IV THE PROPOSITION

Pseudo-Thomas' Objectification of Truth

Logic to examine Pocudo-Thomas' treatise on the proposition. Once again, I shall not attempt a complete analysis of the treatise, but a consideration sufficient to show the effect of Pseudo-Thomas' notion of logic as a science of scientific knowledge on his doctrine concerning the proposition. This doctrine is necessary to his logic in order to understand the syllogism, of which propositions are parts. It reats firmly on the foundation of his treatment of the predicables and the categories, where he has explained the origin of the objects understood, which are signified by the terms that are parts of the proposition.

Pirst, previous treatises have been concerned with the things which pertain to the first act of the intellect as objects understood; this treatise is concerned with the modes of signifying those things and the judgment of the second act of the intellect. Second, the previous treatises were concerned with what pertained to the first operation of the intellect, simple understanding, in which the thing is known as to its essence; this treatise is concerned with the second operation of the intellect, composition and division, in which the intellect joins one thing with another, or divides one thing from another, by "to be" and "not to be. a.

Three points must be noticed immediately. First, although Pseudo-Thomas contrasts the complexity of the second operation with the simpli-

^{1&}lt;sub>Proces.</sub> 2_{Tr. VI, chap. xviii; tr. VII, chap. v.}

STr. VII. chap. 1.

city of the first, this simplicity only is relative. We have seen already how he explains the constitution of the simple object understood; that object is a compound of a first-intentional nature and second-intentional determinations; it already has been clothed in the producables, which re-Late the nature in the soul to other natures according to their relations to things outside, and in the categorical intentions, which relate the underatood nature to other objects understood according to the requirements of the natures themselves, grounded on existential relationships of things outside. For Pseudo-Thomas, then, the second operation begins with objects understood, which already have been located in a complex intentional structure by the first ect of the intellect. Second, Pasudo-Thomas' initial description of the performance of the second act of the intellect as a composition or division of things by "to be" and "not to be" is an accurate indication of his view. I shall explain this point directly. Third. Pseudo-Thomas' restriction of linguistic considerations to this and the following treatises is a clue to his view of the relations between the operations of the intellect, for it indicates his notion of signification as communication. This point also will be explained.

What I mean by saying that Pecudo-Thomas' initial description of the performance of the second act of the intellect is an accurate indication of his view, can be shown best by educing his theory of the copula. He explains that a categorical proposition, which is one absolutely, has three parts; two of these, the subject and the predicate, are principal parts, while the third is a verb coupling these two. From his statement, and the exemple he gives—"Han is an animal,"—it appears that he considers the subject and predicate to be nouns and the copula a verb; moreover, although he says that the copula is predicated as a third part, it seems that he considers the copula to be distinct from the predicate as well as from the subject. Pseudo-Thomas alludes to the verb "to-be," in its present-tense, indicative forms, as that verb to which all others are resolved. This allusion seems to me clear evidence that he considered sentences which apparently are composed of only two parts, a noun and a verb-

libid., chap. vi: "Hoe verbum 'est,' quie praedicatur tertium adjacens, dicitur conjunctio, seu copula verbalis."

²Iold.

Ibid., chap. 1.

for example, "Man runs,"—to be reducible to a subject-copula-predicate form, with two nouns and the copula—"Man is running."

Pseudo-Thomas' explicit treatment of the verb bears out this interpretation, for although he says that verbs signify action as such, he incists on the inherence of action in a subject as the reason why verbs normally are restricted to the predicate-place. He is particularly interested in the possibilities for verbs to function as nouns, in the subjectplace, "since our intellect apprehends and signifies the process of action and passion, or its inherence in a subject, as it is a certain thing," and then the verb has the force of a noun. 2 Pseudo-Thomas also explains that a verb belongs in the predicate-place, not only because it signifies sotion as such which inheres in a subject, but also because in every predication there must be a verb, "since a verb imports the composition by which the subject is composed with the predicate." In this context, the explanation seems to me to mean that an unresolved verb must be in predicate-place, since it includes in its sessing the copula, whose proper function is to express the composition of the noun which is included in the meaning of the unresolved verb, with the noun in subject-place. The copula is by itself a part of the proposition, than, although it is a less Profession

My analysis also is borne out by Facude-Phasas' later remarks, for he draws an analogy between the subject, predicate, and copula, and the body, soul, and form of the whole—that is, the concrete components of man and humanity. Now the form of the whole, while it includes both parts, is distinct from them, for it is what the intellect understands of the thing, while they are components of the concrete thing. "Humanity" signifies the form existing objectively in the intellect; the copula, therefore, signifies the two principal parts insofar as they become one object for the intellect. There are, them, three parts of a proposition; the subject and predicate correspond to two things which are compared with each other, while the copula corresponds to the unity of these terms of comparison, insofar as it becomes an object known. Consequently, when

Tr. II. chap. ii. Tr. I. chap. ii. Thid., chap. xii.

Pseudo-Thomas says the second operation of the intellect is that by which things are composed or divided with one another, by "to be" and "not to be," he means precisely that pre-emistent contents are joined or divided in a single object of understanding. The reasons for this view of the proposition will appear when I emplain Pseudo-Thomas' doctrine on truth and judgment.

Pseudo-Thomas' restriction of linguistic considerations to the treatise on the proposition, and those following it, effectively limits the significance of single words to their function as parts of a proposition. Thus, he originally indicated that the treatise on the categories would treat the things signified by parts of the proposition. When he begins to discuss the noun and verb, he indicates that they are understood to be parts of the proposition. When he treats the sentence in general, he says it appropriately is defined by "to cause sense in the mind of another,"—that is, to signify—and he emphasizes the distinction between perfect and imperfect discourse simply on the basis that perfect discourse causes complete sense, while imperfect discourse does not. In this way, he identifies perfect significance with the proposition, and imperfect significance with the terms, which can be considered only insofar as they are parts of a proposition.

Since Pseudo-Thomas repeatedly cites Aristotle in this treatise, I think that the indication of three points in Aristotle's On Interpretation, which Pseudo-Thomas does not emphasize, may help to reveal and clarify the significance of what I have just said. First, Aristotle insists on the distinction of simples—even if they are linguistically complex, like "goat-stag"—that are significant, but neither true nor false, from the complexes of thought and speech which are true or false. Second, Aristotle insists that verbs have significance, but denies that any verb, even "to be," by itself can express an assertion. Third, Aristotle makes a clear distinction between significance, on the one hand, and affirmation or denial, on the other; single words have meaning, although their parts

ler. VII. chap. i.

Ibid., chap. 111.

¹⁰¹d., 16^h19-25.

Proces. Sr. VII, chap. i. Sarietotle On Interpretation 16°9-18.

do not, and positive and negative propositions are true or false, although neither their parts nor certain other kinds of sentence are true or false. Aristotle is insisting upon the significance of the parts of a proposition, as well as upon the significance of sentences which are not propositions, and distinguishing this significance from truth and falsity as chargly as possible.

Pseudo-Thomas does remark that noums and verbs have significance, although their parts do not. 2 and he contrasts them with sentences whose parts are significant separately: " however, he does not directly contrast the significance of separate terms with their lack of truth and falsity, as Aristotle does. He points out that cases of a noun. joined to a form of "to be." do not signify truth or felsity; 4 however, he does not insist on the significance of verbs in this context, and seems to indicate that the cases of the noun are not properly significant. 5 In his first description of the proposition he does not mention truth and falsity: 6 in his second description, he mentions it only to contrast the proposition with other sentences which are neither true nor false, not to contrast it with its parts. It is in this same context, however, that he divides inperfect discourse from the perfect discourse which indicates that something is or is not in something—that is, composition and division—and explains the distinction by the imperfection or perfection of sense caused in the sind of the hearer. He then explains that cince the use of speech is to communicate, it is well that perfect and imperfect speech are defined by "to cause sense, or to signify." Thus he identifies perfect significance with the proposition and imperfect significance with the terms, which can be considered only insofar as they are parts of the proposition.

Underlying Pseudo-Thomas' neglect of Aristotle's sharp distinction

Idda. chap. iii.

Did.: "Solum enim nominativus dicitur nomen principaliter, quia per ipsus facta est impositio nominis ad aliud significandus."

Did.: "Bene ergo definitor oratio perfects et imperfects per generare sensus, son significare."

between significance and truth, and his own restriction on the significance of incomplex terms, is his peculiar notion of signification. This notion has two aspects. First, he identifies signification with the communicative value of language—that is, to signify is to cause sense in the mind of another. Second, he considers signification to be related to the linguistic parts of a significant expression as form is related to matter. Therefore, signification is the structure of speech by which it communicates what is conceived by the mind of the one speaking to the mind of the one hearing. From this we can understand why Pseudo-Thomas says, without qualification, that the mind is held in suspense if there is no copula in the expression, since the copula imports the form of the whole—that is, the object conveyed as it is a unity for thought. The copula, consequently, is necessary to the complete significance of any expression.

However, Pseudo-Thomas also considers signification to be the form which makes letters or syllables into nouns. The noun and verb signify objects understood, such as have been analyzed in the previous treatises. Why, then, does he not grant the neun complete significance and admit it to be communicative of a simple object understood? It seems to me that this question cannot be answered without taking into account two factors: Pseudo-Thomas' idea of logic and the place of a treatise on the proposition in logic, and his notion of objects understood and the relation of these to being. First, I shall explain the relevance of these factors, and then I shall attempt to answer the question.

Pseudo-Thomas' notion of logic is that it is a reflexive enalysis of demonstrated conclusions which transforms them into that possession of the intellect which is scientific knowledge. In this undertaking, the treatise on the proposition plays a vital role, for it explains the parts of a syllogism which, in appropriate matter, is demonstration. Not only are the proposition and the formal syllogism directly considered here insofar as they are linguistic expressions, but demonstrative science also is con-

*Su. 18-21, 36-41.

¹ Ibid. "Seu" does not indicate an alternation of things, but of expressions.

Ibid., chap. i. Ibid., chap. iii. Ibid.

This, chap. i. Proem.; VI, chap. xviii; tr. VII, chap. 1.

sidered in the same way, for Pseudo-Thomas says that in demonstrative science, "by the ears of man, he is led through reason to considering the true from those which are proper to the thing." Botice that he does not says "to finding the true" or "to agreeing to the true," but "to considering the true," as if the truth already were present, and required only to be considered with respect to its origination from what is proper to the thing known. Description, then, is required in order that one man, who already is aware of the truth, can communicate his awareness to another; it does not add to what is known about things, but it adds to the intellect's explicit awareness of what it already knows. The logical treatment of the proposition sust explain how to reduce known truth—that is, truth as objective in the intellect-to objects understood, since what is commmigated in demonstrative discourse will be reduced through this middle to content already in the greep of the intellect. Exactly how Pseudo-Thomas performs this reduction will be shown by examining his explanation of truth and the judgment.

Pseudo-Thomas' notion of the objects understood is that they are a compound of a nature and intentions. We have seen already how he explains the origin of these objects in the things outside and in the intellect itself. which begins its action by reflecting upon the nature posited in itself. I have pointed out that Pseudo-Thomas never separates the nature from the intentions. 2 but treats the compound as a unit which cannot be understood except as a whole, although various factors in its derivation must be treated distinctly in the logical analysis. It seems to me that ultimately there is only a single object understood, which is the outire complex of natures and intentions, individuals and their habitudes-all included in the one nature of being. However that may be, it is clear that Pseudo-Thomas considers an object understood to be an indivisible whole insofar as it is an object of the intellect; this whole is reduced to the nature which the intellect possesses, and finally to the nature of being, which includes all the natures, and which is the intellect's primary possession. This view of objects understood does not permit them to be communicated—at least, not in ordinary scientific discourse—since the understanding of them as objects is presupposed by considering the trath

Tr. VII. chap. Mit.

with reference to its origination in what is proper to the thing. For Pseudo-Thomas, we do have an intuition of individual things independent of our knowledge of them; however, the things are not known except insofar as we understand the thing objectively—that is, except in the object understood; consequently, one person cannot communicate an object understood to another, since the other would not have anything to which to reduce the communication, if he did not already understand the object.

Given this notion of logic and this theory of objects understood, a eingle noun or verb cannot be granted complete significance, since it cannot by itself communicate enything. If a potential auditor understands objects, they cannot be communicated to him; if he does not understand objects, nothing can be communicated to him. If he understands objects, but lacks full awareness of the ways in which what he understands can be thought, that awareness can be communicated to him. If he understands objects and has a scientific knowledge of their origin in his own intellectual passessions—that is, if he has read the earlier treatises of this. logic-then demonstrations can be reduced to propositions, propositions to objects understood, and demonstration thereby becomes science-that is. possession. However, that such a reduction is possible implies that the proposition and the demonstration do not add to the content of knowledge. but only to the ammeness of what is implicit in the content already posnessed. In other words, to know propositions adds to reducible objects known. It does not add to irreducible objects known, nor does it add to our knowledge about things outside. I now shall indicate additional evidence for this interpretation in Fseudo-Thomas' statement of his metaphysics of truth and psychology of judgment.

Pseudo-Thomas begins by saying that a proposition is a discourse signifying the true or false. Two points, he says, are necessary for understanding this definitions: 1) what the true or false is; 2) why it belongs only to the proposition to signify the true or false. The exclusiveness of the proposition in signifying the true or false, here, must be referred to other sentences, not to incomplete sentences, for Pseudo-Thomas has just made this distinction and he will begin the next chapter

little, chap. iv.

^{2&}lt;u>IMC.</u>, chap. 111.

by admitting the noun, the verb, and the sentence into the exclusive circle.

What is truth? It is a conformity between the thing and the intellect. This confermity must be a relation of reason; otherwise, truth would be limited to one category. The conformity is not between something in the intellect subjectively and something else, but between the thing as it is in the intellect objectively—that is, the object understood—and the thing in the nature of things. This explains what it means to say that true is to be what is, and not to be what is not, and false is the opposito; since truth consists in this; that the thing is apprehended by the intellect, just as it is in the nature of things. Pseudo-Thomas further explains that truth belongs prizarily to the object understood; secondarily to the intellect, which apprehends the truth; the act of understanding, which is an apprehension of the truth; and the thing in itself, which naturally causes a true apprehension of itself. He also explains the notion of truth with respect to the practical intellect. Finally, he mays that some hold that truth is the conformity of the thing to an intellect informed by a likeness of the thing, while felsity is the disagreement of an intellect so-informed with the thing. This opinion, he concludes, probably can be held.2

Why are truth and falsity only in the proposition? Truth is not in significant speech—whether it is a neum, a verb, or a sentence—except as in a sign. Since signs signify conceptions of the intellect, the true and false are said to be in them, since conseptions of the intellect are true or false. Truth is found in both operations of the intellect. In the first operation, the intellect understands the true, not in the sense that it understands the relation which is truth itself—since that only is inassuch as it is known—but in the sense that it either understands the thing as it is, or is ignorant of the thing. Truth objectively is in the second operation of the intellect, for here the intellect apprehends the conformity as such. The intellect does this by comparing one thing to another—that is, the thing understood to the same thing existing in its own being.

