the instantiation of God. By analogy, the Word became flesh and "instantiated" God in time and space (John 1:14). We understand the eternal instantiation by analogy with the temporal one. The instantiational aspect is related to the Second Person of the Trinity.

We understand classification analogically. God the Father, God the Son, and God the Holy Spirit are God. But in the revelation in time, God the Father is preeminently the one called "God." He is the one who first

⁷ These three categories, classificational, instantiational, and associational, are closely related to my earlier categories of contrast, variation, and distribution, respectively. The earlier labels are used in Vern S. Poythress, *Philosophy, Science and the Sovereignty of God* (Nutley, NJ: Presbyterian and Reformed, 1976) 123; and id., "A Framework for Discourse Analysis: The Components of a Discourse, from a Tagmemic Viewpoint," *Semiotica* 38-3/4 (1982) 289-290. The earlier categories derive from Kenneth L. Pike's feature mode, manifestation mode, and distribution mode (*Language in Relation to a Unified Theory of the Structure of Human Behavior* [2d ed.; The Hague and Paris: Mouton, 1967] 84-93; see also id., *Linguistic Concepts: An Introduction to Tagmemics* [Lincoln: University of Nebraska Press, 1982] 41-65). I employ a new terminology here in order to make my meaning more transparent, to emphasize the basis for the categories in Trinitarian revelation in John 1:1, and to expand the potential range of application of the categories. My newer terms express aspects of God, and analogically they pertain to anything in creation. They have the generality of Pike's earlier terminology of three "modes." By contrast, the terms *contrast*, *variation*, and *distribution* are customarily narrower: they denote three aspects of descriptions of linguistic units. They are thus the expression of classificational, instantiational, and associational aspects in a particular area, namely, in the description of a single linguistic unit.

⁸ Van Til, *Defense*, 25.

represents the attributes of God. Moreover, the classificational aspect focuses on what is the same or common to all instantiations. All instantiations are instantiations belonging to the *same* one class. The Son becomes incarnate, and the Holy Spirit is sent, both of which are dynamic actions in relation to the *sameness* of the eternal plan of the Father (Acts 2:22-23, 32-36). Hence, the classificational aspect is especially expressed in God the Father.

We should not think that this situation is strange. Because God is self-sufficient, the revelation of God comes from the supply of his self-sufficiency. The process of revelation is inherently Trinitarian because God is the Trinitarian God. The classificational, instantiational, and associational aspects of revelation reflect the character of God as Father, Son, and Spirit. The classificational aspect reflects the character of God the Father, who is the same through all the dynamicity of God's historical actions. The instantiational aspect reflects the character of God the Son, who became flesh for us. The associational aspect of mutual fellowship and indwelling reflects the character of God the Holy Spirit, who indwells us.

By virtue of the coinherence of the Persons of the Trinity, God's revelation of himself is also coinherent. Hence we may also note that each Person of the Trinity is eternally God. Each possesses the attributes of God and thus manifests the classificational aspect. Each Person of the Trinity is a particular Person, an "instantiation," thus manifesting the instantiational aspect. Each Person of the Trinity is with the other Persons, thus manifesting the associational aspect.

In addition, we can appreciate an analogy between the coinherence of the Persons of the Trinity and the coinherence of the classificational, instantiational, and associational aspects. Coinherence of these aspects follows from the fact that all three aspects derive from God, who is one.

First, consider the instantiational aspect, as expressed in John 1:1a, "In the beginning was the Word." The assertion of the eternity of the Word implies his deity. That is, the Word is "classified" as God. Thus the instantiational aspect implicates the classificational. Moreover, the designation "Word" indicates that he is the Word spoken by Someone. In the context, that Someone must be the Father. Hence the Word is already in association with the Father. The instantiational aspect thus implicates the associational aspect.

Now consider John 1:1b, "the Word was with God." The word *God* refers to the Father, and in that reference already presupposes the classification of the Father as God. Hence, the associational statement in 1b implicates the classificational aspect. Moreover, the Word must remain the Word in his particularity in all three clauses of John 1:1. Hence, he is involved in his instantiational aspect in 1:1b. Hence the associational presupposes the instantiational.

In like manner, in 1:1c, the mention of the Word presupposes his instantiational identity. Hence the classificational aspect, as expressed in 1:1c,

presupposes the instantiational. In order not to collapse 1c into modalistic heresy, we assert that the Word is not mathematically identical with the entirety of the Godhead—in particular, that he is distinct from the Father. To be classified as God, in the particular sense of John 1:1c, demands that there be simultaneously other instantiations, namely the Father and the Spirit. Hence, the classificational aspect presupposes the associational aspect.

All three of these aspects, classificational, instantiational, and associational, are incomprehensible. The classificational aspect is an expression of God's distinctiveness as God, and of the distinctive work of the Father, which is incomprehensible. The instantiational aspect is an expression of the plurality of Persons in the Godhead and of the unique work of the Son in the incarnation, which is incomprehensible. The associational aspect is an expression of the mutual indwelling and coinherence of the Persons of the Trinity, and of the unique work of the Holy Spirit, which is incomprehensible. The relation among the three aspects is incomprehensible, since it analogically represents the relation among the Persons of the Trinity.

The incomprehensibility can be evaded only by denying analogy. We might pretend that the language of John 1:1 is not analogical. That is, we claim that it does *not* invite us to understand its assertions by analogy with creaturely things, and by analogy with the work of God in the incarnation and at Pentecost. But if we drop our reliance on analogy, we fail to relate the language of John 1:1 to other instances of human language and to instances of God's action in the world. We then do not understand John 1:1 at all. We lapse into the theory of the unknown god of pagan philosophy. Pagan philosophy ends with an unknown god precisely because it is unwilling to accept analogy as a mode of knowledge appropriate to creatures. Pagan philosophers principally deny that they are created and that their thinking is dependent and derivative.

Terms

We earlier discussed names. God's name identifies himself. By analogy, God gives names to creatures and to aspects of creation. We understand the names and the terms for creatures by analogy with the name of God himself. Since the name of God is Trinitarian (Matt 28:19), we expect other names to be dependent on God the Triune Lord. To put it another way, human words are ontologically dependent on the eternal Word, revealed in John 1:1. Human words exist according to the pattern of the eternal Word. Hence human words show classificational, instantiational, and associational aspects.

For example, consider the word *camel*. First, it has an instantiational aspect. The word *camel* occurs in various instances. It may be pronounced rapidly or slowly. It may be used to refer to any of a number of different

creatures in the camel class, both one-humped dromedaries and two-humped Bactrian camels. We learn the word through instances of its occurrence in certain contexts and associations. Perhaps we see some pictures of camels. Or we just hear a verbal description. Either way, the particular pictures or the particular verbal descriptions are instances. The particularity of these instances or "instantiations" is necessary for learning.

The particularities color our subsequent knowledge. Immediately after we have learned the meaning of the word *camel*, it means for us "an animal like the ones I saw in the pictures," or "an animal matching the description that I heard and the impression that I formed in my mind." Our knowledge may of course be modified by further experiences in which we see camels, hear them, smell them, or have them mentioned to us. But these later experiences involve more instantiations. The further instantiations modify the impact of the initial instantiation. We never simply dispense with instantiations.

Second, *camel* has a classificational aspect. Every instance of occurrence of this word belongs to the class *camel*. We classify a particular occurrence as an instance of the word. There is a unity belonging to all such instances, namely the unity of the *one* word *camel*. That one word is recognizable as one in and through all the individuality of its particular occurrences. As an expression of this classificational unity, we recognize this word as distinct from other words in English. It is distinct in pronunciation. It is identifiable as a certain sequence of sounds or letters in contrast with other possible sequences. It is distinct in meaning. It singles out large mammals of the genus *Camelus*, with their characteristic features, in contrast with other kinds of animal. It contrasts with other words, *dog*, *horse*, *pig*, etc. Contrast is an integral feature of the classificational aspect of words.

Third, *camel* has an associational aspect. The word occurs in association, in contexts of other words that occur before and after, and in contexts of human situations that may help to make plain what camel is being referred to, contexts of human communication in which we speak, listen, and think. It occurs in the context of the English language and speakers of English. We learn the word *camel* as children by observing contexts in which it is used.

Our word *camel* presupposes God's word governing the creation of camels. First, consider the classificational aspect. The word is one in all its occurrences because God is stable and self-consistent; his word concerning camels is one. Second, consider the instantiational aspect. The human word *camel* has a diversity of particular occurrences because God in his creativity and fecundity ordains a diversity of occurrences. Third, there is an associational context of human words because any particular word of God has an associated context in a whole plan, according to the unity of God's wisdom.

