

Aquinas' Principle of Individuation

Patrick W. Hughes
Denison University

Saint Thomas Aquinas, the Thirteenth Century Catholic theologian and philosopher was one of the first Medieval philosophers to attempt to reconcile the newly re-introduced Aristotelian system with the Catholic religious thought of the day. Aquinas' numerous commentaries on Aristotle and his adoption of the Aristotelian thought form the basis for the whole of Aquinian metaphysics (as well as the basic Aristoteleanism which pervades Aquinas' whole systematic philosophy). In this paper I will deal with a specific yet fundamental principle of Aquinian metaphysics—the principle of individuation. On first reading of the Aquinian texts, the principle of individuation appears to be stated succinctly, yet further investigation into the concept of individuation reveals problems and ambiguities. As it is necessary for an understanding of the problem of individuation in the Aquinian system, I will start off with the basic ontology of Aquinas and then will proceed with one interpretation of the ambiguities which exist in the texts regarding the principle of individuation. I will then give a counter interpretation that Aquinas might level against my interpretation and the problems of my interpretation; finally, I will analyze any problems that arise from the Aquinian response.

I. Primary Substance in Aristotle and Aquinas

The difficulty in dealing with systematic philosophy is that it is difficult to know where to begin, since each concept is built upon previous concepts and all of the concepts are fundamentally interrelated. Nevertheless, I shall start by explicating Aquinas' fundamental ontology. Aquinas, following Aristotle, points out that the world is made up of individual things—or what Aquinas calls "primary substances". Socrates, Rover, and the pine tree in my yard are all existing individual primary substances in the world. I can ascribe certain qualities to these individual substances—I can, for instance, say that Socrates is a philosopher, that Rover is frisky, and that the pine tree has snow on it. These are characteristics which apply

specifically to these individuals. Although these primary substances are complete individuals in themselves, they are not unique in themselves, for they also possess characteristic essential properties which can be categorically ascribed to groups of primary substances. I can for example, say that Socrates is a man, as is Plato, or that Rover and Spot are both dogs. There is not just one pine tree in the world, but there are numerous trees—there are whole forests of individual pine trees. This introduces the question of individuation: how can something be an individual thing yet also belong to a certain category or class of things? How can Socrates be Socrates the individual yet also belong to a more universal category of “Man”? The problem of individuation will become clearer when the ontological structure of the primary substance is explicated.

Aristotle and Aquinas' ontology try to explain how it is that there exist individual primary substances which exist both as individuals and as members of a larger non-individual or universal group. Their explanations or responses to this question characterize the basic ontological composition of the primary substance itself. What must be remembered when considering the ontology of Aquinas is that he continually stresses the unity of the primary substance. Individual things exist in the world, and the ontology which Aquinas proposes is an intellectual construct which explains the composing factors of the primary substance. Aquinas writes that “[the intellect] is capable by nature of separating things which are united in reality” (Commentary on the Metaphysics, 491).

Primary substances, for Aquinas, can be intellectually grasped as consisting of three major components—substantial form, prime matter, accidental forms, which combined, have existence (see figure 1). The substantial form of a primary substance is that which gives the primary substance its underlying structure. The form is the universal component of the primary substance and makes the primary substance what it is, as well as giving it its commonality with other things of its type. The substantial form of Socrates and the substantial form of Plato are identical—both have the same substantial form “Man”. Rover and Spot have the identical form of “Dog” which they share with each other and with all other dogs. The form of the primary substance of a tree is obviously different from both “Dog” and “Man” and can be described as the form of “Tree”. The substantial form is the generalized principle which makes a thing what it is and subsumes it

under a universal category. The form, however, as will be seen, is not the complete essence of a primary substance.

The second component of the primary substance is that of which a thing is made—this is prime matter (**materia prima**). The primary substance is not just pure structure; it is a structure of something. Prime matter, then, is the element of a primary substance which becomes structured by a substantial form. An analogy which helps to explain the basic relation of matter and form in a primary substance is the analogy of the sculptor and modeling clay. The sculptor cannot sculpt anything without clay, just as the form needs to be the structure of some “stuff”. This analogy breaks down, however, in that the clay itself already has some type of structure even before the sculptor is able to sculpt it. Prime matter, in the Aquinian system is completely formless and is, in itself, non-existent. This will be explained later on, as will Aquinas’ position that matter is the principle of individuation.