¹<u>Tbid.</u>, chap. v. ²<u>Ibid.</u>, chap. iv. ³<u>Ibid.</u>, chap. v.

But what is falsity? Pseudo-Thomas says: "I say it is similar for falsity." Does falsity occur when the intellect does not apprehend the conformity? Or, when it apprehends a non-conformity? Or, when it apprehends a conformity? Or, when it apprehends a conformity that is not there? Pseudo-Thomas does not say.

what he does eay, is that it will be clearer according to the second opinion. If truth is the comformity of the thing to an intellect informed by a likeness of it, then there will be truth in the first operation, since there will be such conformity, but the intellect will not know the truth. To know the truth, the intellect must compose and divide according to its judgment; if the judgment agrees with things, it will be true—for example, if the intellect judges that it is informed by a likeness of the thing as the thing is. The opposite must be said concerning the false.

I do not see that this explanation solves the problem. How can the intellect judge that it is not informed by a likeness of the thing as the thing is, if what it is judging already is present in the first operation, unless there can be folsity in the first operation?

However Pseudo-Themas might solve this problem, it seems to me clear that he considers the second operation of the intellect to be an advance only for awareness. The true proposition is reducible to the thing understood, the thing outside, and their already existing agreement; although the relation which precisely is truth, is only in being known. According to my understanding of Pseudo-Thomas' theory of the structure of the proposition, the subject will stand for the thing outside, the predicate will stand for the object understood, and the copula will express the unity of the predicate with the subject through the known relationship of truth. According to my understanding of the function of this treatise in the log-ic, the complexities of discourse are reduced here to elements all of which are present for the first operation of the intellect, with the exception of the awareness of the conformity itself. I shall indicate later how the remainder of the treatise deals with various forms of propositions on this basis.

Meedless to say, this account of the metaphysics of truth and the psychology of judgment is not parellel to enything in Aristotle's On In-

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terpretation. On the other hand, Pseudo-Thomas is not troubled by the problem which Aristotle mentions repeatedly: what constitutes a single proposition? This problem does not concern Pseudo-Thomas, I think, because he is not trying to discover precisely what is being asserted whon an affirmation is made, but he is trying to show how propositions can be reduced to a sere awareness of a conformity between two things already known. The only clarification he gives concerning what constitutes a simple proposition is the statement that a categorical proposition—in which there is a subject, a predicate, and a copula-is simple. 2 A simple propesition, then, is one in which there is a direct comparison between an object understood and a thing. The reason for Pseudo-Thomas' lack of emphasis on Aristotle's distinction between truth and significance also appears from his doctrine on truth. For if truth is present in both operations of the intellect, but is communicable only insofer as it becomes an objectprosupposing Populo-Thomas' equation of "to signify" with "to communicate"then significance will belong to propositions and to their parts just insofar as they express truth.

Pseudo-Thomas gives a threefold division of the proposition. First, he divides it between categorical and hypothetical—this is a division of an analogue into its enalogates. Second, he divides it, as a genus, into affirmation and negation. Third, he divides it into universal, particular, indefinite, and singular. He grounds this division on the division of the first three categories. Since everything that is, is because it is one in number, it must be considered whether the proposition is one simply or by exajunction—this pertains to the substance of the proposition. Since the prodicate is the formal part, this pertains to quality—that is, essential quality. Finally, the predicability of the subject must be considered; since quantity follows matter, this division pertains to quantity.

He explains the quantity of non-modal categorical propositions as follows. Something can be predicated of the universal according to the being it has in the scul; such predication is absolute, and no quantity is assigned for it. Something can be predicated of the universal according to the being it has in things outside—either by reason of itself, or by

¹ Aristotle On Interpretation 17°20-24, 18°12-26, 20°15-21°34.

² Ibid., chap. vi.

reason of a singular in which it is. In the former case, the predicate will be either an essential prelicable or a property—"all" signifies such predication—or it will be incompatible with the essence—"no" signifies such predication. In either case, the predicate will be included in or excluded from everything falling under the universal. "Some" and "some... not" signify predication of what belongs to the universal only by reason of some singular in which it is present. If a sign is not given the proposition is indefinite. Predication also can occur concerning a singular subject as such.

In the next three chapters. Pseudo-Thomas deals with the opposition, equivalences, and relations to truth and falsity of pairs of propositions, on the basis of this treatment of quantity. 2 He distinguishes the various kinds of opposition; giving contradictory opposition primacy, he defines it by seven conditions required in propositions for its occurence. There is nothing notable in his treatment of oppositions and equivalences, since these merely indicate how the various linguistic forms fit into the scheme he has established. In the treatment of the relations of paris of propositions to truth and falsity, however, Pseudo-Thomas again introduces the distinction between something predicated of a universal according to itself and according to the singulars in which it is. He calls the first "accessary matter," and the second "contingent matter." In necessary metter, one of the universal propositions is true and its contrary is false; the subaltern particulars follow their universals. In contingent matter, both of the universals are false and both of the particulars are true. Pseudo-Thomas says that his explanation of this point is different from Aristotle's; he says that Aristotle explained the relationship by the incompatibility of the joint presence of contraries, and the compatibility of their joint absence from one subject. He does not comment upon the fact that he is not taking into account the possibility that the matter might be contingent, but that the predicate might apply to all or none of the particulars. Apparently, he considers that every possibility is fulfilled in at least one instance.

Pseudo-Thomas exemines modal propositions in the next three chap-

¹ <u>Thid.</u>, chap. vii. ² <u>Thid.</u>, chaps. viii-x. ³ <u>Thid.</u>, chap. x.

ters. 1 He begins by listing six modal words: "true," "false," "necessary," "impossible." "possible." and "contingent." He dispenses with the first two immediately, since they make no difference in propositions to which ther are attached. 2 He proceeds to make several distinctions with respect to the forms in which model propositions can be expressed. Finally, he eliminates "contingent." saying that it serely means either "possible" or "necessary." Now. this elimination agrees with his treatment of non-modal categoricals, in which he considers the particulars in contingent matter both true, for if it is impossible that any possibility should be unfulfilled in every actual case. it also is impossible that a proposition be either possible or necessary without being determinately one or the other, since it is impossible that a proposition should be known to be true, without the determinate way it is true, also being known. Consequently. Pseudo-Thomas reduces the sodal propositions to non-modal propositions, arranging them on the square of opposition in such a way that "necessary" corresponds to "A." "impossible" corresponds to "R." "possible" corresponds to "I." and "possible . . . not" corresponds to "O." The whole treatment of modal propositions, then, reduces them to merely linguistically-different ways of expressing the same truths understood which are expressed by propositions that are not modal in form; for the purposes of logical reduction, the difference between modal and non-modal propositions is eliginated.

The last chapter of this treatise concerns hypothetical propositions. A hypothetical proposition has two categorical propositions as its principal parts; in this it differs from a categorical proposition, which has two terms as its principal parts. Terms are only remote parts of a hypothetical proposition. Another difference is that the subject of a categorical receives the name of the predicate; this is not the sense of a hypothetical proposition. Rather, the sense of a hypothetical is that there is a necessary connection between the two propositions. Faculo-Thomas is not reducing hypothetical propositions to categorical ones, by indicating truth-conditions; he is requiring a novel condition—necessary connection. It is worth noticing that he treats the parts of a hypothetical proposi-

Toid., chaps. xi-xiii.

Idd., chap. xiii.

Inta.

Ibid., chap. zi.
Ibid., chap. ziv.

tion as he treated the parts of a categorical; although he does not say so explicitly, he seems to consider the connectives to be copulae in hypotheticals, as "is" is a copula in categoricals. If this is his view, then the conditional proposition as a whole expresses a unified object of consideration, and the commentives express the relations of reason which formally constitute the unity of the object considered.

Rypothetical propositions are divided into three species: conditionals, disjunctives, and conjunctives. In a conditional proposition, two categoricals are conjoined by "if." It can be conditional either with respect to the subjects or with respect to the predicates. Several other forms are reduced to conditionals-for example, rationals, in which the conjunction is "therefore;" causals, in which the conjunction is "since;" and temporals. in which the conjunction is "when." It makes no difference to the truth of the conditional whether the categoricals composing it are true, false, or even impossible; for the truth of the conditional depends only on the sequence of the terms. By this requirement. Pseudo-Thomas explains the statement that the requirement for the truth of a conditional is that the antecedent cannot be true without the consequent being true; this statement holds because the necessary relation of the consequent to the antecedent is such that the consequent must be disposed in the same way as the antecedent. Every true conditional, then, is necessary, and every false one is impossible. 2 Pseudo-Thomas does not accept the requirement that the antecedent cannot be true without the consequent being true as definitory; rather, he explains it by the necessary sequence of terms. However, he does not propose what seems an obvious exception to that requirement-namely, when the entecedent is false, and there is no sequence. His conclusion that every true conditional is accessary, and every false one impossible, also seems to ignore this case. I do not see how this unqualified assertion can be saintained formally, except by arguing that a true conditional expresses necessary sequence, and a false conditional purports to express necessary sequence. However, if the purported sequence is not necessary, it is impossible—that is, it is impossible that it should be necessary. From this, it would follow that every conditional either is necessary or impossible; however, it also would fol-

Ibid., chap. vi.

²Ind., chap. riv.

low that if there is no sequence, the conditional is false. It seems, then, that Pseudo-Thomas is presupposing certain material conditions for the formation of conditionals.

Pacudo-Themas next treats the disjunctive, interpreting it strictlythat is, one alternative must be true and the other false. It seems to follow from this, he cays, that a disjunctive-"Either he is healthy, or he is sick, "-is valid only insemuch as a certain conditional-"If he is not healthy, then he is sick,"-is valid. However, while the equivalence helds in this matter. Pseudo-Thomas explains that it does not hold in all satter, since the conditional can be valid when the terms are either contradictory, contrary, or disparate, but the disjunctive is not true in all these cases. He gives this example: "If he is white, he is not black," is brue; but "Either he is white or black," is not true, since the terms are contrary; the same thing holds if the terms are disparate. 1 Peeudo-Thomas does not notice that according to his own method, the disjunctive form for the given conditional should be: "Sither he is not white, or be is not black." since he has transformed the conditional to disjunctive in the valid case by negating the entecedent. A pair of terms is disperate if they could not be predicated of the same thing at the same time, even though they are not contredictory or technically contrary-for example, "man" and "coat." Pseudo-Thomas seems to attend only to the point that there is a necessary sequence between an antecedent predicating one of a pair of contradictory, contrary, or disparate torms, and a consequent negating the other; but that there is not always a disjunction between a pair of propositions in which both such terms are predicated alternatively. since two such propositions can be false together.

In a conjunctive proposition, there is no conditional relation; both parts of the conjunction must be true. The conditions for the three types of hypothetical propositions differ in this way, that a conditional can be true if both parts are false, a disjunctive can be true if one part is false, and a conjunctive cannot be true unless both parts are true. The conjunctive, however, has been reduced to the truth of the categoricals compasing it, while the conditional and disjunctive have not.

libid.

If this discussion of hypothetical propositions had reduced them all to truth-conditions, it would be easy to understand its place in this treatise, for them they would be merely complex linguistic forms, completely intelligible in terms of the principles Pseudo-Thomas has established in his analysis of truth, judgment, and the categorical proposition. However, no such reduction is intended; even in the case of the simple conditional-"If comething is a man, it is an animal,"-be has denied equivalence to the corresponding estagorical, since "animal" is not predicated of "men." Pseudo-Thomas does not explain clearly what the means for reduction to prior principles is. However, there are two clues in the discussion. First, he seems to think that hypothetical propositions always involve reictionships between terms in necessary matter, as he has previously defined it. for even in the case of disparate terms, as he treats them, their joint impredicability of the same subject is necessary. Second, he sometimes refers to hypothetical propositions as valid, rather than true, and he emphasizes the sectiones of terms.

From these points, it seems to follow that Pseudo-Thomas thinks hypothetical propositions express a relationship among objects different than that expressed by categorical propositions. Except for the case in which something is predicated of a universal according to its being in the intellect, his treatment of categorical propositions requires that the subject stand for a universal in things or for a singular, while the predicate must stand for an object understood. Putting aside conjunctives, which are reduced by truth-conditions, this treatment of hypothetical propositions seems to require that the two terms which are necessarily related be either two universals in things or two objects understood; the unity which becomes objective for the intellect in a hypothetical proposition is not the conformity of an object understood to a thing, but the necessary sequence of one universal in the thing to another, or of one object understood to saother.

If this interpretation is correct, two things follow. First, a treatment of hypothetical propositions is essential to this logic, for they express certain intelligible relations which are distinct from the

Ibid., chap. vii.

conformity expressed by a categorical proposition, and which must be expressed by hypotheticals. In other words, the second operation of the intellect not only functions in the objectification of truth, but also in the objectification of other relationships. Second, if these relationships are to be reducible to the things and objects understood in the first act of the intellect, then the connections of universals in things already must be in those things as they are intuited, and the connections of objects understood already must be in those objects as they are understood—although the connections in either case must be considered for themselves in order to become unified objects of understanding.

From this it follows that when un object understood is predicated of a thing in a categorical, what really is predicated is an implicit complex of all the natures and intentions that conform to that thing, by their connections with the nature explicitly considered. From the vantage point of this interpretation, certain remarks which Pseudo-Thomas made in the first treatise assume special significance. He says, in treating difference, that genue, species, and difference all implicitly signify the form of the whole when they are predicated of an individual, although only the species signifies it explicitly. The whole series of essential natures, with their second intentions, therefore must be present, although implicit, in a unified complex, whenever any one of them is predicated of an individual. He also says, in treating addident, that while a subject can be understood simply-that is, in the first act of the intellectwithout its properties, it cannot be understood to be without them-that is, in the second operation of the intellect; moreover, while an individual can be understood simply without its inseparable accidents, it cannot be understood to be without them. 2

A complex predicated of things according to a universal, then, must include not only all the essential natures, but also all the accidental natures necessarily connected with them; similarly, a complex predicated of an individual must include all the essential and accidental natures which are inseparable from that individual. Now, if my interpretation of Fseudo-Thomas' doctrine of the categorical proposition is correct, "to be"

¹Tr. I. chap. iv.

² Diff., chap. viii.

does not refer to existence, but to the conformity of the intellectual complex with a thing. What he is saying, then, is that no conformity of an object understood with a universal in things according to itself can be known without knowing implicitly all necessary truths concerning that universal, and that no truth can be known concerning a singular as such without knowing implicitly all permanent truths concerning that singular.

By interpretation in the next obspter of Pseudo-Thomas' doctrino on demonstration will depend on this position. However, it also has an important bearing on two topics which are significantly related to any doctrine concerning the proposition: analogy and necessary truth. Next I shall say something about each of these; then I shall conclude this section.