The three aspects, namely the classificational, instantiational, and associational, coinhere. Any particular instance of the word *camel* must be identified as an occurrence of this word rather than some other word.

Hence the instantiational presupposes the classificational aspect. We can only talk about the class *camel* if we are able to produce particular occurrences or instances of the word. Hence the classificational aspect requires the instantiational. And so on.

In principle, we could conduct a similar analysis of any word in any human language. All words have classificational, instantiational, and associational aspects. This situation derives from the fact that human language and human words are dependent on God's language. Trinitarian speech is necessarily Trinitarian, trimodal, and coinherent. Human speech is dependent. Since it provides access to real knowledge of God, it is necessarily trimodal and coinherent by analogy.

We can see similar effects when we look not at words and language but at earthly creatures. Camels themselves, as creatures, were created through a Trinitarian operation of God. The Father is Creator (1 Cor 8:6), the Son is Creator (1 Cor 8:6; John 1:3; Col 1:16), and the Spirit is Creator (Gen 1:2; note Ps 104:30, where there is a providential action analogically related to the original creating activity of God). What are some of the implications?

First, in accordance with the classificational aspect, all camels are camels. According to Gen 1:24, they reproduce "according to their kinds." In accordance with the faithfulness of God, they hold to a common pattern fixed by the word of God, the pattern of "being a camel." Camels in their commonness display the faithfulness, the self-consistency, and the unchangeability of God, as Rom 1:20 indicates. The Word is who he is from all eternity (John 1:1a). So derivatively, analogically, camels are what they are in constant conformity to the pattern specified in the constant word.

Second, in accordance with the instantiational aspect, each camel is particular. It is this camel and no other. Each camel is an instantiation. It is a particular being, not simply camelness, not simply a camel, but *this* camel. The Word is himself particular, in relation to the category of God. Derivatively, analogically, the Word calls forth particular creatures (Ps 104:30; 147:15). These creatures exist and are sustained in conformity with the word that creates them (John 1:3; Heb 1:3). Each camel displays the control of God over details, and each camel displays the creativity of God through its creational uniqueness in being what it is.

Third, in accordance with the associational aspect, all camels exist in contextual associations. Camels live in certain ways, eat certain foods, are used by human beings for certain purposes. The eternal personal association of the Word is the original to which all creational associations analogically relate.

Word and Thought

So far we have focused almost wholly on words and expressed language rather than on thought. Do the same considerations apply to thought as well as to language?

In God there is a close relation between thought and word. "I make known the end from the beginning, from ancient times, what is still to come. I say: My purpose will stand, and I will do all that I please" (Isa 46:10). In the clause "I make known . . ." God speaks of what he is making known to human beings, and hence he includes his words to them. In the later clauses, "My purpose will stand," and "I will do all that I please," he speaks of his will, his inward thought if you will. Clearly his word is in conformity with his thought.

We might infer the same conclusion from John 1:1. The Word of God is an expression of his thought, in analogy with the fact that the words of human beings express their thoughts. In this close relation between thought and word, the thought belongs preeminently to the Father, while the Son is his Word. On a human level, we may say that the relation between human thought and human word is analogical to the relation between the Father and the Word. In consequence, the same fundamental mysteries confront us with respect to both thought and word.

Ontological Trinity and Economic Trinity

Before we go on, we should include one clarification. In the analogical relation between God and human language, are we considering God as he is in himself, the ontological Trinity, or God as he reveals himself to us, the economic Trinity? We should recognize that much of the Bible focuses on God's relations to us and the historical outworking of redemption. God's Trinitarian character stands forth most fully and eloquently in the redemptive events where the Persons of the Trinity have a distinct role (e.g., Matt 3:16-17; Acts 2:33; Rom 8:11; 1:4; John 16:13-15). God reveals himself to us through the "economy" of redemption. We understand the Trinity through the economic relations of the Persons of the Trinity in their functions in creation, redemption, and consummation.

In John 1:1 and elsewhere, the Bible does sometimes focus more directly on aspects of the *ontological* Trinity, that is, on God as he is in his own existence before creation and independent of creation. But even here we recognize that the language is crafted for the purposes of nourishing our faith, enlarging our understanding, and promoting our redemption. Hence the language as a whole is tied in with "functional" or "economic" purposes.

Since God is our standard and his word is our standard, there is nothing more ultimate than this revelation of himself. We believe that God is true. He truly reveals himself, not a substitute. We believe it because God says so. Hence we believe that God is in conformity with what he reveals. The Trinity in economic operations reveals the ontological Trinity. Hence, I have not tried to separate in any strict or exhaustive way between functional (economic) and ontological statements. Such separation on the part

of a creature would itself be a repudiation of creaturehood. The analogies we explore deal with God in both respects, ontological and economical.

The Reform of Would-be Autonomous Categories

Now what are the implications for ontology? First, consider the medieval controversy between realism and nominalism. Realism maintained that universals had a "real" existence, whereas nominalism contended that universals were simply humanly convenient names for collections of individuals. Realism tended to exalt the unity of the universal, the class, at the expense of diversity. Nominalism tended to exalt the diversity of particulars, the individual things, at the expense of unity (the universal).

This dichotomy is in fact a false one. Unity and diversity are equally ultimate. Unity of the universal, that is, the class or "kind," is an expression of the classificational aspect, while diversity of the particulars is an expression of the instantiational aspect. Both presuppose each other and neither is more fundamental than the other. There is no such thing as a "pure" universal graspable apart from particularities of instances. There is no such thing as a "pure" particular apart from the (universal-like) features that it possesses according to the plan of God. The unity of class and the diversity of particularity both rest on the ontologically ultimate unity and diversity of God, as expressed in the classificational and instantiational aspects, respectively.

Our analysis has still broader implications, applicable to Western philosophy as a whole. Since before the days of Plato and Aristotle, Western philosophy has concerned itself with fundamental ontology. What is the fundamental ontological character of things? Philosophy has endeavored to explore this ontology through human thought and human language. Philosophers produce systems of categories. These categories supposedly enable us to obtain insight into the systematic character of the world. For example, in Plato, the categories of "form" and "good" and "idea" play a key role. In other philosophies the categories may be different. But some particular categories always play a key role. The philosopher holds forth these categories as particularly promising for understanding the world. In the time of Descartes and Kant, philosophy came to focus largely on epistemology rather than simply on ontology. In the twentieth century, it has focused on language. Through all these variations, fundamental categories have played an important role.

Now what do these categories look like under close inspection? We have to do with words. These words belong to human language. And as we have seen, human language is not autonomous or self-sufficient. Every single term or category of human language is dependent on divine language. Classificational, instantiational, and associational aspects belong together—they enjoy a mysterious coinherence testifying to God's Trinitarian character. Yet pagan philosophers do not want to acknowledge that dependence. They prefer to walk in darkness rather than light (John 3:19–20).

Characteristically, within the system of rationalist philosophers, philosophical categories pretend self-sufficiency. The categories simply are what they are. They pretend to identify themselves not in the mystery of the Trinity, but in the supposed exhaustive clarity of self-sufficiency.⁹ Typically, philosophers exalt the classificational aspect of categories at the expense of the associational and the instantiational aspects. The categories of classical philosophy supposedly need no associations or instantiation for understanding. In fact, if they *were* needed, association and instantiation would potentially bring in "impurities." The categories are grasped by pure reason or pure insight, independent of ordinary life and personal idiosyncrasies.

To be sure, the categories may typically apply to various instances, but the instances are not necessary for the being of the categories. That is, no instantiation is really needed. The essence of a category remains completely independent of the grubby instantiations through which, in actual life, the categories may have been learned by real human beings. In Plato, the instantiations of the forms actually contaminate the forms and confuse knowledge by bringing in matter. In other cases, with more debt to Aristotle, the forms may exist only "in" their instantiations, but human reason still suffices in principle to distinguish the form from the particularity of its instantiation. The self-identity of what is really common to the instances is still unproblematic.

The rationalist philosopher claims deity by being able to master language in one divine vision. If not all language can be mastered, at least the philosopher masters that crucial piece of language that he needs in order to make the systematic assertions and the universal claims. In the philosophic vision the philosopher triumphs over the mystery of coinherence by reducing everything to the pure identity of a class (the identity of the category). Thus philosophers think that they can manipulate their categories without reference to an associational aspect or an instantiational aspect. The categories are supposedly association-free and instance-free. But philosophers are in fact human beings. Hence, they have themselves learned language from associations and instances. Their present knowledge is not in fact free from the "contamination" of their past learning, nor from their present bodily existence. They themselves are *instantiations* of humanity. Their own thoughts and words are *instantiations* of human thoughts and words. They themselves live within social and historical *associations*, in the context of their own bodies.