Matter and form hold a special relationship in the Aquinian system in that they are the essential components of a primary substance. Aquinas believes that we can abstract from the primary substance the concepts of matter and form and come up with an intellectual construct of the essence of what the primary substance is. Aquinas also calls this essence a secondary substance (see figure 2). The secondary substance, or essence of a thing, is not simply the substantial form, for as I explained, structure without something to structure is meaningless. A sculptor without clay (or iron or stone, etc.) is not a sculptor. The form indeed is that which gives structure and makes a thing belong to a certain universal category, but the essence of the primary substance, for Aquinas, involves a material component. This also will become clearer when I discuss the different ways in which matter can be considered.

That matter and form do not constitute the entirety of a primary substance is evident in that we ascribe characteristics to individual primary substances which are particular to the individual but not necessarily components of every member of the universal category to which the individual belongs. These characteristics introduce the third component of a primary substance—accidental forms. When, for example, I said that Socrates is a philosopher, that Rover is frisky, or that the pine tree has snow on it, I am saying nothing that applies universally or essentially to the class to which

these individuals belong. The sentences, "Socrates is a Man" and "Socrates is a philosopher", do not predicate of Socrates in the same way. In the first case, the predicate is an essential or substantial characteristic which tells us the essential nature of what Socrates is. Socrates could remain Socrates if he stopped philosophizing, but he would not remain Socrates if he ceased being a man. Put simply, accidental forms are exactly these characteristics which tell us not what a thing is, but tell us specific characteristics of an individual. Aquinas writes, "substantial form differs from the accidental form in this, that the accidental form does not make a thing to be **simply** but to be **such**" (Summa Theologicae 1a. Q76 art. 4). Aquinas, following Aristotle, says that there are nine accidental forms which compose the primary substance; these are: quantity, quality, relation, place, time, position, habit, action and passion. As will be seen, only quantity plays a central role in the principle of individuation and for this reason it is unnecessary to consider the other eight accidental forms.

Lastly, the primary substance has existence. Whereas the substantial form tells us **what** a thing is, the existence component tell us **that** a thing is. Existence is not a descriptive quality or property of a primary substance, but Aquinas wants us to realize that he is discussing things which do exist in reality. The distinction between essence and existence is treated at length by Aquinas (as in On Being and Essence) but is not of crucial importance to this analysis.

II. Matter and Individuation

Having considered the ontology of the individual primary substance, my attention will now shift to the principle of individuation. As I said before, individual primary substances exist in the world; it only remains to be discovered what makes the primary substances to be so individuated. In the Aquinian system, the substantial form is a universal property which applies categorically to different primary substances. Things of a class have identical universal forms. The question then arises as to how the universal substantial form becomes instantiated in primary substances yet remains universal. How can Socrates and Plato have the same universal form, "Man", without being the same man? What principle, then, makes all things that have identical substantial forms individuals? This is the problem of the principle of individuation.

Aquinas' answer, put simply, is that "matter is the principle of individuation" (On Being and Essence, 74). Aquinas believes that matter is the component of a primary substance which individualizes the universal substantial form. Aquinas does, however, believe that the "principle of individuation is not matter taken in just any way whatever, but only designated matter" (On Being and Essence, 75). It is obvious from this passage that Aquinas views the concept of matter in several distinct ways. In fact, although he writes that we can identify "two kinds of matter" (Summa Theologiae 1a. Q85, art 1), we can in fact distinguish three ways in which Aquinas writes of matter—prime matter (**materia prima**), nondesignated matter (**materia communis**) and designated matter (**materia signata**). To understand exactly what Aquinas means by designated matter and how it acts as a principle of individuation, it is necessary also to understand what Aquinas means when he talks of matter in other ways.

In his commentary on Aquinas' On Being and Essence, Joseph Bobik gives an excellent overview of the three ways in which matter can be viewed in the Aquinian system:

The difference among the three is a difference of greater and lesser universality, or, to put this in another way, a difference of lesser and greater detail in intellectual grasp and expression. Thus, to speak of prime matter, or perhaps better of matter **as prime**, is to speak of what the matters of all individual composed substances have in common. To speak of non-designated matter, or of matter **as nondesignated**, is to speak of what the matters of all individuals of a same species have in common. Lastly, to speak of designated matter, or of matter **as designated**, is to speak of what is proper to and distinctive of the matter of some determinate, individual, composed substance. Whether we speak of prime matter or of nondesignated matter, or of designated matter, we are talking about the same thing..."(On Being and Essence, 78).