Pseudo-Themas' doctrine on analogy is stated at the beginning of his treatise on the categories. Ite explains that some equivocal predicates are prodicated analogically. Analogues are predicated of many subjects, inseruch so they are predicated with reference to a common term. His example is "healthy," which is predicated primarily and properly of "animal." eince health really is present in animals, but also is predicated of "urine" and "medicine." since wrine is a sign of health, and medicine is a cause of it. The consequence, he says, is that although the word "health" is predicated of "urine" and "medicine," its definition is not, for wrine and medicine do not possess health, but signify or cause it. From this. it follows that "analogical predication agrees in one way with equivocal predication, as I have esid, and in enother way with univocal predication." The reason is that although "health" is predicated of "urine," it does not mean its own definition—that is, a proportion of busours—in urine; nor yet does it mean another definition. but it means the same proportion of humours of which wrine is a sign. He applies the notion of analogical predication at the end of the chapter, where he says that "being" is predicated of the ten genera analogically, since it is predicated primarily of substance, in which its reality chiefly is caved, and is

¹Tr. II, chap. 1. ²Ibid.

³¹bid. I have translated "ratio" by "definition" here, since he seems to equate the ratio of health with the definition; "ratio" is not much used in S. t. 1.

predicated of the others only inassuch as they are sessithing of substance—that is, are related to it session. The meaning of this statement would be that the other categories share in being only insofer as the natures are merged in individuals, and the objects understood are reduced to their origin in things.

At present, my interest in this Scatrine is to show the import of Pseudo-Thomas' treatment of the proposition for it. If I have understood it, his position on analogical predication must be that it is serely a device for simplifying linguistic expressions. The basis for the posability of much predication is that intellectual complexes which are compared to a number of related things can be signified with respect to one nature. which belongs to one of the things, and predicated of all the things insofar as they are related to the one thing having that nature. However, such comparisons could not be made, if the connections within the intellectual complex were only implicit; therefore, analogical predication only occurs if the connections among objects understood within an intellectual complex are known. In other words, the proposition: "Medicine is bealthy," could not be known. unless this conditional were known: "If medicine is taken under appropriate conditions, people become healthy:" analogical predication, consequently, only expresses what always could be expressed without analosy. For example, "Medicine causes health in patients who take it under appropriate conditions," eliminates the need for analogy in this case. In a similar way, the troatises on the categories have eliminated the need-but not the linguistic efficiency-of predicating "being" analogically of the categories, for they have shown precisely the way in which each of the catexprise is related to substance. in which the reality of being chiefly is saved-that is, in which the nature of being is present.

With respect to necessary truth, Pseudo-Thomas' dootrine on the proposition results in a twofold necessity. First, there is the necessity expressed by a true conditional, which depends on the necessary connection of universals merged in singular things or joined in an intellectual complex of objects understood. Second, there is the necessity expressed by a universal categorical proposition, which depends on the conformity of the ob-

Ibid.

ject understood to a universal in things, insofar as the object understood contains that neture, or is necessarily connected with an object understood which contains it. This twofold necessity is stated explicitly in the treatise on the proposition, although I as formulating it in the terms of by interpretation. In neither case does the necessity precisely depend on or refer to the actual existence of the individual, since existence belongs principlly to the individual as such; it belongs to the nature only secondarily. However, in categorical necessity, the subject of the comparison is in an existing thing. It seems to follow that the existence of an individual having a nature is a condition of entegorically necessary truth. However, such a condition would not reduce categorical necessity to conditional necessity in Pecudo-Thomas' own terms, since the comparison would ramein predicative-that is, a comparison between an object understood and a thing. Pseudo-Thomas' view of existence as a thing diverse from essentiel being seems to require that it be considered a condition; however, he appears not to have noticed this need, for he takes the fulfillment of the existential condition for granted. We have seen an example of this in his supposition that every possibility must be fulfilled in at least one case. Consequently, categorical necessity presupposes existence as a condition elengs fulfilled; it never has to be considered. No propositional knowledge-or, at least, no proposition with scientific relevance-concerns existence as such. In this connection, it is significent that there is no mention of the two-part, existential proposition in this entire treatise, although such propositions are treated by Aristotle. It is not difficult to understand why such propositions were exitted. Pseudo-Thomas has assured an immediate intellectual intuition of existing individuals throughout the work; consequently, the reduction of a simple existential proposition involves no logical problem.

In sum, the second operation of the intellect is a knowledge of the relation of truth between objects understood and things or certain other relations—sequence. These relations are present in the objects of the first operation, but then they are not known as objects. All that becomes known in knowing propositions, then, is implicit in the objects attained by the first act of the intellect; the second act does not add to the con-

²On Interpretation 19^b14-17.

tent understeed—that is, to knowledge about things—but to the explicitness of understanding. The function of this treatment of the proposition
is to reduce the complexities of discourse to the objects of the second
act of the intellect, and to show how these are reduced to objects understood. By this reduction, the parts of the syllogism, which is scientific
knowledge when it occurs is appropriate matter, are transformed into possessions of the intellect, for they are mediately reduced to the originative sources of all our knowledge—the things outside and the intellect
impregnated with a nature received from things. On the basis of this
treatment of the proposition, analogical predication can be eliminated,
except as a linguistic device, and the twofold necessity expressed in
propositions can be considered without reference to existence, since existence is merely a condition which always is fulfilled.

Ockhan's Fabrication of Truths

Cokham treats the proposition in the second part of his Sum of Logic. He does not begin by discussing signification in general and the relations between language and thought. nor by explaining the nature of truth and the process of judgment. Rather, he begins directly by laying down several non-subordinated divisions of propositions: in the remainder of the treatise, he expounds what is required for the truth of propositions in the various forms. I First, he treats singular propositions; second, particular and indefinite propositions; third. universal propositions, with a subsidiery treatment of "both," "neither." and "whole;"4 fourth, propositions concerning the past and future. Next be mentions briefly the problems arising from the use of a term in an oblique case. Having treated non-modal categorical propositions, he next treats modal propositions. This entire treatment has assumed that the proposition is really one-that is, that it is not expenible into two or more propositions. However, many apparently simple propositions are exposible. Since every compound of two or more simple propositions is a hypothetical proposition, Cokham treats exponibles under the heading: "On propositions

Cockham, Sum. log., II, chap. ii.

Lid., chap. iii.

Toid., chaps. iv-vi.

Toid., chaps. ix-x.

Toid., chaps. xxx.

equivalent to hypothetical propositions." All propositions in which there are relative and connotative terms fall in this class. 2 Also. propesitions in which there are infinite and privative terms, fictive terms, and relative pronouns are excenible; to these are added propositions in which there is a reduplication, exclusion, exception, or a term signifying becoming or its limits-"begins." "stope." "becomes." Having treated all these forms of extegorical and exponible propositions. Ockham next treats their conversions. Finally, he treats hypothetical propositions.

In this treatise. Ockham does not discuss the question of the oppositions and equivalences of propositions as such; however, the entire treatment of expenibles is. in a sense. an explanation of the equivalence of these to conjunctive hypotheticals, and he does mention occasionally the question of oppositions, especially in his treatment of hypotheticals. Apparently. Ockham did not consider the question of oppositions and equivelences to be a very important one; he simply defined certain oppositions of propositions by formal conditions in the first part. Excepting the division of propositions and the treatment of conversions. the entire treatise on the proposition. Ockham says explicitly, is devoted to stating the necessary and sufficient conditions for the truth of propositions. In the treatment of conversions, although Ockham refers to the convertend as the entecedent and the converse as the consequent, and even refers to the relation between them as consequence. 10 he does not define conversion in terms of consequence and defer further explanation to his treatise on consequences. 11 but he states the formal conditions for the conversion of various propositions. In other words, the treatment of convergious is

Ibid., chaps, ri-xx.

tid., chaps. zii-w.

Ibid., chaps. XXI-XXIX.

Ibid. chaps. xxx-xxvii.

E. g., Ibid., chap. xxrii, he explains that the contradictory of a conjunctive is a disjunction of the contradictories of its parts—the "De Horgan Law"-which holds because Ockham takes disjunction broadly.

<u>Ibid.,</u> I, chap. xxxvi.

⁹ Ibid., II, chap. 1.

¹⁰g. g., Ible., chap. zzv.

¹¹ In his brief discussion of conditionals (Ibid., chap. xxxi), he coes that.

similar to the rest of this part; Ockham states the necessary and sufficient conditions for the truth of the converse of the various formallydefined kinds of propositions.

To understand the acce of Ockhan's treatment, his distinction between categorematic and symmatogorematic terms, and his doctrine on supposition must be recalled. The etymology of "syncategorematic" correctly suggests what the distinction is, for some terms fall into a category, while others do not. Ockhas drew the distinction near the beginning of the first part, however, and presupposed it in his treatment of the catsgories. The distinction is defined in this way: categorematic terms have a limited and fixed signification; syncategorematic terms do not; however, toined with a categorematic term, they limit its signification, or deternine it to stand or suppose for things in a certain way. I Thus, although sympategorematic terms much as "all," "besides," and "inasomoh ad" are terms—and are significant inascend as they affect the signification and supposition of other terms—they are not properly called "intentions."2 they are not capable of being subjects or predicates except in caterial or simple supposition, and "to signify" does not signify them taken by themselves. 4 Syncategorematic terms can alter the may in which other terms signify; for example, "not" attached to a significant term makes it signify negatively what it otherwise signifies positively. Their more common function is to determine the supposition of significant terms.

Supposition is a property which belongs to terms, but only insofar as they are subjects or predicates. The supposition of a term, consequently, is a referential property, for the subject supposes for something only insofar as it is a subject concerning which a certain predicate is predicated, and vice versa. Supposition is divided into personal, simple, and material. A term has personal supposition when it stands for what it signifies. Consequently, syncategorematic terms cannot be used with personal supposition, any term used with personal supposition is used

Thid., I, chap. iv.

Thid., chaps. i-ii, xxx-xxxi, and lxvii-lxviii.

Thic. chap. Exxiii.

Ibid.

Ibid., chap. lxiid.

⁷Ibid., chap. lxiv.

eignificatively, and no term can be used with personal supposition unless it can be predicated truly of the things for which it stands. A term has simple supposition when it stands for an intention of the soul, although it does not signify it—for example, "man" in, "Man is a species." Material supposition is similar to simple supposition, but concerns linguistic instead of mental signs.

Given this foundation. Ockham states the conditions which are necessary and sufficient to the truth of propositions of various forms. Here is the first such statement:

. . . concerning singular propositions, which are not model, which are in present time, in which neither the subject nor predicate is in an oblique case, and which are not equivalent to a hypothetical proposition. About this it should be said that for the truth of such a proposition, which is not equivalent to many propositions, it is not necessary that the subject and predicate be really the same, nor that the predicate be present on the part of the thing in a subject, nor that it really be in the subject itself . . . but it is necessary and sufficient that the subject and predicate suppose for the same.

Ockhes proceeds to argue at length against positions which interpret a predication—for example, "Socrates is a man,"—in such a way that something besides Socrates and the proposition itself would be necessary for the proposition to be true. He explicitly excludes Scotus' formalism; generally, he is excluding any position which holds that there is a nature or real universal in things or in knowledge.

Notice that Ockham first indicates the propositional form for which he will state the necessary and sufficient truth-conditions. In this case, the indication of the form is that it is a singular proposition, excluding a number of determinants. Ockham is particularly anxious to exclude exponibles; he states this condition twice. He then states certain conditions which need not be fulfilled for the truth of the proposition. This statement of unnecessary conditions is not common in all the cases, although some of them are mentioned again. Rather, these conditions indicate views of the proposition as such which Ockham wishes to exclude.

lid.. chaps. lxix and lxiii.

² Ibid., chap. lziv.

Jibid., II, chap. If.

[&]quot;Ibide

E. g., <u>Ibid.</u>, chap. v. he says that the subject and predicate of a universal proposition need not really be the same.

Therefore, he says that it is not necessary that the subject and the predicate really be the same, to exclude the view that predication is an identification of a thing with itself. He ease that it is not necessary that the predicate be present on the side of the thing in a subject, to exclude the view that the predicate expresses a nature or form present in real things signified by the subject. He says that the predicate need not be present in the subject itself, to exclude the view that predication indicates the inclusion of one thing in another in the order of knowledge.

The necessary and sufficient condition is that the subject and predicate stand for the same object—that is, the subject and predicate must be used in such a way that they stand for the same thing, or intention, or word. In other words, the subject and predicate are two signs used insofar as they are signs, whether they be used significatively—that is, in personal supposition—or not, to stand for something for which they can stand; their ability to stand for anything presupposes that they are signs by themselves. 1

In this statement and in the remainder of this pert, Ockham does not use the distinction between mental and linguistic signs. The reason is that while the distinction between linguistic and mental signs is important in the first part of logic, since they receive their significance in different ways, it is not important when constructions formed from given materials are being considered, since the elements of language which affect truth and falsity have corresponding mental elements; the two sets of signs do not signify different sets of objects, nor does language signify

Inde. I, chaps. exxitt and lxitt.

In the treatment of exponibles, perhaps he is using it, since he uses "word," "vocal expression," and other like words repeatedly, but without indicating that he thinks exponibles are serely linguistic. Possibly Ockham considers all distinctions arising from connotative signification to be merely linguistic; he says connotative terms have only nominal definitions and he defines "nominal definition" as a discourse expressing explicitly what is imported by one diction. (Ibid., I, chaps. x and xxvi.) However, this would make most of logic linguistic, including the distinction of categories. This Ockham seems to deny. (Ibid., chap. xliv.) I have found nothing in Moody or Scehner to settle this question; it should be investigated carefully, but I am not prepared to do so. The solution could make a great difference in the interpretation of Ockham's position, but I do not think it would affect the results at which I am aiming.

by way of the signs, but linguistic signs signify the same things as mental signs and in the same forms, although subordinately, since the units of language are conventional and the units of thought are natural. Whether the complexes formed of simple signs are linguistic or mental, then, will depend only on the materials; in either case, they will be objects constructed or judged, and the requirements they must meet will be the same.

A discussion of Ockham's treatment of the copula will help to clarify his notion of the structure of the proposition. Ockham maintains that the copula is an element distinct from the subject and the predicate.2 The meaning of "to be" as a copple is distinct both from "to exist" and from the "being" which signifies everything. Cokham remarks that some say the predicate is the copula together with what follows it. but that this is merely a question of words. 4 He himself holds that only nouns can be subjects or predicates. He doubts whether the verbal distinction between nounce and participles corresponds to a mental distinction: elthough he seems to reduce participles to verbs, his requirement that the parts of a proposition be noung indicates that he eliminated verbs rather than participles. Now, a copula obviously cannot be a categorematic term, for it does not signify anything by itself. However, Ockhas does not list it among syncategorematic terms, when he defines them! of course, he only gives examples, but the omission of the copula from a list of seven examples is odd. if the copula is sympategorematic. Perhaps the reason for the emission is that the comula is not syncategorematic in the same way as "all" or "not." Such syncategorematic terms either alter signification or determine supposition; but what alteration or determination does the copu-

libid., chaps. i, iii, and xii; of. Boehner, "Ockham's Theory of Signification . . . ," Collected Articles, pp. 208-221.

Zibid., chaps. xxx and xxxi; II, chap. i.