Philosophical reflection is idealized. Philosophers project their reflection out toward an ideal that is association-free and instance-free. If they are

⁹ For a similar dissatisfaction with the use of formal modal logic in metaphysics, see James F. Ross, "The Crash of Modal Metaphysics," *Review of Metaphysics* 43 (1989) 251-79. From a Thomistic point of view Ross raises many objections to the attempt to have abstract universals or predicates independent of instantiations (actual individuals to which they may apply). But insofar as Thomism conforms to an Aristotelian view of categories, it is still deficient.

candid and alert, they may admit that this projection is somewhat idealized, yet the idealization is useful, if not necessary, to provide the sort of results that they desire. But we can now see that the particular type of idealization that characterizes traditional rationalist Western philosophy is intrinsically and irreducibly idolatrous. According to this approach, the ideal category is a self-identical classification, but with no instantiational or associational aspect. Or if it has such instantiational or associational aspects, they are trivial and can safely be ignored in philosophical reflection. This view of categories is intrinsically monist or unitarian.

Sometimes philosophers may admit that differentiation exists. But it still comes in at a subordinate, applicational level. Each category is intrinsically an undifferentiable monadic classificational universal; but it does somehow differentiate itself into instances when applied to the real world in practical terms. This differentiation is analogous to the kind of differentiation postulated in a modalistic view of God. Modalistic heresy says that God in himself is one, in a pure undifferentiated manner. God reveals himself in three persons as three modes of revelation or three modes of action of the one original. Threeness (differentiation) occurs in God's contact with his creation, but not in God as he is in himself. Thus, rationalistic philosophy recapitulates a unitarian view or at best a modalistic view of God in its approach to fundamental categories.

If philosophical rationalism is a false trail, what about empiricism? For empiricists the event, the datum, the percept, or the particular instance is fundamental. (Thus modern empiricism is akin to medieval nominalism.) In essence empiricists begin by exalting the instantiational aspect at the expense of the classificational and the associational. At its root, this approach is just as unitarian and just as idolatrous as is the rationalistic approach. The main difference is that the instantiational rather than the classificational aspect is deified.

Moreover, when empiricists *talk* about their views, they talk using categories that are viewed as unproblematic, universal, and self-identical. The categories of "sense data" or "physical objects" or "sense experience" function in the same deified role that belonged to the categories of rationalistic philosophy. Such a result is inevitable. If there is only one level of being and one level of knowledge, one's own analysis, to be correct, must have virtually divine status. It must make universal assertions, and at the same time be exhaustively grasped by the human philosopher.

Subjectivistic or personalistically oriented philosophies have analogous difficulties. Here the ultimate starting point is with the associational aspect. Specifically, we deal not with just any kind of association, but its personal dimension. In the Trinity there is personal interaction between the Word and the Father, according to John 1:1b. Analogously, among creatures, there is personal interaction between persons and their environment. Subjectivistic philosophies advocate unitarianism or modalism by collapsing

the classificational and the instantiatinal into the personal. The classificational aspect comes into being when persons produce the classes that they use to classify their "world"; the instantiatinal aspect comes into being when persons perceive instances. Subjectivistic philosophy has the same difficulty as does all pagan philosophy when it attempts to state itself. The statements come out in language claiming universality in a de-associationalized and de-instantiatinalized fashion. Theoretical formulation falls victim to the same difficulties that beset rationalistic philosophy.

Human language and human categories are in actual fact dependent on our Trinitarian God. They display God's "eternal power and divine nature" (Rom 1:20). In fact, since God's nature is Trinitarian, human language reflects this Trinitarian nature. But non-Christians do not want to submit themselves to the Trinitarian God. They substitute idols, whether idols made of wood or idols of thought. They wish to be autonomous. So they make their idols, in order to govern them as well as to worship them. Their idolatry is manifest in their would-be autonomous approach to fundamental categories.

Idolatry cannot succeed, because there is only one God and God rules the world in righteousness (Ps 97:1-2). Rationalism, empiricism, and subjectivism falsify the very nature of the language that they use. Yet rationalism, empiricism, and subjectivism remain plausible. They appear to give us powerful insights. Why? They are plausible precisely because the classificational, instantiatinal, and associational aspects coinhere. Each is presupposed by the others, as we have seen. But each also involves the others. Each in a sense encompasses the others. The classificational aspect always involves the identification of instances in association. Properly understood, it tacitly includes the instantiatinal and associational as inevitable aspects of its being.

This structure of things is, of course, dependent on the nature of the Trinity. The Persons of the Trinity coinhere. To know Christ is also to know the Father (John 14:9). The indwelling of one Person also involves the indwelling of the others (John 14:17, 23; Rom 8:9-10). Properly understood, each Person offers us a "perspective" on the whole Trinity. Analogously, within the triad of classificational, instantiatinal, and associational aspects, each one offers us a perspective on everything.

Rationalism exploits the perspectival character of the classificational aspect in order to view all of reality through it. Similarly, empiricism uses an instantiatinal perspective and subjectivism uses an associational perspective. All three are parasitic on coinherence. All three fail because they worship their own unitarian corruption rather than the Trinitarian God.

Expressive, Informational, Productive Perspectives

We can arrive at a similar result by considering John 1:1 from another standpoint, the standpoint of communication. We are familiar with instances of human communication. One persons speaks to another, in order

to produce some effect. By calling the Second Person of the Trinity "the Word," John 1:1 invites us to understand the Second Person of the Trinity by analogy with human utterance. The Second Person of the Trinity is the Word spoken by a Person. Clearly, the speaker is preeminently the Father. To whom is this Word spoken, and with what effect? John 1:1 does not say explicitly. But since the speaking takes place from all eternity (John 1:1a), it is not merely a matter of God speaking to human beings or speaking to some other created thing or even to the created world as a whole. In the beginning there was God alone. Hence, we infer that God speaks to himself and finds satisfaction in himself.

Remember now that the eternal speaking of John 1:1a is analogous to God's speaking at the creation of the world in Genesis 1. This speaking in creation is in turn analogous to God's speaking to human beings. God speaks to us through Christ, who accomplishes our redemption. In the realm of redemptive re-creation, the Spirit of God is operative, as in John 3 and Ezekiel 36–37. In 2 Cor 3:3, the Spirit is instrumental in the impact of the word on our hearts: he writes the word on our hearts. To engage in all these operations, the Spirit must himself understand the purpose of God. And so we find places in the Bible that represent the Spirit not only as active and initiating, but as receptive of the truth of God. "He [the Spirit] will speak only what he *hears*" (John 16:13). "The Spirit *searches* all things, even the deep things of God" (1 Cor 2:10).

All these things are true concerning the work of the Holy Spirit in our *redemption*. Since redemption takes the form of re-creation, we are led to expect that the Holy Spirit is similarly operative in the creation of the world. Thus, in Genesis 1 the Spirit of God is present, presumably in making effective the speech of God. The work of the Spirit is also alluded to in Ps 33:6, "the breath of his mouth," and Ps 104:30, "When you send your Spirit, they are created." The Spirit empowers and makes effective the speech of God. The Spirit produces the effectiveness of the word.

In sum, we may say that the eternal Word is the archetypal speech of God. This archetypal speech enjoys three aspects: in its *expressive* aspect, it is the speech of God the Father; in its *informational* aspect, its specific content is God the Son; in its *productive* aspect, it is "searched" and carried into effect in God the Holy Spirit. By analogy, God's speech to us displays these three aspects. It is expressive of who God is, and in it we meet God himself; it is informational and contains specific statements and commands; it is productive in us in blessing or curse—in sanctification, or in punishment, or in judgment. These three aspects are coinherent and presuppose one another, as we would expect. Each is a perspective on the whole. Together they form a perspectival triad analogically related to the Trinitarian character of God.

Note that this new triad, which focuses on communicative *purpose*, is not identical with the former "categorical" triad, consisting of classificational,

instantiation, and associational aspects. In fact, the two triads “intersect,” so that we could consider, for example, how the classificational aspect displays the expressive, informational, and productive purposes of God.