Prime matter, or matter viewed as prime, as was stated before, is one of the components of the composed primary substance. Aquinas writes that prime matter "lacks all forms which give it definiteness" and since it "does not exist alone in reality by itself" (Gilby, 135), it is merely an intellectual

construct. Prime matter is a purely intellectual concept which does not and cannot, as being form-less, exist except in a primary substance as an intellectually constructed component. Aquinas speaks of prime matter in itself as non-existent and property-less to again stress the unicity of the primary substance. Just as the form needs something to structure, prime matter is inherently dependent on some formal aspect for existence. The primary substance is a complete whole and its ontological parts exist separately only as intellectual constructs. Aquinas writes that only "through the form, which is the actuality of matter, [does] matter become something actual" (On Being and Essence, 70).

Another way of looking at matter for Aquinas is matter considered as common or nondesignated. Matter in this sense, like prime matter, is an intellectual construct, but whereas prime matter is matter considered as devoid of any form whatsoever, nondesignated matter is matter conceived as being structured by some form. Matter as nondesignated is the abstract material component which belongs to the secondary substance or the essence of a primary substance. Our concept of a secondary substance or essence is derived from the intellectual process of considering a variety of primary substances all of the same type. The concept of nondesignated matter arises out of a realization that prime matter and substantial form are always united to form the basis of a primary substance. To use Aquinas' example "it is nondesignated matter which is placed in the definition of man" (On Being and Essence, 75). Individual men such as Socrates and Plato exist as individual primary substances and as such constitute a composite of prime matter, substantial form, and accidental forms. The essence of both Socrates and Plato makes them men; they share the same common form of "Man". The essence of what a "Man" is, however, includes general, material characteristics—we know that men are not just forms, but have actual bodies. Nondesignated matter is the intellectual construct expressing the realization that men are not just formal entities but are necessarily composed of some specific matter. Aquinas makes this point when he writes that "This bone and this flesh are not placed in the definition of man, but bone and flesh absolutely. These latter are man's nondesignated matter" (On Being and Essence, 75). Nondesignated matter, then, is an abstract intellectual realization that the definition of what material things are necessarily entails a material component.

The third way in which Aquinas speaks of matter is as designated matter. Whereas nondesignated matter is inherent in a general way in the essence of a subject, and prime matter is also a mental construct which does not exist in itself, designated matter is the matter that is existent in the world and is readily apparent to us. Aquinas writes that “the essence of man and the essence of [the individual] Socrates do not differ except as the nondesignated from the designated” (On Being and Essence, 81). The definition or essence of all men refers to matter viewed as nondesignated, or to a material component of which individual men are individual instances. Designated matter, though, is the specific matter of the individual. Following Aquinas’ example, the designated matter I have means that I am composed of **this** bone and **this** flesh, not as bone and flesh considered as a generalized concept which all men, as men, must have.

III. Designated Matter and Individuation

Since the “principle of individuation is not matter taken in any way whatever, but only as designated matter” (On Being and Essence, 75), this paper’s focus on the principle of individuation requires a more in-depth analysis of the nature of designated matter. Aquinas defines designated matter when he writes. “I call that matter designated which is considered under determined dimensions” (On Being and Essence, 75). Now dimension, for Aquinas, arises from (or can be considered as) one of the nine accidents—specifically the first accidental form, quantity. Aquinas often refers to quantity using two different terms—numerical quantity, which seems to be a common usage indicating “how much” of something there is. Secondly, Aquinas writes of quantity as “dimensive quantity” (Summa Theologicae 3a, Q77, 2). It is this latter type of quantity which interests us in this discussion of individuation. For, as Aquinas writes, “[b]ecause the category of dimensive quantity alone carries this separation of specifically similar units, dimension would appear to lie at the root of individual multiplication” (Gilby, 160). Thus designated matter can be defined further to be matter considered as being under determined dimension, where dimension is itself of the accidental form of quantity. Further support for this comes from Efrem Bettoni when he writes, “The Thomistic solution, which places the principle of individuation in **materia signata quantitate** [matter

signified by quantity], is well known" (Bettoni, 59). When Aquinas writes that designated matter is the principle of individuation, he means **materia signata quantitate**, or matter as signified by quantity.