Boehner, "Metaphysics of Ookham," Collected Articles, p. 384.

⁴⁰okham, op. cit., I, chap. xxxi. Thid., chap. 11.

⁶ Thid., chap. 111. Thid., chap. iv.

Boehner says ("Ockham's Theory of Signification . . . ," <u>Collected Articles</u>, pp. 222-224) that "est" is syncategorematic, for Ockham; however, I have not found any reference to the copula as syncategorematic in <u>Sum.</u>

log. Boehner quotes a passage (<u>Reportatio II</u>, qu. 1, M) which refers to the copula as syncategorematic in that it is not significant by itself.

la make? It does not make any; it merely determines the other elements of the proposition to stand together. In other words, the function of the copula is to indicate that the subject and predicate are conjoined and given the supposition they can have according to the restrictions set by the syncategorematic terms attached to them.

If this interpretation is correct, the truth-condition for any proposition is the compossibility for its elements to be used in the way that their own significations and the syncategorematic terms joined with them indicate that they are being used. If this is so, the copula is a coupling; it joins the elements together, hence it relates them to each other, hence it makes them subject and predicate with reference to each other, hence it gives them supposition.

Now, when Ockhem formally defines "subject" and "predicate," he distinguishes them by their position before or after the copula. Ockhem himself seems to have been pusuled by the way two propositions differing only in order could be distinguished in the mind; he offered two solutions. According to one, the propositions would be simply different single acts of knowledge; according to the other, each would be composed of two acts differing in syncategorematic determinations.

From Ockban's concern with this problem, as well as from his theory of the copula, it follows that he makes no functional distinction between the subject and predicate. By "functional distinction," I mean one such as Pseudo-Thomas made; on his position, the subject signifies a thing, the predicate an object understood, and the copula a relation of conformity between the two. We would not expect any such distinction in Ockham, since he has made both terms uniformly signs and the signates of both terms uniformly things known, whether they be things which are not signs, or signs themselves.

Why, then, are not all propositions simply convertible, even when syncategorematic terms are held with the significant terms? Clearly, they are not; "All men are animals," neither converts to, "All animals are men."

Sum. log., I, chape. xxx-xxxi.

²Ockham, In Feri berm., chap. 1, 16²5 H, ed. Roehmer, <u>Traditio</u> IV (1946), pp. 325-326.

not to, "Animals are all men;" the first is evidently false, and the other is equally false unless there is at least one animal which is every man. The reason is that the two places themselves function syncategorematically: they set formal requirements, which might be set equally well by additional syncategorematic terms. How this can be done, is gathered from Cokham's distinctions of personal supposition, for he explains the differences between the suppositions of the subject and the predicate, not in terms of the two places, but in terms of the relations between common and discrete terms. Furthermore, since the subject and predicate are not functionally distinct, there is no reason why propositions need be limited to the subject-predicate form; both the order and number of significant terms is irrelevant, so long as each term is separated from the rest, completely determined in supposition, and all the conditions set by the terms are compatible.

But does it not follow that all propositions are exponible into conjunctives? This does follow in the sense I have just now indicated—namely, that the truth-condition of any categorical proposition is the compatibility of the conditions set by its parts. However, in two senses, not all propositions are implicit hypotheticals. First, it is not true in the sense that there is no difference between categorical propositions and at least certain hypothetical propositions, for although Ockham determines copulative and disjunctive truth-conditions truth-functionally, he certainly does not determine the truth-condition for a causal proposition in this way. Second, not all propositions are implicit hypotheticals in the sense that every proposition is exponible—that is, reducible to a conjunc-

¹⁰ckham, Sum, log., I, chaps, lxx-lxxiv.

Since Ockhom maintains the substance-accident distinction—for exemple, between "white" and "man"—he must allow for a method of grouping; this is one function of the subject-predicate form.

³"Compatibility" means compatibility in fact—that is, joint satisfaction; I am referring only to affirmative non-model propositions for the sake of simplicity.

⁴ Told., II, chaps. xxxii-xxxiv. It does not seem to me he determines the truth-condition for a conditional truth-functionally either (Ibid., chap. xxxi); however, Boehmer ("Does Ockham Know of Material Implication?" Collected Articles, pp. 319-351) has argued that he does, while clearly excluding the causal proposition (pp. 323-325).

tion of simpler propositions, since some proposition is as simple in form as possible. For this reason, Cokham is insistent on the distinction between categorical propositions which are not exponible, and those which are. In contrast with Pseudo-Thomas, for whom a simple proposition merely is one which expresses one conformity-relation, Cokham's simple proposition will express an atomic compatibility of the conditions determined by the suppositions of significant terms—that is, it will have the simplest truth-condition, and the propositions whose truth-conditions are truth-functional will be verified through it.

The minimum proposition clearly must have two significant terms; otherwise, there either would be no question of compatibility, or more than one question of compatibility. For this reason, Ockham excludes expenible propositions when he treats the truth-conditions of simple estemoricals. In all cases in which a proposition is exponible, either three terms are involved. or the determination of the supposition of one or both terms is divisible with respect to satisfaction. For example, a proposition containing a relative pronoun has three terms: a proposition containing "begine" determines the supposition of one term in such a way that it is divisible with respect to satisfaction. "Socrates begins to be white." inplies both that he was not white and that he now is white; these can be satisfied independently. For Ockham, the same thing holds for all propositions containing connotative or relative terms—that is, terms which signify indirectly something other than the precise individual things for which they can stand.3 It is not difficult to see thy this should be so in cases where enother individual thing, as inherent quality, or something in knowledge is connoted, since absolute things can exist apart and a thing can exist without being known. It is not easy to see why it should be so when the parts of an individual are commoted; however, Ookhan explains that "quentity" commotes parts distinct in place. Since place is extrinsic to the thing in place, the problem is solved in this case. It follows that two absolute terms, used with determinations indivisible in their condi-

lookham, <u>op. cit.</u>, II, chap. xv.

Inide, chap. x1; I, chap. x.

Ibid., I, chap. lx.

² Ibid., chap. xiz.

⁴Ibid. II. chep. zi.

tions for satisfaction, constitute an atomic compatibility; hence, not all propositions can be reduced to still simpler propositions for verification.

Therefore, Ockham treats singular propositions such as. "Socrates is a men," and universal propositions such as, "All men are animals," before he treats propositions such as, "Socrates is white," or, "All sen are colored." The latter require both that the subject should be and that a quality should be present in it, while the conditions for the truth of the former are indivisible. This conclusion, however, seems inadequate: "All men are animals." seems to require the truth of an indefinite conjunction of individual propositions about singular things. Moreover, "Socrates is a man," seems to require both that Socrates be and that the concept of man be present in an intellect forming the proposition. If these objections were allowed, two things would follow. Pirst, there would be no difference between signification and supposition, since "man" would have no fixed range for which it could stand independently of determination by indicating each of the things for which it would be used to stand; in that case, lacking supposition, it would be a mere variable. Second, it would follow either that an individual could exist without being itself or that a term could be used simultaneously in personal and non-personal supposition, since "man" would have to stand for something without the existence of which, individnal sen could exist, or it would have to be used simultaneously both for them and for something else inassuch so it stands for men—that ic. a sign ef men.

Now, Ockhaz does not accept any of these consequences. Ockhaz does declare the meaning of "to signify" by reference to supposition 4 and he

Ibid. II. chape. ii-iv end xi.

Boehner refers to categorematic terms as "instances of variables" in "Ookham's Theory of Signification . . . ," Gollected Articles, pp. 222-225; if all determination of range were by pointing, they would be variables.

Of course, "san" often is equivocal in ordinary language, but an intention cannot be equivocal: Sun. log., I, chap. xiii.

Ibid., chap. xxxiii. For absolute terms, signification belongs to a sign that stands or naturally can stand for a thing in such a way that it can be predicated of it, when the thing is indicated with a demonstrative pronoun, either in the present or in another tense.

does state as a universal requirement for supposition that the term be predicable of the things for which it stands, when they are indicated with a demonstrative pronum. However, he holds that simple intentions are qualities in the mind which are indivisible acts of knowing many individual things which naturally cause them; moreover, he considers the determinacy of the sign-relation to be a presupposition, not a consequence, of predication, as we have seen. Further, he specifically denies that every universal proposition is expenible into singular propositions, giving as a reason that such a proposition can be true if there is only one thing for which the terms can stand.

These answers hardly sees sufficient, however, since they do not explain the presupposed predicability of demonstrable singulars, nor show why a universal is not an expenible when there is more than one thing for which its terms can stand. With respect to the first of these difficulties, it seems to me that Cokham's position is that predication concerning deapostrated singulars is only linguistic, and that such linguistic prodications correspond to natural intuitive acts of knowledge, not to operations in the intellect's own power. Ookham doubts that there is any mental sign corresponding to pronouns and be considers linguistic signs suberdinate to intentions. The latter could not be true if language did not somehow receive determinate significance from intentions; however, it could not do so, if both depended on demonstrative reference. The intellectual correspondent of the linguistic proposition. "This is Scorates." must be an intuitive grasp of Scarates and the discrete but abstract act of knowing Socrates; such an intuition would not be a proposition, in the sense that it sould be constructed, nor would it require en act of assent distinct from the intuition itself. The same thing would held, mutatis autancia, for all propositions in absolute terms, whether discrete or not,

Ibid., chap. lxiii.

²Cf. Boehner, "Realistic Conceptualism of William Ockham," <u>Traditio</u> IV (1946), pp. 308-312; universal signs as well as discrete ones are indivisible and immediate (p. 310, n. 9).

[.] Suma, p. 102.

<u>Sum. log.</u>, II, chap. zi.

⁵ Ibid., I, chap. iii. 6 Ibid.,

⁷⁰ckham seems to say this in <u>Guodlibet</u> V, qu. 6; IV, qu. 17 (McKeon, <u>Selections</u> . . . , II, pp. 380-386).

since all of them are equally direct and indivisible acts of knowing. With respect to the second problem, the solution perhaps is in part the same—namely, that the uniqueness of the verification—condition is known intuitively by a grasp of the two terms and any individual which naturally causes them.

However, this does not seem sufficient, since the two terms are distinct from each other, and the fact that one thing causes both of themeven when both are absolute terms—does not seem a sufficient reason why every individual which causes one of them should cause the other. Ockham's position on this seems to be that the intellect immediately accepts the universal from one particular case, "since there is no better reason why it should belong to one individual of a species than to another." In other words, given an individual and two universal intentions, one of which is the least universal intention directly caused by absolute individuals and nothing else-supposing all this to be known by intuition-the intellect immediately accepts that the other will be caused by any individual which causes the specific one. To me, this does not seem to be a natisfactory enomer, cince the "no-better-reason" principle itself seems noither self-evident, nor demonstrable, nor verifiable by experience; however. Ockham's solution is more consistent and complete than any other I know, once this problem is permitted to arise.

However adequate this solution to the problem is, if I do understand Ockham's position, it is clear that he maintains the priority of signification to supposition by holding that at least some intentions of themselves have a definite range, without any operation determining it; concequently, on this account, Ockham can maintain his position that there are atomic propositions, both singular and universal. Since it is clear too that Ockham meither permits an absolute term to stand for anything without the existence of which the individuals signified by it could exist, nor permits a term to be used signified by in two suppositions, 4

²Ibid. ²Suo, log., III-II, chap. x.

I am supposing that both intentions are absolute; if the second is consolative, the intellect accepts that it can signify any other individual of the same species: <u>ibid.</u>

⁴Ibid., I. xiv-xvii and lziii-lzziv.

it follows that he does not hold that all propositions are expenible, although he does hold—if I have interpreted his position correctly—that the truth-condition for a proposition is the compatibility of the conditions set by the suppositions of its terms; from this, it followed that the order and number of significant terms is irrelevant.

Given this account of the structure of Ockham's propositions, fairly simple answers to the other questions with which I am concerned follow.

Ookhem holds that the truth of a proposition is the proposition itself and he tells us that "true" is a connotative term. I Moreover. he treats "true" as a second-intentional term, for he says it is a mode-that is, a term predicable of propositions as its subjects. In terms of my interpretation, these statements mean that truth is the unity of a set of significant terms having compatible determinate suppositions. Insofar as such unity depends on an act of the sind simultaneously using the terms about the things they signify, truths are constructions of the mind. However, whether the unities the mind constructs are truths or not, does not depend on it. since the single condition of compatibility is satisfied or not satisfied according to whether there are or are not things for which the terms do stand as they are intended to do. To put the same point in other words: supposition is a property of terms only in propositions—that is, of terms used together; but propositions are true if and only if the things which their terms signify are just as they are detersinately signified to be. This statement does not apply to propositions involving tenses other than the present, although it does apply to negative propositions. insofer as assation is syncategoresatic; however. "are" can be replaced by "are and/or were" or "are and/or will be" with respect

lbid. chap. xliii.

[&]quot;Ibid., II, chap. i; of. Boehner, "Ockham's Theory of Supposition," Collected Articles, pp. 254-267.

Ockham does not consider the mental equivalent of every linguistic proposition to be one act using many acts; constines, it is one act, directly considering things, equivalent to many acts: Ockham, Quodlibet V. qu. 6; IV, qu. 17 (McKeon, Selections. . . , pp. 380-386); In Feri herm, chap. 1, 1625 G-K, (Preditio IV, pp. 325-327). However, the latter type of proposition would not be susceptible to logical regulation.

to the things without difficulty, since Cekham does not define "tense."

Similarly, he does not define the modes themselves. "Do stand" can be replaced by "can stand," "cannot stand," "must stand," "ere known to stand," and so on, with respect to the terms; all such special conditions belong to the propositions, not to the things, although their satisfaction depends on things, just as it does with non-model truth-conditions.

The fact that Ockhaz includes "known" among the modal terms" is interesting; it agrees with his statement that all scientific knowledge is of propositions. 4 Science is a knowledge of necessary truthe; individual things neither are necessary, nor are they true. Of course, the terms of mental propositions knowable by real sciences are themselves knowledges of things-that is, they are complex acts of knowing real things, but their complexity as knowledges of things is not science, since scientific knowledge is not the same as one or many direct knowledges of things. Bather. knowledge, insofar as logic regulates the construction and criticism of propositions, is of these very propositions; the objects known are distinct from things primarily known, and the additional knowledge is of these additional objects. How could it be otherwise, when only individual things, precisely insofar as they are individual, are real, and they are known more adequately by intuition than they can be by any common knowledge. Comson knowledge is valuable only insofar as it extends to things not experienced; moreover, knowledge of propositions does not add to our common knowledge of things, but knows that knowledge itself, organizing and using at once knowledges which otherwise would be wholly discrete acts.

The psychological processes involved in the formation and assent to propositions considered as objects—the only cases with which logic could be concerned—are not explained in the part on the proposition in the Sum

Ookham, Sum. log., II, chap. vii. 2 Ibid., chaps. ix-x.

² Ibid., chap. i; "scitus"—that is, "known scientifically."

Cf. Boehner, "Ockham's Theory of Supposition " Collected Aritcles, pp. 244-245.