We can use the new triad of communicative purposes to produce a new form of critique of philosophical rationalism, empiricism, and subjectivism. Rationalism projects the idea of absolute rationality or absolute truth. This projection utilizes the informational perspective. But the ideal is unitarian rather than Trinitarian. Rationalism denies that the truth of God is personal (the expressive aspect). And it denies that the truth of God is eternally productive (the productive aspect). Instead, it conceives of truth as a rationalist abstraction independent of its practical effects. Hence the truth so conceived is not ultimately God’s truth, but the rationalist’s own human idea of truth.

Empiricism projects the idea of absolute data, that is absolute effects. It thus utilizes the productive perspective. But again the ideal is unitarian, denying expressive and informational aspects. (The informational aspect is denied in that the data exist prior to and essentially independent of all language.) Note that the result idolizes an aspect of the creation (data) rather than the Creator.

Finally, subjectivism projects the idea of absolute personality, absolute personal expression. It twists the expressive perspective into a unitarian counterfeit. It idolizes human personality instead of the Creator.¹⁰

Reforming Logic

A Trinitarian understanding of language requires also a Trinitarian reform of logic. How shall we think about logic? Logic deals with reasoning. Reasoning is a kind of processing of language or thought or both. Shall we focus on language or on thought? As we have already seen, language and

¹⁰ John M. Frame already arrived at the same conclusion using his triad of perspectives, the normative, situational, and situational perspectives (*The Doctrine of the Knowledge of God* [Phillipsburg, NJ: Presbyterian and Reformed, 1987] 73–75, 89–90, 109–122). He observes that rationalism tries to reduce everything to rules, thus deifying a normative perspective. Empiricism tries to reduce everything to data, thus deifying a situational perspective. Subjectivism tries to reduce everything to the personal subject, thus deifying the existential perspective. Non-Christian category systems are most often rationalistic, in that the categories have no necessary attachment to the data that instantiate them (situational perspective) or the persons who formulate and understand in a personal context (existential perspective).

Alert readers will perceive that expressive, informational, and productive perspectives are analogous to Frame’s existential, normative, and situational perspectives, respectively. But the two sets of perspectives are not completely the same. My triad of perspectives applies archetypally to God and ectypally to creatures. By contrast, Frame’s triad is asymmetric (as he himself recognizes, *ibid.* 63). The normative perspective is focally oriented toward the law, which is divine (*ibid.*). The existential and situational perspectives are oriented toward creatures, namely human persons and the world. Frame’s triad is then an analogical image of mine. I believe that Frame’s approach remains useful in emphasizing the interrelatedness of norm, world, and self in people’s practical, concrete reception of the word of God.

thought are analogically related. The same fundamental truths hold for both. But because language is in a sense more "accessible" for public discussion, we continue our focus on language. All the conclusions apply to thought as well as language.

Logic, then, works on pieces of language. Our conception of language thus influences our conception of logic. The supposed character of the pieces of language forms the basis on which logic must work. Hence, pagan misconceptions concerning language and categories are bound to affect pagan conceptions of logic.

Sure enough, the influence is perceptible with Aristotle. Aristotle undertook to analyze and expound syllogistic logic especially in the *Prior Analytics*. Aristotle recognized that a syllogism is invalidated if there is equivocation in the use of terms. For example, consider the syllogistic form:

All lions are dangerous.

This stone statue is a lion.

Therefore this stone statue is dangerous.

Within Aristotle's system of classification, this particular syllogistic form conforms to the normal structure of "Darii," a valid syllogism of the first figure. But there is an equivocation in the word *lion*. The word *lion* in the first premise includes real lions but not statuary. The *lion* in the second premise includes all statues of lions. The equivocation invalidates the syllogism.

The proper operation of syllogisms thus requires the use of univocal terms. A univocal term must cover a perfectly fixed kind of thing, belonging to one or another of Aristotle's basic categories (see Aristotle, *The Categories*). These categories are the fundamental categories of ontology, the beginnings of Aristotle's metaphysics. For the operation of the syllogism Aristotle needs categories that are perfectly fixed and whose boundaries of definition are perfectly sharp. If perfection fails, equivocation enters.

Now such perfection and such absoluteness of knowledge belong only to God. Aristotle tacitly tries to take a divine viewpoint when he uses categories. Each category is an idealization of the actual character of human language. The idealization pushes for a pure classificational aspect, with no need for instantiational and associational aspects. Like the abstract reasoning of Euclid, it aspires to dispense with the knowledge of particular cases (instantiational) and the interaction of persons with knowledge (associational). Moreover, it attempts to arrive at a language of pure information, without an expressive or productive aspect. The syllogistic premises and the syllogistic structures must exist as formulas independent of the personal involvement and influence of persons who are practitioners of logic—thus the expressive aspect is excised. The syllogistic structure must also exist independent of any concrete application, for the sake of its absolute universality and necessary truthfulness. Only in this way can the reasoning be purely abstract. Hence, Aristotle's categories presuppose the

unitarian ontology that we have already analyzed. The categories must collapse instantiation and association into pure classification. They must also collapse expressive and productive aspects into pure information.

The syllogistic premises must be association-free to guarantee that meaning is not influenced by association or context. The syllogistic premises must also be instantiation-free, in order that the purity of the categories may not be contaminated by the grubbiness of particular instantiations. The syllogism must be what it is independent of the expressivity and productivity of God. Associations, instantiations, expressivity of persons, or the particulars of productivity all threaten to introduce equivocation.

Thus, within Aristotle's system, syllogisms can operate *only* with unitarian ontology. Hence syllogistic reasoning is itself tacitly unitarian. Only so can one claim that the reasoning is mechanically valid. The nineteenth and twentieth centuries have seen the rise of alternative accounts of logic, by Frege, Russell and Whitehead, C. I. Lewis, and Arend Heyting, among others. There are considerable variations. But all formalized logics retain the fundamental Aristotelian approach to categories. In order for the logics to work, the categories must be perfectly stable, in the unitarian sense.¹¹

Do we then throw out logic, and become pure irrationalists? Certainly not. God is faithful and does not lie (Num 23:19). Jesus Christ is the truth (John 14:6) and opposes lying (John 8:44-45). God's loyalty to himself forms the only foundation for logical consistency. Pagan logics are attractive and plausible because, for all their idolatry, they are parasitic on the self-consistency of God. Hence, we do not eliminate logic, but we reform it. God's self-consistency is the foundation for all human consistency. God's self-consistency is intrinsically Trinitarian in character. Hence reformed logic will be analogically Trinitarian. In this article we can only sketch the basic directions that such a reform may take.

Substitution in John 5:19-26

All human thinking and our categories as well are intrinsically analogical. They are imitative of God—though sinners attempt to twist this relation.¹² All categories are analogical rather than univocal. Recall that Aristotelian syllogisms require univocal terms. Hence, there is no such

¹¹ Superficially, the fuzzy logic of Lotfi Zadeh, growing out of Lukasiewicz's work on multivalued logic, might seem to be an exception (see, e.g., Lotfi Zadeh, "Fuzzy Sets," *Information and Control* 8 [1956] 338-53; id., "Quantitative Fuzzy Semantics," *Information Science* 3 [1971] 159-76; Bart Kosko, *Neural Networks and Fuzzy Systems: A Dynamical Systems Approach to Machine Intelligence* [New York: Prentice Hall, 1991]). Zadeh's concept of fuzziness produces an interesting analogue to the phenomena of fuzziness in the classificational aspect of words and categories in natural human language. But it still does not include in any integral way the instantiational and associational aspects.

¹² Even fallen human beings do not cease imitating God, though they do so with the twist that they attempt to imitate his autonomy by making themselves gods (cf. Gen 3:22)!

thing as a valid syllogism in the Aristotelian sense. Moreover, God is self-consistent and is faithful to himself (2 Tim 2:13). His reliability and consistency offer the only firm foundation for logic in all its aspects. We know as a matter of broad, general principle that God is the foundation. But we can also explore some particular instances.

As an instance, let us consider how God's self-consistency applies to phenomena of substitution in formal logic. We may start with John 5:19, 21, and 26: "... whatever the Father does the Son also does. . . . For just as the Father raises the dead and gives them life, even so the Son gives life to whom he is pleased to give it. . . . For as the Father has life in himself, so he has granted the Son to have life in himself." This passage exhibits some logical reasoning. We might compare the reasoning to formal logic in several ways. Verse 19 is analogous to a formal implication, namely, $(x)(\text{the Father does } x \supset \text{the Son does } x)$, where x ranges over predicates and " \supset " is the symbol for formal implication. In type theory, x would be a "second-order" variable.

In v. 21 we can single out two propositions, namely that the Father gives life and that the Son gives life. If b represents the predicate "gives life," then we can obtain a deduction as follows:

1. $(x)(\text{the Father does } x \supset \text{the Son does } x)$
2. The Father does $b \supset$ the Son does b .
3. The Father does b .
4. Hence the Son does b .