The problem of Aquinas' view of designated matter or **materia signata quantitate** as the principle of individuation arises out of the way in which the accidental forms (of which quantity is the first) inhere in the primary substance. In On Being and Essence and in his Commentary on The Metaphysics of Aristotle, Aquinas seems to talk as if matter and form combined together compose, in themselves, a type of self-subsisting substance. Aquinas writes, "But that to which an accident comes is a being complete in itself and subsisting in its own existence" (On Being and Essence, 239), and Bobik comments that the accidents "depend on substances, as on a subject, for their beings" (On Being and Essence, 50). In the Commentary on the Metaphysics of Aristotle, Aquinas criticizes the pre-Socratics for believing that accidents reside in anything other than this "subsisting substance". this union of prime matter and substantial form. He writes, "And they [the pre-Socratics] called those things forms which we call accidents, for example, quantities and qualities, whose proper subject is not first matter but the composite substance" (Commentary on the Metaphysics, 499). Quantity is an accidental form, which as an accident, must also depend on this "composite" of prime matter and substantial form. The only way that an accidental form can have existence is through a substance which is composed of form and matter.

On this account, then, the concept of designated matter already includes a material component and a formal component. Designated matter, as Aquinas says, is matter "considered under determined dimensions" (On Being and Essence, 75), or as was shown, as **materia signata quantitate**. But quantity, or dimensive quantity, is an accident, and as such, necessarily depends on this unified and subsisting composite subject for its being. Designated matter then, is an existing substance composed of substantial form, prime matter, and the accidental form of quantity. Yet in the Aquinian ontology, this definition already specifies a primary substance. That is to say, if my account is correct, and form and matter together with the accident of quantity constitute the definition of designated matter, then designated matter cannot be a principle of individuation for a primary substance because it just is a primary substance. A primary substance, remember, is

something composed of substantial form, prime matter, accidental forms and which is existent. But is not this precisely the definition of designated matter?

The problem, then, is how designated matter, which can already be considered a primary substance be the principle of individuation of primary substances. The form is the universal component of a primary substance—both Plato and Socrates, as men, have identical forms but are also individuals. Designated matter, considered on my account (see figure 3), cannot be the principle of individuation because designated matter contains in its very definition a formal aspect and can already be considered as being a primary substance. If we view designated matter as having the components of a primary substance—substantial form, prime matter and an accident (quantity), then Aquinas is begging the question of individuation. Designated matter cannot be the principle of individuation of the primary substance because substantial form, prime matter and accidental forms are contained already in the definition of designated matter.

My argument as given can be most concisely summed up in nine points:

1. Primary substances are individuals, but also belong to universalized groups.
2. Primary substances have the components of substantial form, prime matter, accidental form, and are existent.
3. Substantial form subsumes the primary substance under a universal category.
4. Designated matter is the principle that individuates the primary substance.
5. Designated matter is matter signified by dimensive quantity.
6. Dimensive quantity is an accidental form.
7. "But that to which an accident comes is a being complete in itself and subsisting in its own existence" (On Being and Essence, 239)—or the union between prime matter and substantial form is the subject in which the accidents inhere.
8. Designated matter or **materia signata quantitate**, is already an existing composite substance composed of substantial form, prime matter and

the accident of quantity.

9. This, however can be considered a primary substance and designated matter, having substantial form, prime matter and the accidental form of quantity in its definition begs the question of individuation of the primary substance.

IV. Aquinian Response

Because of the ambiguities that exist in many of the passages that deal with quantity, designated matter, and the principle of individuation, it is certainly possible that my interpretation is incorrect. How, then, might Aquinas respond to my argument and which specific point[s] might he attack? I will lay out a possible Aquinian response to my interpretation and then note any problems that arise from this Aquinian response.