Ockham, Sum. log., III-II, chaps. 1 and v.

Robert Guelluy treats this question at length, especially with respect to theology, in <u>Philosophie et theologie chez Guilleume d'Ockham</u> (Paris; J. Vrin. 1947), pp. 313-322 and passim.

of Logic. In his <u>Quedlibetal Questions</u>, however, Oakham discusses these processes and seems to distinguish three acts. First, the proposition is formed; second, it is apprehended; third, assent is given to it. Prom his description, it seems that the process is terminated by assent—an intent to use terms or a committeent to their unity; this unity must be apprehended as such, by an act knowing it, not its objects; the unity must be formed by the simultaneous occurrence of several simple acts of knowledge. From what has been said about acts of scientific knowledge, I think they would be saons the second of these three acts.

Propositional knowledge, then, neither is necessary nor sufficient to know that anything exists, since it is not directly a knowledge of existing things. Existence is known primarily by intuition, although there is a certain judgment of existence too. Of course, the terms of a complex whose construction logic can regulate may or may not stand for existing things; such a proposition as a whole may or may not require that the existence of something be known for its verification.

Although the matter more properly belongs to the next chapter, it is necessary for comparison to say something here concerning Ockham's doctrine of necessary truths. As we have seen, a necessary proposition is one whose terms necessarily stand for things as they are intended to do. Such a proposition is not one that necessarily is formed, then, but one which cannot be formed without being true. From this it follows that no proposition which concerns corruptible things and which is affirmative, present-tense, and whose copula is non-modal can be necessary. The proposition, "Man is a rational animal," with the stated conditions, is not necessary, since it is not necessary that there be anything for which its terms can stand. However, if this proposition is transformed into a conditional or

Pp. 380-386).

1 Quodlibet V. qu. 6; IV, qu. 17 (McKeon, Selections . . . , II,

Sebastian J. Day, O. F. H. treats this question thoroughly in <u>Intuitive Knowledges: a Key to the Significance of the Later Scholastics</u> (St. Bonaventure, N. Y.; The Franciscan Institute, 1947), pp. 156-168.

Sum. log., III-II, chap. v.

Ibid. Ookham states explicitly that this is against the position of Aristotle.

or one concerning possibilities, it is necessary. This, of course, is not to say that the proposition is not true whenever a man forms it; nor is it to say that it is not atomic. The requirement that the proposition concerning contingent things be determined to what can be, or asserted only on the hypothesis that the signates are, is necessary for the necessary truth of the proposition, not for its truth. These remarks about the conditions for necessary truth show that acientific knowledge is even more remotely related to existence than other propositional knowledge.

Although Ookham edmits complexity in the conditions for the verification of propositions, he does not admit analogy any place in his system at all. Linguistic predications may involve various types of equivocation; mental predications admit only the different modes of univocal predication, if we include denomination under univocation.

In our. Ockham considers propositions to be force of signification compounded of intentions or of linguistic signs. These two parallel each other: propositions are formed only of signs, not of things. In Pseudo-Thomas' proposition, the terms differ in function; the terms of Ockham's propositions are the same in function. Bowever, Ockhen, like Psoudo-Thomas, admits the copula as a distinct element, although Ockham's copula is a coupling of signs, while Pseudo-Thomas' verbal copula imports the objectification of the conformity of an object understood with a thing. Their doctrine on truth differs accordingly, since Faculo-Thomas considers it the conformity itself. while Ockham identifies it with propositions whose truth-conditions are satisfied. Ockham's simple proposition is an irreducible compound of signe; Pseudo-Thomas' simple proposition is the expression of an awareness of a single relation. Neither considers the knowledge of propositions to which logic directs us to be an addition to the content of our knowledge concerning things, since Pseudo-Thomas treats it as an explication of our knowledge of objects understood, while Cokham treate it as a knowledge of the complex itself which logic regulates. Thus. Pseudo-Thomas view of the proposition is aptly summarized in my title, "The Objectification of Truth," and Ockhan's in my title, "The Fab-

Menges, (op. cit., p. 127 and passio) treats the question thor-

rication of Truths." Both authors maintain that certain propositions can be necessary truths, but neither permits such propositions to be directly concerned with existence. Finally, neither treatment of the proposition leaves any distinctive place for analogy. Once again, the two positions are radically opposed, but their common ground is greater than it seems to be at first eight.

Aquinas Objectification of Reinga

Aquinas neither limits the consideration of language to the part of logic concerned with the proposition and those following it, as Feeude-Thomas does, nor does he consider it unascessary to emphasize distinctions between linguistic and cognitive structure when he discusses the proposition, as Ockhas does. For Aquinas, a consideration of words belongs to all three parts of logic, for they are signs of simple intelligibilities in the categories, nouns and verbs which are parts of an enunciation, and terms in a syllogism. Hours and verbs are not considered in the second part of logic, then, insofar as they signify simple intelligible aspects, but only insofar as they signify parts of a complex intelligibility—the composition or division—which terminates the second act of the intellect. On the other hand, differences between linguistic and logical structure cannot be ignored; "is" in an enunciation, for example, is a third word, but it is not a third part of the enunciation.

Generally, Aquines restricts the use of "sign" to sensible things; he seldom applies it, and only in an extended sense, to cognition. A discussion of signification, therefore, is a discussion of language. Language would be unnecessary if can lived as a solitary. The principal use of language, then, is in the communication of knowledge; all words insediately signify conceptions of the soul, not things in themselves. By "conceptions of the soul," here, we must not understand the acts of know-

In Peri bern., I, lect. i and iv.

Ibid., Proem.; De ver., qu. 4, art. 2, c.

In Peri bern., II, lect. ii.

Sum. theol., III, qu. 60, art. 4, ad 1.

De ver., qu. 9, art. 4, ad 4.

Ibid.

Toid.

ing, but the terminations of those acts, either simple or complex. On the other hand, words do signify things according to the conceptions we have of them. Since "sign" means that which leads to a knowledge of something other than itself, the significance of a linguistic sign can be considered in two ways. In one way, it signifies knowledge—that is, it makes the knowledge of one known to another; in another way, it signifies things according to knowledge—its signification is the conception itself. Aquinas consistently treats linguistic signs as immediate signs of conceptions and mediate signs of things. This is underetendable, incamed as he considers signification to belong to a word according to an intelligibility, and considers the intelligibility or conception to be precisely what is known of or about a thing.

Aquinza, consequently, allows to stand the statement that the meanings of words are congruous to the natures of things, although the imposition of meaning is not naturally determined. Discourse and its parts can be considered as artificial things, since they are made in exterior matter, like other artrorks. However, Aquines qualifies the assertion that discourse is an instrument of reason; it is a quasi-instrument. Similarly, signification is a quasi-form of the noun. It is significant that he uses the word "adiavanit" with respect to language. Aquines seems to reserve this word to works which are immediately of reason; we have seen its significance for the intentions the legician considers. It seems to follow that incofar as language is meaningful, it is reason which immediately introduces meaning.

Do ver., qu. 4, art. 1, c. 2001. Spu. Sheel., I, qu. 13, art. 4, c. 2014., III, qu. 60, art. 4, c.; In Sept., I, dist. 1, exp. 4 In Sept., III, d. 6, qu. 1, art. 3, c.

De vor., qu. 4, art. 1, o.; he cometimes uses "ratio" as an equivalent for "seasing" or "sease;" e. g., Sum. theol., I-II, qu. 102, art. 2, o.

In Pari hera., I, lect. iv.

In Pari hera., I, lect. iv.

In Pari hera., I, lect. vi.

In Pari hera., I, lect. vi.

Same theol., I, qu. 57, ert. 1, c.; Cont. cent., I, chap. xxxv.

11 Supra., pp. 57-59.

Commenting on Aristotle's On Interpretation, Aquines mainteins and even emphasizes the distinction between the significance of simple words and their imbility to express truth and falsity. He explains that the parts of a simple word are not significant by themselves, incomech as one word signifies a simple concept; but the parts of a discourse are significant by themselves, since they are in the discourse as in a sign of a complex conception. To the argument that a single word does not have significance by itself, in that the mind of one hearing it does not rest, he answers that the mind of the auditor does rest in its first act, although not in its second set. The distinction between significance and truth, then, corresponds to the distinction between the terminations of the two acts of the intellect, since the first is a definite understanding of something, but without truth or falsity, while the second is a composition or division in which truth or falsity is present.

Aquinas does not often use the werd "cyncategoresatic;" however, he frequently makes use of the distinction. The distinction is drawn explicitly in the context of the argument that the parts of discourse are alguificant by thesselves; he points out that this is true of nouns and verbs, but not of syncategoresatic words. These, he says, only signify the habitude of one to another. Clearly, the habitude is not a real relation. A syncategoresatic word, he explains, imports the order of the predicate to the subject; a categoresatic word absolutely puts what it signifies with a certain supposit, as "white" does with sam, when we say "white man." The distinction, then, is relevant in the context of predication; assuming a subject, a categoresatic word can be predicated, but a syncategoresatic word indicates only the order of the predicate to a subject. The syncategoresatic words, then, are taken to be expressions of cortain modes of predicating.

Rather than reducing verbs to nouns or permitting only nouns to be

In Pari home, I, lect. iv.w. Ibid., lect. iv.

Thid., lect. v.

The ver., on. 1, ext. 3, c.; Cont. cent., I, chap. lix.

In Port here, I, loot, will of. loot. 1.

Sm. theol., I. qu. 31, ert. 3, c.

significant terms in a proposition. Aquinas maintains the distinction between them. The noun and verb are principal parts of an enunciation; pronouns ero contained under noune end participles are contained under verbe. although participles agree in some way with nowns. I A verb indicates the composition by which an emmaiation is completed; therefore, it is the quasi-formal part of it, while the noun is the subjective and quasimaterial part. Z Nouns and participles can be on the side of the subject. or of the predicate, but verbs always are placed on the side of the predicate. Elsewhere. Acuinas explains that a term which is put in the subject is taken materially—that is, it stands for the supposit; however, a term put in the predicate is taken formally-that is, it stands for the nature it signifies. However, within the predicate, a noun, such as the object of a verb, is taken materially. Houns and participles can be included in the predicate, then, since the composition of an enunciation is indicated by the verb which also can join to the subject other words in subordination to itself.

Aquinas treats the question of the infinitive in the subject as an objection to this position. Action is signified by a neun considered by itself; it is signified by a verb insofar as it precedes from a subject and inheres in it. However, since the intellect can consider process and inherence themselves as if they were things, action can be signified by an infinitive inasmuch as it signifies what is, as it were, a certain thing. Pseudo-Thomas distinguished the second and third cases, but he did not mention the first, and he concluded that action can be signified by an infinitive since our intellect "apprehends and signifies the process of action or of passion, or its inherence in a subject, as it is a certain thing." The difference between "quasi" and "ut" in the two accounts of the infinitive marks the difference between a defense of the irreducibility of verbs and a reduction of them to nouns, difference from other nouns only by what things they signify.

In Perl here, I, lect. i. Ibid., lect. v. Ibid.

Sum. theol., III, qu. 16, art. 7, ad 4.

In Sent., III, dist. 1, qu. 2, art. 5, ad 5.

In Perl herm., I, lect. v. S. t. l., tr. VII, chap. ii.

The namer in which Aquima makes the distinction also is interesting. Hours eignify action by itself in the abstract; infinitives can be taken as verbs, by reason of their concreteness, and as nows inserach as they signify as it were a certain thing. I Feede-Thomas does not introince this distinction: for him, a concrete norm signifies a form in its being in a thing, while an abstract nown signifies a form in its being in the intellect. If action is a cortain thing, then, on expression sizmifying action will be abstract, while an expression cignifying an agent will be concrete.4 It follows that there is no difference between norms and infinitives signifying action itself, since both abstractly signify the certain thing—that is, the form—that action is. Assines also distinguishes between abstract and concrete modes of signifying, since names imposed for signifying some subsisting whole are concrete, while mames inposed for signifying simple forms signify abstractly. The simile intelligibilities in the cutempries of accidents, consequently, are signified obstractly. 6 In a proposition, however, both subject and predicate aust sometime signify the same thing, although they signify eccording to different intelligibilities. A noun oignifies action by itself in the abstract, just as a certain thing, but a verb signifies it as proceeding from and inboring in a subject: an infinitive, which signifies the very inherence of action in the subject, can be taken as a verb, by reason of the condratemens—that is, with the subject—and as a noun insumuch as it signifies as it were a certain thing. The use of the infinitive as a subject. therefore, does not disprove the point that verbs are always predicated; consequently, it does not weeken or recove the distinction between norms and verbs. Bother, it shows that even concrete process and inherence can be apprehended and signified as if it were a thing.

Revertbeless, when Aquinas explains how verbs indicate predication.

In Ford here, I, lect. v.

S. t. l., tr. I, chap. iv; of. tr. IV, chap. vi.

Pseudo-Shows treats it as a form <u>ibid.</u>, tr. VI, chap. ii.

This is his analysis: <u>Abid.</u>, tr. VI, chap. 111.

Sum. theel., I, qu. 13, art. 2, ad 2. De ente, chap. vi.
Sum. theel., I, qu. 13, art. 12, a. In Feri herm., I, lect. v.

he seems to limit what is proper to the verb to the "ie" it implies. He gives the two reasons—that a verb always signifies what is predicated and that a predication requires a verb to indicate the composition by which the predicate is composed with the subject. He then explains the first by saying that verbs properly are predicated and that they are signs of semething predicated marely because of the composition they indicate. Hereover, he says that every verb can be resolved into the verb "is" and a participle. Finally, in distinguishing vericus cesses of "to be," he lists one meaning according to which it is a copula. Very similar remarks of Feaudo-Thomas led me to interpret his analysis of the proposition as a reduction of the subject-predicate form to a subject-copula-predicate form. Does not aquinas' position amount to the same reduction?

Aguinas explicitly rejects the reduction of propositional form. In an enunciation such as, "Socrates is white," the word "is" is said to be third, since it is not predicated by itself, as if a principal predicate, but as if conjoined to the principal predicate to compact it with the subject. However,

19 is easid to be third, not since it is a third predicate, but since it is a third word put in the cummoistion, which together with the predicated noun, makes one predicate, and so an enunciation is divided into two parts and not into three.

Consequently, the subject-predicate structure stands. Like other single words, "is" does not by itself signify composition in which there is truth or felsity; rather, it commotes such a composition, which cannot be understood without its components. "Is" commotes composition

since it does not signify it principally, but as a consequence, for it primarily signifies what falls in the intellect after the sammer of actuality absolutely; for "is," said simply, signifies "to be in act;" and, therefore, it signifies in the sammer of a verb. But since the actuality which this verb "is" principally signifies, is in general the actuality of every form, or every substantial or accidental act.

¹ Told. 2 Ta Note. V. lect. iz.

In Sant., I, dist. 33, qu. 1, art. 1, ad 1.