The first step in the deductive pattern above is the substitution of a particular instance b for the variable x . The substitution of b yields an instantiation in line 2 of the general principle expressed in line 1. The kind of instantiation here is *analogous* to the instantiation that we earlier saw in John 1:1, where the Word is an "instantiation" of God. The Word manifests all the attributes of deity. Analogously, line 2 manifests an instance of the truth in line 1. The Word is faithful to what God is. Analogously, line 2 is faithful to what line 1 is.

As a general *formal* pattern, the relation between line 1 and line 2 is a matter explored in formal derivations in formal logic. It is analogically related to the way in which the Word is an instantiation of God. In virtue of the Creator/creature distinction, the Trinitarian relations are basic and the formal patterns derivative. The formal patterns thus depend ultimately on the self-consistency of God and the faithfulness of the Persons of the Trinity to one another and to the perfections of deity.

It is worth noting that formal expression of the derivation, in the way that we have stated it in lines 1 and 2, is not of the essence. There are several ways in which the dynamics of derivation are rich, complex, and mysterious. First, the truth relations hold when they are expressed more informally and tacitly, as in John 5:19-26. The formal summary is secondary to this meaning that can be expressed in a variety of informal ways.

Second, the derivation holds only if the instantiation is appropriate. In order for the derivation to be proper, we must know that instance *b* is genuinely within the range of the quantifier in line 1, namely “(x)”; *b* must be an *appropriate* substitute. What is appropriate? We earlier specified that *x* is a “second-order” variable, a variable over predicates. Hence *b* must be a second-order instance, a particular predicate. It works to say, “If the Father loves, the Son loves,” or “If the Father has life, the Son has life.” It does not work to say, “If the Father apple, the Son apple,” because an apple is a first-order instance; it is a thing rather than a predicate.

In fact, the situation is even more complicated, because there are still exceptions. If we mechanically substitute for *b* the words “begets the Son,” we obtain “If the Father begets the Son, the Son begets the Son.” Such a substitution is obviously not an appropriate instance within the intended range of (x). The universality of “(x)” extends over all the usual attributes of God, but does not include actions unique to one Person of the Trinity. Since God is incomprehensible, we cannot specify beforehand exhaustively all the instances that will or will not be within the range of (x), though we have a general idea. In general, we may say that *b* must be a genuine instantiation of the generality expressed in line 1. A genuine instantiation of something (in this case, of the variable *x*) is what it is by virtue of being in analogical relation to the archetypal instantiation, namely the Word as an instantiation of God in John 1:1. Hence the derivation depends on the being of the Word.

Third, the derivation holds only if the occurrences of *b* have a stability and self-identity. We need to be confident that the various occurrences of *b* in line 2 have analogous functions, else we may be actually dealing with several distinct entities *b*₁, *b*₂, *b*₃, etc. The instances of *b* have a stability, classificational identity, and distinctiveness only in analogical relation to the archetypal classificational self-identical stability of God the Father. Hence, the derivation depends on the being of the Father and the self-identity of the entire Godhead.

Fourth, the derivation holds only if the statement in line 2 is viewed as interpreted with associations and context similar to the context for understanding line 1. (Otherwise, we may be dealing with equivocal use of terms.) The sharing of associations is what it is in analogical relation to the sharing of association in John 1:1b, where the Word was with God in the association with the sharing of the Holy Spirit. Hence the derivation depends analogically on the being of the Spirit.

The point of these observations is that derivation by substitution is never the merely mechanical process that many specialists in logic imagine it to be. Derivation always depends on the support of concepts of instantiation, classification, and association. We must always judge whether a given case has the right sorts of instantiation, classification, and association. The judgment relies on appeal to a standard. And the ultimate standard is no other than God himself, in his Triunal character.

We may make analogous observations using the informational, expressive, and productive perspectives. When we inquire concerning the correctness of the form of the substitution in line 2, we focus on the informational perspective. Thus, we ask ultimately whether the substitution conforms with the character of the Word of God, as the standard for all human language patterning. But the informativity of the Word coinheres with the personal expressivity of the Father as the speaker and the productivity of the Spirit as the one who searches divine meaning.

Hence, in particular, we cannot ultimately evaluate the informational aspect of a syllogism without taking into account *who* is speaking (the expressive perspective). Who is making the substitution and setting forth the result? If an unbeliever makes the substitution, the result looks “formally” correct—it appears to be the same result that we as believers would obtain. But what person’s understanding of the result is decisive? The unbeliever understands the result and the process as well in a distorted fashion, since in the bondage of idolatry he does not relate it properly to the archetypal knowledge in God. And would-be knowledge not properly related to the archetype is in fact defective. The associational relations are different for the believer and the unbeliever. Only by denying the relevance of the associational aspect (and thus falling into unitarianism) do we avoid the conclusion that believer and unbeliever do not do exactly the same thing when they go through a process of substitution.

Similarly, the productive perspective is an irreducible aspect in evaluating the informational aspect of the process of substitution. We must ask what is being referred to. In this case, we refer to the Father and the Son, and once again the unbeliever is incapable of understanding the referent in the same way that the believer does.

Modus ponens in John 5:19–26

As another case, consider the derivation of line 4 from lines 2 and 3. The formal pattern here is the pattern of *modus ponens*. Supposing that *p* is true and that *p* implies *q*, we may deduce that *q* is true. In this derivation, it is crucial that we understand the nature of the premise “*p* implies *q*” or symbolically $p \supset q$. What is being connoted by the word *imply* in such a context?

Our starting point is the fact that “as the Father has life in himself, so he has granted the Son to have life in himself” (John 5:26). We are dealing with an intimate relation between the Father and the Son. Elsewhere John speaks analogously of the fact that “the Father loves the Son and has placed everything in his hands” (John 3:35). This giving of the Father to the Son involves the Spirit, who is the Spirit of love (John 3:34). We have seen above that the intimacy between the Father and the Son takes place through the

Spirit's capacity of indwelling. Hence, the "implication" involved in the Son's imitation of the Father is an implication from the dynamic of the Spirit.

When we say that "the Father has life in himself," we focus on the Father. When we say that "the Son has life in himself," we focus on the Son. When we say that "if the Father has life in himself, so does the Son," we focus on the relation between the Father and the Son, and thereby we tacitly involve ourselves with the Spirit. Thus, in the total derivation we involve all three Persons of the Trinity. In the initial premise of line 3 we have the Father; in the implicational premise of line 2 we have the Spirit, and in the conclusion of line 4 we have the Son.

It is customary to regard such a derivational process as a particular application or particular instance of a general, abstract, impersonal principle, namely the abstract principle of *modus ponens*. But what is the standard by which the operation of *modus ponens* in human reasoning is to be judged? Clearly, God is the Original to which human reasoning must conform. Hence, the derivation in John 5:19-26 is not "an" application of a higher and more exalted principle that is just "out there" independent of God. Rather, the derivation is an instance of personal Trinitarian communion, and this communion is the standard for all human application of *modus ponens*. To put it provocatively, the *Original modus ponens* is not an abstract principle, but God himself in the mystery of his Triunity. Human instances of use of *modus ponens* are to be evaluated according to whether they show appropriate analogical relation to the Original.

From this understanding of the ontological roots of *modus ponens*, we can see many ways in which the operation of *modus ponens* involves something other than pure Platonic abstraction. To begin with, in the archetypal *modus ponens* of God, the movement "p implies q" involves the giving or "granting" by the Father. "He has *granted* the Son to have life in himself" (John 5:26). This granting takes place in connection with the granting of the Spirit, who is the heart of the bond of love between the Father and the Son: "For the one whom God has sent speaks the words of God, for God gives the Spirit without limit. The Father loves the Son and has placed everything in his hands" (John 3:34-35). Without the Spirit and without the granting of the Father, there is no such thing as *modus ponens*. It is inconceivable that the Father would *not* love the Son and would *not* give him the Spirit. Hence we can rely on *modus ponens*. But note that *modus ponens* rests not on abstract impersonal law, but on the love of God and the character of God.¹³

¹³ The operation of logic rests ultimately on the eternal, ontological Trinitarian character of God. But human beings come to know of logic through the economic operations of God in creation, providence, and revelation. As usual, God acts economically in accord with who he is ontologically.

More broadly, use of *modus ponens* involves dependence on classificational, instantiational, and associational aspects. Consider *modus ponens* in the schematic form:

p.
p implies q.
Therefore, q.