Aquinas would most likely attack my argument at my eighth point; he would probably find fault with my definition of designated matter as necessarily entailing some type of formal aspect. In some passages, as I have shown, Aquinas seems to imply that matter designated by dimensive quantity necessarily entails some type of substantial form. Dimensive quantity, as an accidental form, could only be considered in relation to the composite of matter and form. In other passages, however, Aquinas seems to imply that quantity has as its subject not the union of substantial form and prime matter, but rather prime matter itself. Aquinas writes that "since the parts of a substance are matter and form, certain accidents follow principally on form, certain others follow principally on matter" (On Being and Essence, 240). Earlier in my analysis, I claimed that Aquinas proposed the inherence of accidents in a wholly composed substance; the passage just quoted suggests more of a distinction between particular accidents as having their subject in either one part of the composite substance or the other. In the Commentary on the Metaphysics of Aristotle, Aquinas makes this distinction clear when he writes that some accidents can be considered as "something flowing from its matter, and then it is quantity; or as something flowing from its form, and then it is quality" (Commentary on the Metaphysics, 346). I have not been able to find a text which gives a complete list of the exact subject of the other seven accidents—which accidents "flow" from

matter and which from form, but from this passage it seems clear that quantity is to have as its subject **not** the union of both matter and form, but matter only.

Aquinas writes in The Summa Theologicae that “dimensive quantity is the very first accident which affects a material thing” (Summa Theologicae 3a. Q77, art 2) and then makes the even stronger claim that “quantity has its basis in matter, parts of a quantity are part of a thing’s matter” (Summa Theologicae 3a. Q90, art 2). That Aquinas is drawing a fine line between the subject of the nine accidents is obvious; accidents do not have the composite as their subject, but have one component or the other as their subjects. Aquinas, when he writes of accidents in this way, seems to undermine my proposition that designated matter necessarily has a formal component. By differentiating between accidents attaching to form and those proper to matter, Aquinas drives a wedge between matter and form in my interpretation of designated matter.

On this reading, Aquinas would perhaps define designated matter, or matter characterized by quantity, as prime matter with the accident of quantity attached to it, this being made possible only by the union of prime matter with substantial form. Put another way, the union of form and prime matter is the necessary condition for quantity to be ascribed to matter, but the form is not included in the definition of **materia signata quantitate**. Only in the union of form and matter can matter be said to be quantified, but quantity is not given attached to the form nor is form contained in the definition of designated matter. Any accidental form arises out of the union of prime matter and substantial form—for accidents “depend on substances, as on a subject, for their being” (On Being and Essence, 50)—but it is not the case that the individual accidents inhere in the composite as a whole, but rather, to either prime matter or substantial form, not matter and form. Quantity is not given by the form nor does it inhere in the form, but rather, is made possible by the union of matter and form.

Designated matter, then, is prime matter with an accident of quantity, made possible by the fact that matter and form are so united. Aquinas speaks this way when he writes that “from the fact that matter has corporeal existence through forms, it immediately follows that there are dimensions in matter” (De Anima, 115), and that “matter, so far as it is understood to have substantial existence as a perfection... can, therefore, be

regarded as the subject of accidents" (De Anima, 115). Substantial form need only be included in the definition of designated matter insofar as the union with matter is the necessary condition of matter to be quantified. Designated matter, in this Aquinian response, does not include a substantial form as a composing factor, but only as such that its (substantial form's) union with prime matter brings the possibility of prime matter as quantified (See figure 4).

In this possible Aquinian response to my position, designated matter as quantified matter can, it seems, be regarded as the principle of individuation. The definition of designated matter does not contain the form, and so this definition does not beg the question of individuation. So Aquinas can save the principle of individuation in this way, yet this new position has other serious consequences for Aquinas' system. On this account, quantity clearly plays the leading role in individuation. Matter without quantity is not designated; matter as quantified, or under determined dimensive quantity, is designated matter. Quantity then, is the principal factor of individuation. Quantity, however, is an accident and this would seem to run counter to Aquinas' position that "It is obvious, then, that the principle of individuation is not a collection of accidents (as some said), but designated matter, as the Philosopher [Aristotle] has stated" (Commentary on the Metaphysics, 602). Designated matter, as was shown, however, has, as its main component dimensive quantity, which is accidental. Designated matter, or **materia signata quantitate**, is accidental in nature. This, then, makes the principle of individuation contingent on an accidental form—individuation is accidental.

This characterization of designated matter as accidental and its inherent problem in the Aquinian system is the topic for a completely different paper; yet it still needs to be pointed out as a definite problem for Aquinas and was, in fact, a problem addressed by succeeding Medieval philosophers such as Duns Scotus. Duns Scotus saw a problem inherent in the Aquinian definition of designated matter as depending on an accidental form. Bettoni, in his book on Duns Scotus writes, "His [Scotus'] criticism is mainly based on the fact that quantity is an accident" (Bettoni, 60). Scotus, not contented with the accidental nature of designated matter in Aquinas' thought, responded by positing his famous principle of individuation—"Haecceity". Bettoni continues that in regards to the principle of individu-

ation, "Duns Scotus has recourse to his theory of 'haecceity', or thisness" (Bettoni, 60). Briefly, **Haecceity** is a unique principle of the form which gives to each individual thing its individual perfection and is not dependent upon a material principle.