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In Peri have., II, lest. ii: "Et dicitur esse tertium, non quie sit tertium praedicatum, sed quie est tertia dictio posita in enunciatione, quae simul cum nomine praedicato facit unum praedicatum, ut eic enunciatio dividatur in dess pertes et non in trop."

it follows that when we wish to cignify that some form or not actually is in a subject, we signify it by this verb "is."!

The so-called copulative "ie," then, has a primary significance of its own. Its primary meaning neither is a comparing of object understood with a nature in itself, nor a coupling of signs, but "what falls in the intellect in the mode of actuality absolutely."

To say that verbs themselves are preficated and occasion predication merely because of the composition they indicate, them, means that verbs properly concretely signify an action or actuality and connote the composition of the emmeistion, not that they are nowns marged with a copula. Moreover, every verb can be resolved to "is" with a participle, not because "is" is syncategorematic, but because "is" signifies the actuality of every other not. Finally, "is" in one sense is called "a copula," not because it is a mere comparing or coupling, but because it secondarily signifies the truth of the composition in propositions.

Since, for Aquines, the structure of an emanciation includes only two parts, the subject and the predicate, we must see what is the relationship between these. The question is more difficult than it adjut even, since Aquines makes two different kinds of statements concerning the subject and the predicate.

On the one hand, he says that in a true affirmative enunciation the subject and predicate must signify what is semands one according to the thing, but diverse in intelligibility. This holds both an to accidental and as to essential predication, since in an accidental predication there is identity in emblect and in an essential predication there is identity

Ibid., I, lect. v: "Ideo autom dicit quoi hon verbum est consignificat compositionem, quin non eam principaliter significat, sed ex consequenti; significat enim primo illud quod cadit in intellectu per modum
actualitas absolute; nam est, simpliciter diutum, significat in actu same;
et ideo significat per modum verbi. Quin vero actualitas, quam principaliter significat hoc verbum est, est communiter actualitas comis formas,
vol actus substantialis vol accidentalia, inde est quod cus volumes significare quamcumque formam vel actum actualiter inesse alicui subicato, significamus illud per hoc verbum est."

²<u>Told.</u>

³<u>In Nets.</u>, V, lect. ix.

⁴<u>In Sent.</u>, I, dist. 33, qu. 1, art. 1, ad 1.

of supposit, but in either case there is a diversity of intelligibility. Aquinas uses this amilysis in explaining how true propositions can be formed about God. although He is not complex. The intellect does not attribute the mode in which it understands things to the things themselves. but proposes the unity of the thing by a verbal complex. which is a mark of identity; thus, the diversity in the composition is referred to the intellect, while its unity is referred to the thing. 2 Another way in which the same analysis is made is by saying that the intellect in forming an enunciation takes what is two according to mode, but one according to the thing. It forms the subject and predicate according to the diversity of intelligibilities. and composes them according to the identity of the thing. In the last statement, it is clear that the subject and predicate are not serely two intelligible aspects; they are formed from two intelligible aspects—some operation has intervened. This analysis is in agreement with Aquinas' position that words signify things according to conceptions: what is required for the truth of an affirmative proposition is that the distinct intelligibilities according to which the two words signify must be aspects of a real unit. The identification is not of things distinct in thesselves: Acuinas takes an apparently contrary case to 11lustrate this point. Then we say, "Man is white," we mean that a man has whiteness, since it is one thing which is a man and which has whiteness. This aspect of Aquinas' treatment of the structure of the proposition is similar to that of Odkham, since both the subject and the predicate are considered to stand for something one according to different meanings. Of course, there are differences, since Ockham's linguistic signs signify things directly, and his intentions are not intelligible aspects, as are Aquines' retiones.

However, there is snother statement of the role of subject and predicate. In composing and dividing—that is, in forming may proposition—the intellect either applies to or removes from the thing signified by the subject a form signified by the predicate. Be insists on this same point

l_{Sum. theol.}, I, qu. 13, art. 12, c.

Cont. gent., I, chap. xxxvi.

In Sent., I, dist. 4, qu. 2, art. 1, ad 1.

Sum. thecl., I, qu. 65, art. 5, ad 3. Ibid., qu. 16, art. 2, c.

in distinguishing verbs from nouns, for the subject of an enunciation is signified as that in which something inheres, while the verb signifies action as such, according to whose intelligibility it is that it inhere; therefore, verbs are always on the side of the predicate. This analysis of the structure of the proposition night be interpreted to agree with Pseudo-Thomas, so that the subject would indicate a certain thing, in which the form understood either was present or not. Again, however, there would be important differences, since both subject and predicate must be significant of things according to intelligible aspects, for Aquinas, while the predicate of Pseudo-Thomas' enunciation is not so much significant of a thing, as of an object understood.

'Aquinas' position, which resolves the apparent inconsistency between these two statements of the relation between the subject and predicate, is that the two parts of the enunciation are signs of two parts of a unified termination of the intellect; Insamuch as that unity is one term of knowledge, its parts cannot be the same in function, but must differ functionally with respect to each other. The two intelligibilities cannot be understood simultaneously insofar as they are distinct, since the intellect does not understand many as many, but only insofar as one of them can be understood through the other-one being as it were formal, and the other material. The subject is taken materially; the predicate is taken formally. A nown has the significance of the intelligibility from which it is meaningful; however, placed in the subject-place, it is used to stand for something—that is, it denotes or has supposition. A verb, on the other hand, signifies a certain intelligibility concretely; however, in the predicate-place, it is used to signify a principle of a thing. The predicate, then, does not stand for a thing; rather, it is the precise intelligibility through which the thing is known in the proposition.

In Peri berm., I, lect. v. De ver., qu. 2, ert. 7, c.

Ibid., qu. 8, ert. 14, c. and ed 6.

Sum. theol., III, qu. 16, ert. 7, c.

In Sent., III, dist. 6, qu. 1, ert. 3, c. and ed 3.

Sum. theol., III, qu. 16, ert. 7, ed 4.

De ver., qu. 8, ert. 14, c. and ed 6.

Then Aguinas explains that the truth of a proposition is founded on the disposition of the thing, he seems to say that the subject-predicate structure of the proposition corresponds directly to the matter-form. substance-accident, or some similar otructure in things. I That this is his position would seem to be borne out by one respect in which the analogy definitely holds-manely, that matter and form are one in the thing without a medium. Just as the "is" of predication is assumed into the predicate, and a three-part structure in the proposition is rejected, so the conjunction of matter and form is completed by the form, and the notion that there is another principle, joining the two, is rejected. Such correspondence does not necessarily hold, however; it obviously does not hold in identity-statements. I nor does it hold in assertions about God, yet the subject and predicate maintain the same relation. 4 Moreover, even when there is a correspondence, the disposition of the components of the proposition does not precisely correspond to the composition of the thing, since the terms of the proposition signify the thing according to its unity. not according to its parts. The matter-form analysis of the atructure of the proposition, then, is only an analogy; the subject somehow is determined by the predicate within the emmelation. The two parts of the enunciation are not two things, but two intelligibilities, one of which is understood through the other. Consequently, when he speaks strictly, Aquines says that the verb is as it were the formal part of the emmaciation, since it is the part which completes it.

In agreement with this restriction on the analogy of propositional to real structure, Aquinas does not consider the subject of the proposition to be a mere symbol—that is, a mere indicator of things to be understood, without any intelligibility of its own. Rather, the proper intelligibility from which the subject is formed remains present in the subject of the proposition; consequently, the subject can determine some predi-

In Meta., IX. lect. xi.

In Meta., VI, lect. iv.

Sum. thecl., I, qu. 15, art. 12, c.

Ibid., qu. 85, art. 5, ad 5.

De ver., qu. 8, art. 14, c. and ad 6.

In Meta., IX. lect. xi.

Pe ente, chap. ii.

Sum. thecl., I, qu. 15, art. 12, c.

cates to convene to itself of necessity. Loreover, that there can be nowns placed in the predicate in subordination to a verb indicates that in the propositional structure there can be further distinctions within the quasi-form.

Underlying Aquinas' account of the structure of the proposition is his doctrine concerning the second act of the intellect—the act in which the intellect composes and divides through its judgment—and his doctrine concerning the truth which is known in the term of that act.

In the first act of the intellect, we know many intelligible aspects of things: however, none of those aspects is precisely the thing which is to be known. In understanding this sultiplicity of espects, we fulfill to some extent both the potentiality of the thing to be known, and our potentiality to know: however, the fulfillment is not complete. inasmuch as it exhauste neither potentiality. The intelligible aspects which we understand separately need not be diverse in the object. 5 Their multiplicity, then, need not correspond to a multiplicity in the thing. As we have seen in examining Aquinas' doctrine on the categories. some of these aspects are of the essence of the object. others are of its accidents and relations. In simply understanding what anything is, we do not understand what is and what is not in it. Moreover, although the very being of the thing is its ultimate actuality, we never know whether enything is. in any aspect we simply understand. This is not to say that we do not understand being, for Aquinae holds that being is the primary intelligibility which we achieve concerning everything; 2 rather, it is to say that

The pot., qu. 8, art. 2, ad 6.

In Sent., III, dist. 1, qu. 2, art. 5, ad 5.

De ver., qu. 8, art. 4, ad 5; Cont. gent., I, chap. lviii; II, chap. soviii.

Sum. theol., I, qu. 85, art. 5, c.

Cont. gent., qu. 2, art. 7, c.

Sum. theol., I, qu. 85, art. 5, c.; De ver., qu. 2, art. 7, c.

Sum. theol., I, qu. 58, art. 4, c.; Cont. gent., I, chap. lviii.

De ente, chap. iv.

Ibid., Proces: "essence" is derived from "ene" in this sense: chap. i; cf. In Sent., I, dist. 8, qu. 1, art. 3, c.

simple intelligibility of it. Por this reason, Aquines distinguishes the two acts of the intellect by saying that the first is concerned with essence—what the thing is—while the second is concerned with the very being of the thing—that is is. In short, for Aquines, we do not immediately know, in the first act, an absolute sataphysical principle—whether the sataphysical absolute be conceived as a nature or as an absolute individual. Our first knowledge of things is an understanding of aspects whose distinction or unity and objective status are not yet known; in this sense, the termination of the first act of the intellect is not a complete knowledge of things.

The second operation of the intellect, then, is not a mere rejoining of distinct intelligibilities in order to constitute a complex understanding of things. Aside from the difficulty inherent in a notion of many distinct intelligibilities being understood together, which we have seen requires a functional differentiation of the parts of a proposition, a mere conjunction of intelligible aspects could not result in a knowledge which none of them contains—that is, a knowledge of the very being of the thing. The second act of the intellect, therefore, makes an advance in knowing the things which are known; it does not merely make the intellect aware of the implications or organization of the knowledge it already has.

Many intelligibilities can be known as one only insofar as they are compared together, related, or ordered. The unity of the proposition, therefore, does not come about by a mere joining of distinct intelligibilities, but by understanding at once the intelligible content of both in such a way that the intellect achieves a new termination in which there is an addition to our knowledge of things. The act is called "composition and division," because with reference to the object, the intellect knows

De ente, chap. iv.

In de Trin., qu. 3, art. 3, c.; cf. De ente, chap. iv.

De ver. qu. 8. art. 14. c. and ad 6.

⁴Sum. theol. I. qu. 85, art. 5, c.

⁵ Ibid., qu. 58, art. 3, c.; of. Cont. gent., I, chap. lv.

De ver. qu. 4. art. 2. c.

either a unity or division of things; however, considered simply with reference to the term of the act itself, the operation always is a composition. It is, in fact, a composition of many intelligibilities into one intelligibility.

But what is known through such a composition that is not known in a simple intelligibility? Aquinas gives two answers, which seem quite distinct. On the one hand, that a thing is, is not included in any simple intelligibility; the very being of the thing, which is its actuality, is known only in the composition, not by simple understanding. On the other hand, he explains that the first act of the intellect does not include an understanding of any comparison or adequation to things; such adequation is known only when the intellect composes and divides, forming the proposition. Indeed, there is no adequation in the first act, since there is nothing in the term of that act which is proper to the intellect itself; the intelligibility merely is a likeness of the thing. Hotice that aquinas refers to the simple intelligibility as a likeness, for he is considering it in the context of the second act; considered just in itself, the intellect's simple understanding is identical with what is understood, insofar as it is understood.

These two ways of stating what is known through the second ect are not exclusive; rather, they are two ways of saying that the intellect achieves a knowledge of truth by its second operation. To show this, I must explain next what Aquinas' dectrine of truth is, and how be teaches

In Peri herm. I, lect. 111.

In de un., III, lect. x; De ver., qu. 2, ert. 7, c.

De ente, chap. iv: In de Trin., qu. 5, art. 5, c.

din de an., III, lect. xi; In Meta., VI, lect. iv; Cont. Ment., I, chap. lix; Sum. theol., I, qu. 16, art. 3, c.; De ver., qu. 1, art. 3, c.

De ver. qu. 1, art.), c. Thus, for Aquinas, the conformity is not present in the first act, only to become known in the second, as is the case for Pseudo-Thomas (tr. VII, chap. v), especially according to the second or "clearer" opinion. The treatment of truth in Aquinas commentary In Peri herm. I, lect. iii, was given not to reduce truth to a prior conformity, but in defense of the point that truth only is found in composition and division.

^{6.} E., Sum. theol., qu. 14, art. 2, c.

that we come to know it.

The intelligible aspect signified by the word "truth" is a general mode of being—that is, a transcendental intelligibility. It is not a complex, but a simple intelligibility; it edds nothing really to the meaning of being, but only a relation which merely is understood—the relation of every being to intellect. Since everything can be understood inasmuch as it has nowe proportion to intellect; everything can be called "true," and is considered to be intelligible according to this aspect. However, since not everything required for knowledge has to be known before anything else is known, the intelligibility of being can be understood without understanding that of the true.

"Being" and "true" are convertible, but they are convertible in two different ways. "True" can be used to refer to anything according as it is adequated to God's knowledge and can be adequated to ours. In this sense, "true" and "being" are predicated convertibly of anything whatever. On the other hand, since the agreement in which truth consists is fulfilled in the intellect rather than in things, "true" can be used in another sense to refer precisely to the intellect. In this sense, it is converted with being not by predication, but by agreement or harmony, since to a true understanding, some being must answer, and vice versa.

Just as truth is in the intellect more than in things, so it is in the second act of the intellect more than in the first. Truth requires adequation; there can be no adequation in the first act of the intellect, since there is nothing proper to the intellect itself, different from the thing, to correspond to it. Then the intellect begins to judge concerning that it has apprehended, then the very judgment of the intellect is proper to it; such judgment occurs then the intellect composes or divides, saying that something is or is not. Truth primarily belongs to the composition and division of the intellect; it belongs secondarily to definitions of things, inasumeh as a true or false composition is implicated in them; it belongs in the third place to things inasumeh as they are adequated to the divine intellect and can be adequated to ours. Tamediately after explain-

¹ De ver., qu. 1, art. 1, c. 2 Ibid. 3 Ibid. 4 Ibid., ed 3. 5 Ibid., qu. 1, art. 2, c. and ad 1. 6 Ibid., art. 3, c.

ing this, Aquinas answers an objection to the effect that truth is more principally and properly found in the first act of the intellect. He says:

Although the formation of quiddity is by the first operation of the intellect, still the intellect does not have anything else of its own by that act, which can be adequated to the thing; therefore, truth is not there properly.