For *modus ponens* to work properly, the p in the two premises must be classificationally the same. The q in the conclusion must be classificationally the same as the q in the premise "p implies q." This classificational sameness is analogically derivative from the sameness of the Father and the Son in the archetypal *modus ponens*. Next, the whole argument must be an instance or instantiation, a genuine analogue of the archetypal *modus ponens* in John 5:19-26. Formal correspondence is not enough, unless we know that the meanings of "implies" and of the total structures are genuinely analogous to the archetype. Third, the whole argument depends on personal associations for its interpretation and application. Marks on paper mean little unless there is a language in which to interpret them. Likewise for abstract mathematical symbols like *p* and *q*.

We can specify still other ways in which *modus ponens* interacts with contexts. For example, using the informational, expressive, and productive perspectives, we may stress that any given example of the use of *modus ponens* involves all three perspectives inextricably. According to the informational perspective, the use of *modus ponens* must be an expression of language in conformity with the divine archetype. This conformity means that we can cast the use into the formal structure: p; p implies q; therefore q. But in addition to the informational perspective, we may use the expressive perspective and the productive perspective. In most real, practical uses of *modus ponens* we need to know that p is true and that "p implies q" is true. We obtain these premises from other sources, including observations about the world (a creational productive focus). Having obtained the conclusion q, we also use it by reckoning with what it says about the world (productive focus). In every step of this process, our interaction with the world ought be in conformity with the Spirit's archetypal productivity in the world. At the same time, in all these reflections it is *we* who do the operations. The focus on *us* is expressive. Our own persons must be in conformity with the original expressivity of the Father. For the operations to be of any use to us, we must in some way know what we are doing and be convinced that it is true or valid or useful.

If we had time, we could explore the divine origin of other logical rules. For example, we could see how in John 16:13 the law of excluded middle has its archetype in the distinction between the Spirit and the Father. In John 16:14-15 we see operation of various aspects of predicate logic. The distinction between truth and falsehood derives from the loyalty of love between the Father and the Son (John 14:30-31; 16:13).

The Nature of Formal Logic

Modern formal logic or mathematical logic may appear to evaporate all personal and associational factors in reasoning, including the presence of the Trinitarian God. Apparently, reasoning means just pushing around abstract symbols. But the evaporation of association is illusory. The logician has ideas about how the symbols are going to be applied; but such ideas reside in the logician's mind rather than on paper. Or they come out on paper in the natural language explanations that introduce and frame the formal symbolic material.

The formal symbolic material "works" to bring impressive results partly because it is controlled by a personal logician who imparts significance. But more ultimately, it "works" because the symbolism is analogous to the formal structure or grammatical structure of parts of natural human language. The symbolism provides a kind of picture (analogy) of certain regular classificational features belonging to practical derivations in human language. These practical derivations "work" because they are analogical instantiations of the archetypal divine *modus ponens* and other aspects of divine self-consistency. *Modus ponens* is *intrinsically* an analogical concept. So is the law of excluded middle and other laws of logic, because all such laws are intelligible only through analogical relations to a divine, Trinitarian archetype.

Formalized logic "works," in a certain sense, if we regard it as a convenient summary and schematic representation of regular structural features in reasoning that honors God and images God's self-consistency. But not every instantiation that formally conforms to a syllogistic pattern or other formal logic pattern actually has the necessary traction. Not every instantiation enjoys an analogical relation to God such that it is in fact actually valid. Even within an Aristotelian framework, Aristotle has to admit that equivocation destroys the validity of a syllogism. Within a Christian framework, the analogical character of categories makes it necessary to check on the content or meaning of each statement, and to evaluate it within a larger network of contexts, including the context of persons who are reasoning, the situation being reasoned about, and ultimately the context of God himself. In other words, we take into account not only classification but association and instantiation, not only the informational but expressive and productive perspectives.

First, we take association into account. The interpretation of a particular premise inevitably involves a context of persons and world, leading to the ultimate context of God himself in his Trinitarian fellowship. Apart from this interpretation, there is no assurance that *p* and *q* are what they are and that the terms are sufficiently stable in classification to avoid the fallacy of equivocation.

Second, we take instantiation into account. As human beings, we have always come to understand *through* instances. Moreover, all instances are

instantiated witnesses to God's creative power and his presence in the world (Rom 1:19-21). To interpret the premises we utilize the background of instances through which we understand each premise. We also know that the total structure is one *instance* of *modus ponens*, an instance expressed in language by a particular person, at in a particular time, and through a particular medium. Without such interpretation, again there is no stability.

Validation in reasoning also depends on God. Validity and truth in human reasoning depend on the original self-validating and self-confirming character of God, whose word is truth (John 17:17). Christ is the Word of the Father (John 1:1), the truth (John 14:6), and the wisdom of God (Col 2:3; cf. Matt 11:28-30). The self-validation, self-confirmation, and truthfulness of God are not unitarian but Trinitarian in character. The Father testifies to the Son and the Son testifies to the Father, in order that validation may have two witnesses (John 5:36-37; 8:17-18; 7:18; 8:54; 13:31-32; 17:1-5). The Holy Spirit is also witness (John 15:26; 16:9-10). Hence validity and truth depend on the personal presence of God in his Triunity. Validity in reasoning is never self-sufficient, but dependent on the validation of God through the giving of the Spirit of truth.

Within a biblical worldview, logic is personalist. Or better, it is Trinitarian. It is Trinitarian in origin, in the sense that the being of God, in his self-consistency, is the Origin for the creation of human beings and their reasonings. It is Trinitarian as to standard, in that Trinitarian commitment in love is the archetypal standard to which human reasoning must be compared. It is Trinitarian in purpose, in that the glorification of the Persons of the Trinity is the goal of logical consistency. Let us now explore briefly some ways in which our reformed understanding of logic impacts evaluation of theological "paradoxes."

Theological Paradox: The Trinity

Is the doctrine of the Trinity a "paradox"? It is a paradox according to the common opinion of human beings. But of course the common opinion of human beings is not the ultimate standard by which we measure real truth or the intractability of problems. Within a biblical worldview, the doctrine of the Trinity is not a kind of inexplicable surd that violates known logic. Rather, God is the very foundation of logic, and so of course logic properly understood confirms rather than challenges the doctrine.

How does this kind of logic work in practice? Consider the argument of Jehovah's Witnesses from John 1:1. In John 1:1b, the Word is with God. Hence, according to Jehovah's Witnesses, the Word is distinct from God. Word \neq God. In John 1:1c, either Word = a god or Word = God. Hence Word = a god. We might bring various exegetical objections to bear on this piece of spurious reasoning. But we may best illustrate the functioning of Trinitarian logic by examining the reasoning process itself.

Consider first the premise, "Word \neq God." Distinction or classificational nonidentity in this premise is derivative from the archetypal distinction or nonidentity of the Persons of the Trinity. This distinction coinheres with instantiational and associational aspects relating to the Persons of the Trinity. The Word is nonidentical with the Father only in the instantiatedness of the Word as being God. The first premise cannot be true unless we set it in the context of the archetypal divine being. Once we do so, it is clear that the Jehovah's Witnesses' understanding of the premise is false.

Consider the identification of the word "God" used in the premises. For checking the validity of the argument, we must understand this word in terms of its classificational, instantiational, and associational aspects. Reflection on these aspects once again destroys the argument, because "God" in the first premise most naturally refers to the Father, while "God" in the second refers to the Godhead, with the classificational aspect in prominence.

Consider also the derivational process from the premises to the conclusion. Since the conclusion is dishonoring to the Son, the Spirit refuses to honor it (John 16:14). The derivation does not conform to the divine archetype, and therefore is illicit. Logic, properly understood, depends on the Trinity. Hence Jehovah's Witnesses cannot disprove the Trinity using logic (properly understood).

Logical Circularity

Our observations involve circularity, of course. We rely on our knowledge of the Trinity to arrive at a form of logic that prevents people from attacking the Trinity. But what do we expect? We are creatures. Circularity expresses our status as dependent on God. We must rely on God in order to praise God and in order to reason about him.

The archetypal knowledge of God is also "circular" in a sense. The Father knows the Son and the Son knows the Father (Matt 11:27). The Father testifies to the Son and the Son to the Father (John 5:36-37; 8:18; 17:6-8). Circular reasoning is licit when it is validly dependent on the archetypal knowledge of the Father and the Son. It is illicit when it sets up idolatrous substitutes. Hence, the idea that all "circular reasoning" is fallacious is itself fallacious. It is not only fallacious, but idolatrously fallacious, since it is in tension with who God is as ultimate standard.