So on my interpretation of the often ambiguous texts, designated matter begs the question of individuation and the principle of individuation remains as yet to be discovered. The Aquinian response reclaims for designated matter its status as the principle of individuation, but at the same time it raises a new problem—specifically the problem that Duns Scotus confronted—that the principle of individuation in Aquinas is accidental.

Figure 1: Primary Substance

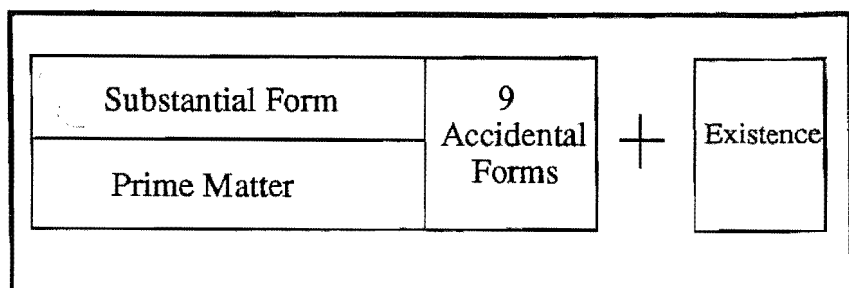


Figure 2: Mental Construct of Secondary Substance or Essence

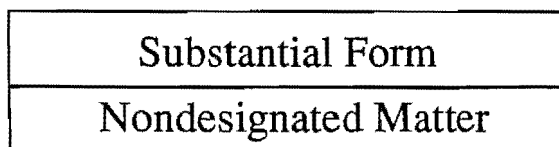
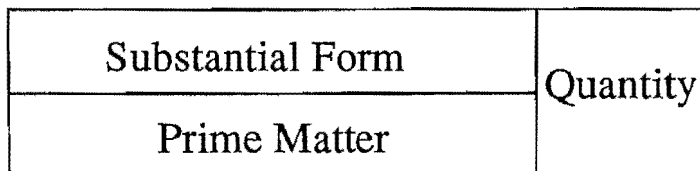
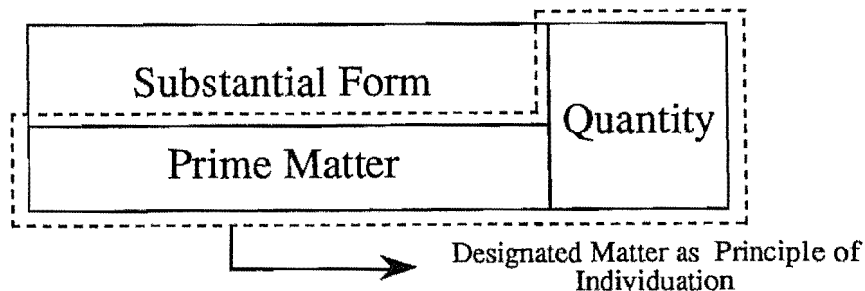


Figure 3: My Interpretation of Designated Matter

Figure 4: Aquinian Response:
Definition of Designated Matter

Works Cited

- Aquinas, Saint Thomas, On Being and Essence. Translated and interpreted by Joseph Bobik. Notre Dame, Indiana: University of Notre Dame Press, 1965.
- Aquinas, Saint Thomas, The Soul (De Anima). Translated by John Patrick Rowan. St. Louis: B. Herder Book Co., 1949.
- Aquinas, Saint Thomas, The Summa Theologicae. Blackfriars, 1970.
- Aquinas, Saint Thomas, Commentary on the Metaphysics of Aristotle. Translated by John P. Rowan. Chicago: Henry Regnery Company, 1961.
- Bettoni, Efrem, Duns Scotus: The Basic Principles of his Philosophy. Translated by Bernadine Bonanesea. Washington: The Catholic University of America Press, 1961.
- Gilby, Thomas, Saint Thomas Aquinas: Philosophical Texts. Selected and translated by Thomas Gilby. London: Oxford University Press, 1967.