Properly, then, there is no truth in the first act of the intellect, in the sense in which there is truth in the second act; truth belongs to the first act only in that it conduces to truth in the second act, or only insofar as the informed intellect itself is a certain thing. When it is said that there is truth in the first act of the intellect, then, this sust be understood either to mean that "true" can be attributed to it according as it is predicable convertibly with "being" or in the sense that it conduces to the attainment of truth in the second act.

Truth, in this proper sense, is grounded more in the very being of the thing than in its easence, just as the name "being" is derived from the act of being; the relation of adequation is completed in the operation of the intellect accepting the being of the thing just as it is, by a certain likening to it. This operation, of course, is the second act of the intellect, in which the proposition is formed. In this act, the intellect "comprehends the being of the thing;" it does this by composing and dividing, not by simple understanding.

But how is thic done? Aquines explains that the intellect knows

lbid., art. 3, ed 1: "Quesvis formatio quidditatis sit prime operatio intellectus, tamen per eam non habet intellectum aliquid aliud proprium quod possit rei adasqueri; et ideo non est ibi proprie veritas."

²Aquinas states this clearly in <u>In Nota.</u>, VI. lect. iv, where he also says that falsity is in definitions in the same sense it is in things.

The texts in which aquines insists on the point that the first act of the intellect always is true (e. g., In de an., III, lect. xi) in contrast with the second act, can be understood in this way, providing we remember that "falsity" in the proper sense can be denied of the first act, just as "composition and division" can be denied of it.

^{4&}lt;u>In Sent.</u>, I, dist. 19, qu. 1, art. 5, o.

⁵ Ibid. Aquines says it is signified by the emunciation—that is, the linguistic emunciation; of. In do Trin., qu. 5, art. 3, c.

⁶ In Sent., I, digt. 38, qu. 1, art. 3, c.

truth as a consequence of its act. It is a consequence of the act, inassuch as the judgment of the intellect is of a thing as the thing is. The intellect knows this according as it reflects on its own act, knowing it and its proportion to the thing. The latter is known inasmuch as the intellect knows the natures of its act and of itself. This explanation is quite satisfactory in one respect—it does not require that the intellect know its conformity to things by first being conformed without knowing it, and then comparing what it knows with what it does not know. However, it seems strange since it accounts for the intellect's knowledge of its relation to the object, just by its knowledge of itself. Horeover, as we have just seen, this explanation—given as an unqualified account of the way the intellect knows truth—must explain how the intellect comprehends the being of the thing by composing and dividing.

Some other texts can clarify the explanation. Although Aquines sometimes speaks as though it were the act of the intellect—that is, the judging itself or the operation of composing and dividing—which is true and is known to be adequated to the thing, he states clearly and without special qualification that the adequation is not in the act, but in the term of the act. "Judgment" may signify what is true or false if it signifies the same as "proposition" or "enunciation," but if it refers to the operation, it is not true or false. Truth and falsity are in the proposition, just as the "to be" which signifies the truth of the proposition is in the predicate, not added to it.

Moreover, the intellect attains the knowledge of truth by composing and dividing through its judgment; if the judgment is consonant with things, it will be true, but it is false if judgment is discordant with the thing. Now, coupling the use of the word "through"—"per suum iudicium"—here with the fact that the truth known is in the term of the act, the relationship between the two can be clarified. "Through" expresses some causal rela-

De ver., qu. 1, art. 9, c.

² Indeed, he seems to say this: Ibid., qu. 1, art. 3, c.

Cont. gent., I. chap. lix.

⁴ Ibid.; In Peri horm., I, lect. 111; II, lect. 11.

⁵ In Peri herm., I, lect. iii.

tionship. The judgment, then, is the means by which the proposition, in which truth is, is known; if judgment is consonant with the thing, the intellect will be true—that is, the proposition in which the act terminates will be true.

"Judgment" can be used with respect to any of the cognitive powers when there is a question of discrimination. For example, an external sense judges proper sensibles by discerning one from another. However, it belongs only to reason to judge its can judgment, because only reason can reflect on its own act. Truth and falsity are in the second act of the intellect, precisely because it not only has a likeness of something, but it can reflect on that very likeness, knowing and discriminating it.

Now, this discrimination is not the division which is opposed to composition; in fact, Aquinas emphasizes the discrimination of judgment with respect to an example of an affirmative proposition—"Man is an animal." Yet how is it to be reconciled with his statement that the act of the intellect always is a composition on the part of the intellect, even though it can be either composition or division with respect to the object? Recall that the operation proceeds by a reflection of the intellect on its own act. Recall too that there is no adequation of the intellect to the thing in the first act, for then the intellect has nothing proper to itself; it has something proper to itself only when it begins judging. Finally, recall that the intellect in this reflection is judging its own judgment—discriminating its own discernment. The operation of the second act of the intellect, then, is a discrimination between what is known and its being known; in the term of this operation, the thing is known in discrimination from its being known. Aquinan explains this by saying that to

Sum. theol., I, qu. 36, art. 3, c.

<u>Ibid., qu. 78, art. 4, c.</u>

De ver., qu. 24, art. 2, c.

In Neta.. VI, lect. iv. Aquinas is not satisfied in this place to use the word "indicando," which already implies discrimination or discernment, but uses "diudicando," emphasizing the discrimination by a word which almost draws a picture for us of the cutting.

⁷ In Peri herm., I, lect. 111.

^{6&}lt;u>Da ver.</u>, qu. 1, art. 9, c. 6<u>Tbid.</u>, qu. 24, art. 2, c.

know the relation of conformity precisely is to judge it "to be so" or 'not to be so" in the thing; this is to compose and divide; consequently. the intellect knows truth only by composing and dividing through its judg-In other words, to schieve a termination of the second act of the intellect, which is to know truth, precisely is to know the thing in disorigination from its being known; this is not to know the thing without knowing it, but is to know a composition or division in discrimination from the act of the intellect itaelf—that is, to know that it is not merely an intellectual construction. The intellect can know the latter, since it knows itself by reflection. This now termination, always is a composition from the side of the intellect, since it is a unified content thought to be adequate to a thing; the very discrimination between the knowing of that thing and the thing, is included in the termination of the act. It is precisely this knowledge of the thing in discrimination from its being known, which is a knowledge that the thing is, since the relatich of adequation—which is truth—is completed in the very operation by which the intellect accepts the being of the thing, just as it is, by a cortain likening to it.

From this point of view, we can understand why Aquinas treats the copula as part of the predicate, and assigns it the primary meaning of the very actuality of every form and act—the actuality which falls absolutely in the intellect. Then a proposition is known to be true, the objectivity of the being itself is known—that is, its intelligibility is posited with it in a unity that is discriminated from the act of the intellect itself.

This interpretation, however, seems to be involved in a double difficulty. First, the "to be" which signifies the truth of the proposition is only in the intellect; in fact, the intellect introduces (adinvenit) it by joining the predicate to the subject. Aquinas says that in this

In Peri hera., I, lect. 111.

In Sent., I. dist. 19. qu. 5, art. 1, c.; cf. De ente, chap. iv; In de Trin., qu. 5, art. 3, c.

In Peri berg., I, lect. v.

Sum. theol., I, qu. 3, art. 4, ad 2.

seculna. "to be" is a verbal copula, signifying every composition which the soul makes; it is nothing in the nature of things. I It is divided azzinst "to be" zesning the act of every entity—that is, the act by which it is denominated a being in act in the nature of things. In this sense. "to be" only is attributed to things in the ten categories; therefore. "being" said from this "to be" is divided into the ten categories. 2 Second, it is certain that not all propositions are existential, in the sense of positing individual actual existence. Propositions which posit individual actual existence seem peculiar. for they appear to have only a subject. while Aquines requires two terms for a proposition. Then we say that Socrates is white, however, the point is not to essert his existence. but to indicate that whiteness belongs to him. 4 Moreover, it does not seen that any necessary proposition is concerned with existence. for Acuinas says explicitly that the proposition, "Han is rational," can be true even if there are no individual men existing. It seems, then, that it is impossible to say that Aguinas considers the knowledge of truth, which terminates the second act of the intellect, to be a knowledge of the existence of things.

Those apparent inconsistencies, however, can be resolved. Considered simply by itself, the "to be" which signifies the truth of a proposition need not signify that anything exists apert from the intellect, since affirmative propositions can be formed with respect to what is understood by comparison or contract with the simple intelligibilities which are understood primarily. However, every absolute positing signifies something existing in the nature of things. An absolute truth is one which requires no supposition or condition. Any simple intelligibility that is primarily and directly understood, posits something in the nature of things, not by itself, but when it is predicated without conditions. Thus, the "to be" which signifies the truth of the proposition signifies

In Peri berg., I, lect. iii.

Quod. VIII, qu. 1, art. 1, c.

De ver., qu. 21, art. 1, c.

De ente, chap. i.

Thid., De ente, chap. i.

Thid., lect. ii.

De ente, chap. i.

In Feri born., I, lect. i.

primarily what falls in the intellect as absolute actuality, since those propositions which posit something in reality are primarily true, while those which do not, are true only insemand as the intellect understands real beings and forms negations and relations by contrast and comparison.

The intellect introduces truth by joining the predicate with the subject; consequently, to know that something exists, is not to understand its existence, but to posit it. This not only holds with respect to God, but also with respect to Socrates. When we say, "Secrates is," we may mean that he is a being—then the proposition is necessarily true—or we say mean that the proposition is true—then the proposition is not necessarily true, since it means that Socrates exists in the nature of things. The texts in which Aquinas opposes the meanings of "to be" signifying truth and signifying existence, then, have two meanings. First, they indicate that "to be" can be used without its full significance, to signify propositions which are true only on condition that the intellect considers things in a certain way. Second, they indicate that the "to be" known by means of the proposition is not an intelligible aspect of things known, since it is not an identification of understanding with a thing, but a positing of the thing in distinction from understanding.

Tith respect to the proposition, "Socrates is white," it is not the case that the point is that Socrates exists. Nevertheless, the proposition is not wholly irrelevant to existence. Rather, its precise point is to assert that whiteness is present in Socrates, apart from our knowing him, for he neither is white nor anything else merely by essence, but only by the actuality of every form and act—existence. When we assert that man is rational, this assertion can be true, not because it is necessary that individual men exist, but because spart from our peculiar way of knowing, which divides the two intelligibilities, they are one. Aquimas shows with this example that the unity bolds, and holds by reason of the thing itself, apart from our knowledge or the existence of individuals, because it is founded on divine knowledge.

Sum. theol., I, qu. 3, art. 4, c. and ad 2.

In Mets., V, lect. ix; In Feri herm., II, lect. ii.

³ Guod. VIII, qu. 1, art. 1, c. and ad sed cont.

With respect to the problem concerning the apparent lack of composition in a simple existential proposition, it seems to me that this can be answered by saying that the lack of composition is only apparent. The intellect knows the singular directly—as it were by reflection. But since the reflective operation involves a point of departure in simple understanding, there are two terms in such an act-what has been understood directly, and the intellect's continuity with the experience on which its ect is found to depend. The very act of knowing a singular, therefore, is a judgment terminating in a proposition. knowing that the thing is. Simple intelligibilities never can be posited absolutely by themselves, for they do not have objectivity except for the intellect—the thing understood insofer as it is understood. Only a determined unity can be posited unconditionally—an intelligibility signified by the predicate according to a determined subject, and a subject only under a certain intelligibility. It is precisely for this reason that it is necessary to take the modes of predicating into account: the proposition bears its own requirements for truth within itself and fulfills these requirements at the same time—if it is unconditional.

Aquinas' commentary on Aristotle's Quainterpretation, therefore, is quite different from the revision which Pseudo-Thomas made of it. Aquinas explains that the treatment of the hypothetical proposition is not included, since it is not suitable for scientific knewledge, which sust be of an absolute truth, not a conditional one. He follows Aristotle in his emphasis on the question of the unity of the simple enunciation, explaining that the exposition is in terms of apposite modes of plurality. In an absolutely simple enunciation, one must be predicated of one—that is, there must be only two terms, each of which can be grasped in a simple intelligibility. After the treatment of signification and the definition and division of emmoiation, the treatment begins by taking a twofold diversity of enunciation, one from the very affirmative or negative mode of the enunciation itself, the other from its possible truth or falsity. The variations of the enunciation through these modes are then studied. The

Isum. theol., I, qu. 86, ert. 1, c. Ibid., lect. viii.

²In Peri herm., I, lect. 1. ⁴Ibid., lect. ix.

distinction of necessary and contingent matter is not introduced in the division of quantity, but only in the treatment of the problem of future contingents. The entire question of quantity is a matter of the diverse modes of attributing, and the signs of these modes. The evident importance of the two modes—composition and division—is understandable, since it is by these modes that the intellect either apprehends identity or diversity with respect to the thing.

Three final points will complete this analysis. First, Aquinas holds that there is an absolute necessity in creatures, in that there are absolutely necessary consequences of certain causes, even though all creatures depend on the will of God for existence. A In the sense in which a univerdal proposition is existential, therefore, there can be a necessary knowledge of existing things other than God. Second, we have seen that in the process in which the intellect knows a truth, judgment is within the act, while the proposition is the term of the act. Unless an emunciation is offered ready-made for consideration or inquiry, consequently, there is no question of assent. We have seen the development of Aquinas' doctrine on judgment and the proposition in many texts; in mone of these is he conderned with assent. He does speak in terms of assent when he deals with matters of faith; it is in this context that assent most often is mentioned. The reason for this appears to be that when a proposition is known directly, essent is identical with the judgment through which the proposition is known. Third, enalogy occurs because of diversity of the modes of predicating; consequently, analogues are divided according to diverse modes of predicating. Since the modes of predicating campot function except within the proposition, knowledge in which analogy is present

loct. mii.

Told., lect. z. Quantification of the predicate is ruled out, since such a mode of predicating is incompatible with the predicate.

Ibid., lect. 111. Cont. cent., II, chap. xxx.

⁵ g. Sum. theol., II-II, qu. 1, art. 4, o.

Thid., I-II, qu. 17, art. 6, c.; De malo, qu. 6, art. 1, ad 14.

In Sent., I, dist. 8, qu. 4, art. 2, ad 1.

[&]quot;Ibid., diet. 22, qu. 1, art. 3, ad 2.

is not reducible to the content of eimple intelligibilities; on the other hand, although simple intelligibilities are not analogous by themselves, there can be analogy in predication which actually edds to our knowledge of things.