Theological Paradox: Divine Sovereignty and Human Responsibility

We may note briefly how this reformed approach to logic affects arguments concerning divine sovereignty and human responsibility. Consider the following argument:

1. Human beings are ethically responsible in many of their actions.
2. If a human being is ethically responsible for a particular action, that action is unconstrained.

3. If God causes an action, that action is constrained by him.
4. Hence, the actions in which human beings are ethically responsible are not caused by God.
5. If God does not cause an action, he is not sovereign over that action.
6. Hence God is not sovereign over many human actions, namely those actions that are ethically responsible.

How do we evaluate this sort of argument? Typically, people follow one of four options. First, they may claim that the argument is substantially correct, and use it as one argument against the existence of God. Second, they may claim that the argument is substantially correct, and therefore conclude that Arminians or Pelagians are right: a god of some kind exists, but he does not sovereignly control many free human actions. Third, they may think that the argument is technically incorrect by conventional Aristotelian standards. Some of the premises are untrue, or there is an equivocation, or there are still hidden premises that are incorrect. Fourth, people may substantially accept the argument, but claim that the relation of God to human beings involves paradoxes that are insuperable.

Along with the fourth category of people, I believe that God is incomprehensible, and his relation to human beings is incomprehensible. We know God truly, but there are impenetrable mysteries in our understanding. But I would also challenge the correctness of the argumentation on another ground, namely that it does not conform to divine standards of validity.

In particular, the categories of "cause," "responsibility," "constraint," and "sovereignty" are analogical rather than univocal. Reasoning using these categories is valid when it relates in a proper analogical fashion to God's standard. When we reflect on the divine standard, we find that the Father causes the resurrection of the Son (Rom 8:11) and the Son causes his own resurrection (John 10:18). The Son is responsible to obey the command of the Father (John 12:49-50) and the Father is responsible to fulfill his promise to the Son (John 17:1-2; Ps 2:8-9). The Son is constrained so that "the Son can do nothing by himself; he can do only what he sees his Father doing" (John 5:19). At the same time, the Son is free (John 8:35-36) and saves whoever he chooses (Matt 11:27).

It follows that human beings are responsible, free, and constrained, respectively, by analogy with the responsibilities, freedom, and constraint of the eternal Son. There is no "logical paradox" in these truths because logic and paradox alike are defined and determined by the Son's relation to the Father, through the Spirit.¹⁴

¹⁴ At this point I seem to be in tension with Van Til, since Van Til repeatedly asserted that Christian teaching is irreducibly paradoxical (*Defense*, 44-46; id., *Common Grace and the Gospel* [Nutley, NJ: Presbyterian and Reformed, 1972] 9; see the discussion in John M. Frame, *Van Til: The Theologian* [Phillipsburg, NJ: Pilgrim Publishing Company, 1976] 13-37). But the tension is more apparent than real. Since the Trinity is incomprehensible, I insist as much as

Logic as Conditioned by Redemptive History

Modern people commonly conceive of logic as independent of history and the particularities of human beings. But it should now be clear that this conception is confused. God is unchangeable. Hence the divine archetypal logic is unchangeable. But human understanding undergoes development. Human reasoning and human use of logic are dependent on knowledge of God and are guided by it. This truth should be obvious from the very character of human thought, which should "think God's thoughts after him." But this dependence becomes more obvious when we root logic in the Trinitarian character of God. God in his Triunity decisively reveals himself through the redemptive work of Christ in the NT. The full revelation of the character of God, the being of God, and the logical self-consistency of God comes in the form of a climax of redemption in the person and work of Christ.

Before the coming of NT redemption, human beings knew God less fully. This deficiency is not an incidental fact arising merely from some mental or moral deficiency in the individual or the society. It is an inevitable consequence of the very structure of history and the structure of redemption. Human knowledge of God can grow only in step with the redemptive operations that work out God's plan. Consequently, God's Trinitarian character is only dimly revealed and dimly understood in the OT. Trinitarian theology in its full form rests on NT revelation.

Hence, the human development of Trinitarian logic requires NT revelation. The fullness of logical understanding requires a fullness in development

Van Til does on the mystery and nonexhaustiveness of all human knowledge, including human knowledge of logic. The one and many of the Trinity and the question of divine sovereignty and human responsibility are not resolvable by human formulation or logical analysis in any way that would dispense with the analogical character of human knowledge.

My statements do, however, differ from Van Til's in their *terminology*. I resort to a new formulation in order to provoke people to think further along the very lines that Van Til laid down. In particular, apparent contradictions appear to be contradictions only against a standard for what a contradiction is. Since the standard is God himself, there can be no real contradiction. Since our *knowledge* of the standard is derivative and analogical, we cannot exhaustively penetrate situations where, by Aristotelian standards or other autonomous standards, there appear to be contradictions. In particular, precisely because God is God, the Creator, there are *disanalogies* as well as *analogies* between him and his creatures. God is both one and three, in a manner that is *disanalogous* to oneness and threeness among creatures. If we insist that logical rules be made perfectly abstract, mechanical, and impersonal, we naturally will formulate rules about oneness and threeness that we claim must apply to all being without discrimination; but such a move betrays a remaining rebellion against the Trinitarian character of true logic. Nevertheless, if there are no logic "tensions" for God, there still may be for us, even when we are Christians. We are called to grow in knowledge in all these areas, and within this life there always remain areas of tension in our understanding. Intellectual growth is a struggle against the principalities and powers (Eph 6:10-20). Van Til emphasizes paradox and apparent contradiction in order to point to the permanent limitations and qualifications of human knowledge; conversely I emphasize that when we feel that so-called paradoxes are a problem, the real problem is our pretended autonomy, not creatureliness. These emphases are complementary.

of redemptive history. Human logic is redemptive-historically conditioned. It is not the same before and after the coming of Christ. Redemption in Christ includes the redemptive reformation of human logic. That reform takes place once and for all in the resurrection of Christ. As the last Adam, the spiritual man (1 Cor 15:45–49), seated at God's right hand, he is the human pattern and exemplar for all redeemed human logic. On the basis of this one climactic event, reformation of human logic takes place in the church through the progressive renewal of our minds (Rom 12:2).

It goes without saying that categories and category-systems are also redemptive-historically conditioned. Understanding categories in their classificational, instantiatinal, and associational aspects grows with the fuller revelation of the Trinity in Christ. Human categories are not univocal, not only because of their analogical relation to God's knowledge, but because of the fact that they undergo change in the course of redemptive history.

The Anti-Biblical Character of Common Alternatives

We have already examined the common pagan philosophical ideal of univocal categories. Plato and Aristotle both share this ideal, though in variant forms.¹⁵ Pieces of this ideal were adopted into Christian theology at an early point—at least as soon as the second century apologists. The apologists and others after them tried to Christianize ideas from the philosophy of Plato, Aristotle, and the Stoics. But Christian critique never went nearly far enough. In particular, the pagan unitarian ideal for categories was never decisively rejected.

One way of Christianizing Plato is to suppose that Plato's forms, which are his fundamental categories, are not independent of God or above God, but are ideas in God's mind (so Augustine). Nevertheless, in their "inward structure" and character the categories remain more or less as they were conceived before within the framework of pagan philosophy. It is only their location that is changed. This kind of Christianizing is in fact superficial and inadequate.

Let us see some of the difficulties. The first difficulty, of course, is that the categories in God's mind are still conceived in an essentially unitarian fashion. They have a classificational aspect, but not an instantiatinal or associational aspect.

We may be modest enough to admit that human ideas about God's categories are not identical with God's categories. Our human ideas always require associations and instantiations for their learning. But the projection

¹⁵ Note also Van Til's analysis of non-Christian philosophy in terms of the problem of the one and the many and rationalist-irrationalist dialectic (e.g., *A Survey of Christian Epistemology* [Philadelphia: den Dulk Christian Foundation, 1969] 47; id., *Defense*, 123–28).

or idealization into God's mind sloughs off these deficiencies and inelegancies. This idea of projection gives rise to a second difficulty: how do we know that we have projected correctly? The existence of an alternative (such as mine) shows that hidden assumptions about the nature of God are coming in. What is the source of these assumptions? How do we justify our view as the *correct* view rather than a view that we imagine to be possible?

A third difficulty is that the categories in God's mind are still being conceived as univocal rather than analogical in their meaning and application. How do we avoid abolishing the Creator-creature distinction? For example, the Second Person of the Trinity is the Son. I am a son of a human father. I have also been made a son of God through Christ. What is the relation among these three occurrences of *son*? If we say that there is only one univocal category here, we deny the unique Sonship of the divine Son. On the other hand, if we have here three distinct categories, with no relation to one another, we destroy knowledge. We know the meaning of the divine Son only by analogy with our experience of human sonship, and conversely we know the meaning of human sonship only because there is a divine Son who offers us the archetype for that meaning.

So we may try another alternative. We may say that there are three categories sustaining an intimate relation to one another. Perhaps there are three subcategories: divine Son, human son of God, and human son of human father. All these are subdivisions within the larger category of generic son. But now the divine Son has apparently become only a differentiation within the wider category, generic son. How do we understand this differentiation or instantiation? And if the differentiation differentiates the divine Son from human sons, then is the association of other possibilities (e.g., human sons) necessary for understanding the distinctiveness of the divine Son? Both instantiation and association have been introduced here. Are they essential to the picture or not? It appears that in this theory we have begun to destroy the association-free and instantiation-free character of divine categories. Hence the initial model is fundamentally flawed.

In addition, when we attempt to patch up the theory, it becomes more speculative. How do we know what is the organization of God's mind? The presumption that we can correctly guess the details of God's mind is arrogant, and God punishes such arrogance through darkening the understanding. Finally, the picture of abstract categories in God's mind is in fundamental tension with the revelation of the Second Person of the Trinity as the Word. The Word is himself the archetype. He is personal, not an impersonal abstraction. He is one Person, not a string of disconnected monadic categories.

In a second approach, we may postulate that categories are created by God. Their origin is simultaneous with the origin of the created universe, as described in Genesis 1. The difficulty here is that placing of categories purely on the side of the creature leads to the denial of the divine authority of the Bible. The message of the Bible is written in human languages and

as such uses created categories. Hence, by this reasoning, the message belongs wholly on the side of the creature. Hence it has no divine authority and power. Moreover, it is hard to see how we can speak truly of God. How can we say that "God is light," when both "God" and "light" are created categories?

The fundamental flaw with all these approaches is the virtual denial of the Creator-creature distinction and the accompanying presumption of human autonomy. Rather than thoroughly submitting ourselves to the revelation of God in Christ, we project an idolatrous unitarian ideal back onto God.

Implications for the History of Theology

Corrupt ontology and logic from Plato and Aristotle has deeply influenced the entire history of Western theology. We have already touched on the Platonic influence on the apologists and Augustine. Augustine became the dominant source for medieval theology, so the influence continued until the revival of Aristotle in the late middle ages. Petrus Ramus was one of the few who attempted to reform logic and move away from Aristotle. But his alternative was just as much a victim of the unitarian ideal as was the Aristotelian system. It should be evident, then, that it is necessary to reform the whole of theology in the light of the Trinity.

The development of the doctrine of the Trinity in the first four centuries was itself not free from the influence of pagan philosophy! But in the struggle to develop the doctrine, philosophical terminology was reformed in order to express truths fundamentally incompatible with the substance-accidence schema as well as the category schema of Aristotle. The Trinitarian teaching of the Fathers and the great creeds uses the language of essence and hypostasis, substance and person. These words can of course be understood in the univocal framework of pagan philosophy, but they are best understood as analogical terms, used in conformity with the Creator-creature distinction to summarize the teaching of the Bible itself and to warn against crucial deviations.

The best theological work of all ages must be similarly understood. The theologians knew God as he is revealed in Christ. Hence, time after time, their theology came out better than what a purely Aristotelian or Platonic framework would have dictated. We need to learn from them, especially since we are doubtless trapped in deceptions and idolatries of our own, tempted by the fads and follies of our own age and culture. What I say, then, is simply this: in the long run, theology needs radical recasting in the light of Trinitarian ontology and logic. In view of the unitarian character of the deductive systems of Aristotle and later formal logics, we must move away from the ideal of theology by formal deduction, which would mean ultimately impersonal, mechanical, association-free and instantiation-free deduction.

How are we to evaluate my own reasoning in this article? I strive to use reasoning analogically consistent with the Trinitarian being of God, and with the logic that I have expounded here. The argument of this article is circular, in the sense that I use Trinitarian logic in order to argue for Trinitarian logic. Such circularity is inevitable, but not vicious.

Implications for Apologetics

The reform of ontology and logic has direct implications for the practice of apologetics. Apologetic reasoning with unbelievers requires, at the very outset of reasoning, the use of categories and the use of logic for reasoning with the categories. To be consistent Christians must adopt a Trinitarian view of categories and Trinitarian logic. Non-Christians are created in God's image and live in God's world. Hence, in spite of themselves, they depend on God and on God's standards for categories and logic. Nevertheless, they constantly try to rebel and escape God in this area as in other areas. As a result, there is no prospect of neutral reasoning. The realities of sinfulness and rebellion confront us in the midst of every attempt at intellectual endeavor.¹⁶

Implications for Other Fields

The view that I have sketched here results in a new approach to language and linguistics. Linguistics requires reform, inasmuch as almost all the major linguistic theories, in their technical linguistic terms, attempt to approximate the unitarian philosophical ideal.¹⁷

This new approach to categories also entails a fundamental reinspection of the sciences, of all academic subjects, and of the use of language in ordinary communication. The fundamental technical and metatheoretical categories used in the various academic subjects all depend on God. But because of the drive toward secularization, this dependence on God is

¹⁶ My reform of logic helps to highlight the uniqueness of Van Til's "transcendental" presuppositional approach to apologetics. According to Van Til's understanding of biblical theism, God in his Triunity is foundational for every category (classificational), for every particular (instantiational), and for every relation (associational), as well as for every step in logic. Hence in the actual practice of apologetic discussion with unbelievers we must presuppose God before we even begin any argument whatsoever. In particular, Van Til's position should not be confused with an approach that seeks to show by a classic *reductio* that all non-Christian thought systems are contradictory according to supposedly neutral, Aristotelian standards, and that therefore Christianity is true. Such a *reductio* operates *within the already-accepted framework of classical logic*. Logic would then exist in unitarian fashion whether or not God exists. Van Til's conviction about the pervasiveness of creational dependence is much more radical. We do not start with "neutral" logic. Rather, we as Christians confess loyalty to God as the foundation for the very categories that underlie the logic that we develop.

¹⁷ However, as noted above, Kenneth Pike's tagmemics is a radical exception. My own approach to language attempts to deepen Pike's work through explicit theological reflection.

radically suppressed (Rom 1:18-21). Thankfulness to God must be restored, and this goal requires radical desecularization.¹⁸

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¹⁸ Herman Dooyeweerd's work attempted to begin a critique of categories and concept-formation in theoretical thought (*New Critique of Theoretical Thought* [2 vols.; Philadelphia: Presbyterian and Reformed, 1969]). The goal was laudable. But in my opinion Dooyeweerd's decision to isolate theology as a special science alongside other sciences greatly suppressed the power of the Bible to reform philosophy. There are also difficulties with Dooyeweerd's fundamental philosophical categories. These categories look suspiciously "abstract" and unitarian, apparently following the model of the fundamentally unitarian Western philosophical tradition.

There are other problems as well. I am disturbed, as was Van Til, by the way that discussion of God enters at a certain third "stage" of Dooyeweerd's transcendental critique (cf. *Jerusalem and Athens: Critical Discussions on the Theology and Apologetics of Cornelius Van Til* [ed. E. R. Geehan; Nutley, NJ: Presbyterian and Reformed, 1971] 74-127). Apparently, Dooyeweerd hopes that his reasoning will carry non-Christian people along with him, at least until this third stage (p. 76). But unless more is said, Dooyeweerd's followers may naively hold to an unanalyzed assumption that the standards of reasoning are common to Christians and non-Christians. The development of Trinitarian logic shows that it is impossible to agree with non-Christians about standards for reasoning and truth.

Dirk Hendrik Theodoor Vollenhoven represented concerns similar to Dooyeweerd in his attempt to reform Christian thought. He gave attention specifically to the area of logic in *De noodzakelijkheid eener christelijke logica* (Amsterdam: H. J. Paris, 1932); id., "Hoofddlijnen der logica," *Philosophia Reformata* 13 (1948) 59-118. See also Nicolaas Theodor Van der Merwe, "Op weg na 'n christelike logika: 'n studie van enkele vraagstukke in die logika met besondere aandag aan D. H. Th. Vollenhoven se visie van 'n christelike logika" (M.A. thesis, University of Potchefstroom, 1958). Unfortunately, in a manner similar to Dooyeweerd, Vollenhoven's fundamental categories remain unitarian.