In our, Aquinas treats the proposition as a unified term of the secand act of the intellect. This act is necessary to perfect the limited knowledge of things acquired in the first act. In it, the thing is known de objective; although this knowledge still is imperfect, at least a limited objective unity is known in distinction from the act of knowing. In knowing this unity, truth is known, but it is achieved only according to the limits and determinations of the modes of predication. The proposition has a two-part atructure, consequently. The proposition of individual existence is an extreme case of what occurs in every unconditional judgment. for this is simply knowing the truth of a proposition which is a knowledge of an individual thing. Other propositions, which are not conditional, posit their content in the nature of things, not morely supposing existence, nor merely on the condition of existence, but declaring a unity which holds true for existence. In consequence of this doctrine, the question of the unity of a simple proposition remains an important one. to be studied in terms of opposite modes of plurality. In cases in which a proposition is known, assent to the proposition is not a consequent act. but is the very judgment through which the proposition is attained. Moreover, analogous predication can play an important role in this view, since the diverse sodes of predicating, which determine a genuine addition to dur knowledge of things, divide an intelligibility, making its predication dnalogous.

Conclusion

I have examined three distinct doctrines concerning the proposition its logical structure, the underlying theories of propositional knowledge and truth, and certain aspects of the logical treatments of propositions.

For Pseudo-Thomas, the proposition has three parts: the subject, the copula, and the predicate. He initially describes the second act of the intellect as that in which it joins one thing to another, or divides one thing from another, by means of "to be" or "not to be." My analysis of

his treatment of the nown and verb resulted in two conclusions: first, the verb actually is reduced to a noun with a copula; second, both parts of the proposition are treated in such a way that the distinction between the significance of single words and their lack of truth or falsity becomes irrelevant. The copula signifies the two principal parts, insofar as they become a single object for understanding. Significance requires communication of such objective unities and presupposes the object known, which already has been enalyzed and reduced to prior principles. Pseudo-Thomas considers truth to be a conformity between an object understood and something in the nature of things. At least according to the second of his two theories, it is clear that the conformity itself pre-exists our objectification of it and that the second act of the intellect is not an advance in our knowledge of things, but in our everences of what we already know, and of its relation to the things. Pseudo-Thomas' lack of concern with the problem of the most simple proposition, his treatment of categorical propositions and reduction of model to non-model categoricals, and his method of distinguishing categorical propositions from hypothetical once-all these depend on his view of propositional structure and his underlying theory of the second operation of the intellect.

Ockham's purpose and procedure in treating the proposition in the Sum of Logic are quite different. Thereas Pacado-Thomas shows the way for reducing what is communicated in propositions to the prior principles of objects understood and the unfolding swareness of the intellect. Ocksan states the various propositional forms and indicates in terms of supposition the necessary and sufficient truth-conditions for propositions of each form. Both principal terms in a proposition must be nouns. for they are signs used with determinate supposition—the supposition partly is indicated by syncategoresatic terms, and partly by the form of the proposition itself. The copula is syncatogorematic insofar as it does not have significance by itself; however, it does not limit the supposition of other terms. but indicates that they are being used with their determinate supposition. Oakham does not emphasize distinctions between cognitive and linguistic structure in his treatment of propositions, since the two correspond insofar as truth and falaity are concerned, given the saterials from which propositions are formed. It seems to follow from Ockham's

treatment of propositional structure that the subject-predicate form as such is not necessary; nevertheless, Ockham offers an acute view of the conditions for a simplest proposition, according to which it is one having an indivisible truth-condition. Truth is identified with the proposition itself; the knowledge of truths, insofar as logic can conduce to it, is a knowledge having propositions, not things, as its direct objects. Ockham neither reduces modal propositions to non-modal ones, nor does he permit all hypothetical propositions to be reduced to estegorical ones. Ockham's entire logic of the proposition rests on the distinctions and definitions he has set down in the first part of his logic; moreover, it is in agreement with his notion of logic as an art directed to the construction of complex forms of signification.

Aquinas' treatment of signification requires that linguistic considdrations be given a principal place in all three parts of logic. The linguistic structure of the emmeiation does not indicate its logical structure. for although both terms signify things according to conceptions. they are joined in a functional unity in signifying the proposition which terminates the second act of the intellect. The proposition, then, has two parts, not three; the copula is included in the predicate. The copulative "is" has a primary significance of its own, for it principally sigmifies what falls in the intellect in the mode of absolute actuality. The proposition terminates an operation of knowledge in which there is a genwine advance in knowledge of thinge; this advance is accompliched through judgment, for by judgment the truth of the proposition itself becomes known and the existence of the thing thereby is known—not by being understood, but by being posited. Since the intellect introduces the composition of the proposition, it introduces the simple intelligibilities which enter the proposition as intentions and it introduces additional modes of composition from the two terms. The business of the logician is to study these nodes, for the truth of the proposition requires that judgment judge itself, taking the modes of predication into account. In the second part of logic, the modes which are introduced precisely in the process of judgment-especially, affirmation and negation-are examined by contrasts. Aquinas' view neither reduces the proposition to prior principles—judgcent takes into account whatever is necessary-nor states the truth-conditions for propositions in terms of the things for which they stand. The latter procedure, however, has its analogue in Aquinas' consideration of modes of predicating, since these determine truth end falsity; however, the modes function within the proposition, not by the application of rules established extrinsically.

Concerning certain points, the three theories of the proposition tend to agree. Each of the three considers the proposition on the busis of his treatment of the categories. The distinction between the subject and the credicate is related in each case to a doctrine of substantial unity: for Poeudo-Thomas' subject signifies a thing or a nature in a thing. Ockhan's irreducible term is a specific sign, and aguines' subject stands for the concrete supposits or subjects with which the predicate is understood to be joined. Again, each theory is related to a doctrine on truth and the operation of the intellect in which truth is objectified, truths are formed, or truth is introduced. Considering the theories with respect to knowledge of objects, however, they are different; Aquinas emphasizes the continuity of the process of knowledge concerning the same objects, while Pseudo-Thomas and Ockham in different ways consider the direct knowledge represented in a proposition to be displaced from things prisarily known—the former locating its object in the conformity which preexists judgment, the latter locating its object in the proposition itself.

A few remarks concerning John of St. Thomas' treatment of the proposition are sufficient to indicate the direction of his analysis. He considers the division of the proposition into categorical and hypothetical to be by reason of the capulation or conjunction. His treatment of the structure of the categorical proposition explicitly distinguishes three parts—subject, copula, and predicate—and indicates different kinds of copula. In treating the verb, however, John insists on the significance of the copulative "is;" in fact, he assigns it a proper concept. His explanation of this concept is that it is of existence; since the existence

Loamis a Sameto Thomas, op. cit., I, 157 9-18. (He refere to S. t. l., tr. VII, chap. vi.)

Idd., 26⁴23-27⁸26.

² Ibid., 122 1-35. (Se quotes Aquinas, In Peri herm., I, lect. v.)

of a creature is a term of action, it can have the mode of action or transientness in aignification. In defining the enunciation. John carefully excludes both truth end judgment from the emunciation itself. An emunciaation is a perfect discourse expressing a complex object; judgment can be passed with respect to this; therefore, it follows that it signifies the true or false. 2 John generalizes the cases—such as faith—in which there can be an enunciation presented for judgment; on his account, an enunciation first is formed and apprehended, then it is judged. Truth or falsity in themselves are accidents of the proposition and judgment; emunciation is perfected by the signification of a complex object, on which an assertion and affirmation of judgment can fall. That John seems to do, then. ie to treat the proposition as a knowledge of a complex object—including some mode of existence-which is formed, apprehended, judged, and asserted or denied. The form for expressing knowledge of a proposition would not be simply the emunciation itself-"John is a man"-but the essertion of the proposition—"It is the case that John is a man."

In the context of those conclusions concerning the relevance of the oppositions of the three logical theories to their treatments of the proposition, it is interesting to notice certain analogies in the three contemporary philosophers to whom I have referred. Once again, I do not intend to extend my conclusions, but morely to indicate analogies which suggest the relevance of my investigation. The points I shall mention, then. I consider to be suitable for inventigation, not for assertion.

In his Problems of Philosophy Russell included an interesting chapter on truth and falsity. Distinguishing knowledge of truths from knowledge of things-that is, acqueintance-hassell says that knowledge of truths has an opposite-namely, error. In this chapter, he proposes to investigate the question: "That do we seen by truth and falsity?" presupposing this distinction, and setting aside the question concerning how we know whether a given belief is true. 6 A theory of truth must admit false-

²<u>Ibid.</u>, 145^b24-29. <u>1014.</u>, 123⁸17-124⁸6. <u>1014.</u>, 145⁸12-⁶22.

Sertrand Hussell, The Problems of Philosophy (London; Oxford University Press, 1912), chap. xii.

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hood; it must recognize that truth and falsity are properties of beliefs and statements; and it must recognize that truth and falsity are relational properties of beliefs, not a quality intrinsic to them. Russell's distinction between knowledge of truths and knowledge of things is somewhat like the distinction I understand Pseudo-Thomas to make between the second act of the intellect and the direct knowledge of things which has a function in both the first and second acts. His requirement that truth be considered a relational property of beliefs, is analogous to Pseudo-Thomas' treatment of it as a relation of reason.

Russell argues that the accessity of allowing for falsehood demands that belief be a relation of the mind to more than one object, since if it were a relation to one object, it would always be true—if the object existed—or it would not be possible—if there were no object. Consequent—ly, he defines belief or judgment as a relation of a mind to several things. The judging mind is the subject; the other terms are objects; the act of belief is the relation uniting them. The subject and objects together are the constituents of the judgment; the relation of believing sets these in a certain order, or gives them a certain sense or direction.

Among the objects of the belief, there must be at least one relation. As it enters the belief-relation, however, this object-relation is merely one constituent; it is the belief-relation which unites all of the constituents into a single whole. Then a belief is true, there is a complex unity, distinct from the belief-relation, in which the remaining constituents are joined by the relation which is included in the object-constituents. Thus, a belief is true when it corresponds to a distinct complex which has its object-terms united in the order and by the relation which is included among them. It follows that the truth of the belief is its relational-property to the fact to which it corresponds; it is felse when it lacks a corresponding fact. The mind does not create truths, but only beliefs, which are true or false because of facts. This part of Bussell's theory, while it emphasizes a complex propositional structure, like John of St. Thomas', also has sumething similar to Pseudo-Thomas' notion that

¹<u>Told.</u>, pp. 120-121. ²<u>Told.</u>, p. 124. ³<u>Told.</u>, pp. 126-127. ⁴<u>Told.</u>, pp. 127-128. ⁵<u>Told.</u>, pp. 129-130.

the object understood is formed by the mind in one act. and considered in comparison with the nature in things by a second ect.

On the other hand. Father Boehner has pointed out that Ockhom's theory of truth, resting on his doctrine of supposition, is related not only to Aristotle, but also to the contemporary, semantic concept of truth. If we look at Carnap's Introduction to Semantics, the analogy is striking. A semantical system is a metalinguistic set of rules determining the necessary and sufficient conditions for the truth of every sentence formulated in the object-language to which it refere. Carmap distinguishes between code systems, in which a truth-condition is given sensrately for each sentence, and language systems, in which general rules are given. In a simple example, he establishes signs for properties and for objects, and states the truth-condition: a centence joining on object-eign with a property-sign is true if and only if the designatum of the objectsign has the designatum of the property-sign.

From this and other examples, be says that a semantical system may be constructed as follows. First, a classification of aigns is given; second, rules of formation are laid down; third, rules of designation are laid down; finally, rules of truth are laid down. By the rules, "sentence." "designation." and "true" are defined for the system. This defimition of "true" is the aim of the whole system. Cernap explains how he is using the word "true." To accort that a sentence is true is the same ds to assert the sentence itself. This is not a definition of "true." but a criterien according to which a proposed definition will be judged edequate or inadequate—that is, is agreement with his intention or not.

The analogy hardly needs comment. Carnap considers the sentence to be a unity of signs used with definite supposition; the truth-condition of the sentence is that the designate fulfill the condition which the sentonce requires. The need for a classification of signs and the rules of designation exises from the fact that Carnen considers only linguistic

Boehner. "Cokham's Theory of Supposition." Collected Articles. pp. 260-261.

²Carnap, <u>Introduction to Semantion</u>, p. 22.

⁵ Inta. 4<u>Ib1d., p. 24.</u>

signs; he does not suppose any of them to be given with determinate significance. His rules of formation correspond to Ockham's statement of propositional forms; his rules of truth correspond to Ockham's statement of the necessary and sufficient conditions for the truth of propositions of various forms.

Dewey's notion of the structure of the judgment depends on his treatment of inquiry. Inquiry is a directed transformation of an indeterminate situation into one whose constituents are determined in such a way as to convert the original elements into a unified whole. "Situation" here does not mean an object or set of objects but an entire context. Antecedently, the situation itself is unsettled; it evokes the question and the precedure of inquiry. The knower is not merely subjectively doubtful; rather, he is faced with the situation, and he inter-acts with it through a temporal process. The inter-action becomes inquiry when there is anticipation of consequences, and an active direction of the situation toward a certain outcome, within the potentialities of the situation. Dewey's notion of the process leading to judgment, then, involves action in an external matter by a directed program of overt operations. In Aquinas' terms, this would be called "art" in the strict sense.

Judgment is the settled outcome of inquiry; it is to be distinguished from propositions, which function within the process that leads to judgment. Judgment is individual, but not singular—that is, it has a situation as its subject matter, not a singular object. The judgment has a subject-predicate structure. The subject refers to the situation as it is observed to constitute the problem and to provide facts about itself. In the first instance, it is neither a mere this, nor an entological substance, but an inclusive situation in which singulars may be discriminated and properties noted, because of their significance for the problem. The predicate refers to the meanings or ideational contents which constitute a proposed solution to the problem. The subject and the predicate, then,

Dewey, op. cit., pp. 104-105.

Thid., pp. 105-106.

Thid., pp. 126-107.

Thid., pp. 124-125.

Thid., pp. 124-125.

Thid., pp. 131-132.

held enterially, those in the predicate are held formally. Of course, the analogy is only an analogy, since Dewey's terms have a time-differential and processive relation to each other, while Aquinas' terms do not.

The copula is not a separate element; it affects both terms and it expresses predication. It indicates the operations by which the subject is selected and the predicate applied to it. The unity in diversity it implies is not self-contradictory, for the copula stands for operations performed in a temporal process transforming the situation. Aguinast conceptual reconstitution, then, is parelleled by an operational transformation in Dewey; in either case, the separate terms do not express a complete knowledge of a metaphysical principle, but an aspect of a thing.

In a jadgment, the "is" has temporal force and inherent existential reference. In a mere comparison of meanings, on the other hand, it does not have such significance. The situation to which the sentence refers determines the meaning of "is." Not an isolable constituent, the copula really puts the subject and predicate to work on each other. Objects, finally, are subject-matters transformed according to judgments; they are an outcome of the process of inquiry. The discrimination of the object from the process of knowing in Aquinas' proposition is analogous to the constitution of an object for Dowey, since the object is the outcome—that is, there is an object at the point at which inquiry terminates.

The remarks on all three of these theories have been by selected references; even so, the differences are as apparent as the analogies. Revertheless, that there are analogies seems evident, and this is sufficient to indicate that the opposition among logical theories is not irrelevant.