SECTION II.

Whether the material cause of generable and corruptible substances is single or multiple.

1. In this section and the following one we will briefly touch on the opinions of the ancient philosophers, whom Aristotle investigates more thoroughly and opposes in various places, especially in Metaphysics I.3 ff.; Physics I.2; On Generation and Corruption I.1 ff.; and On the Heavens III.7. The same things can be read about in Diogenes Laërtius, Lives of the Philosophers; Plato, Theaetetus and Sophist; Plotinus Enneads 9.2; Theophrastus, <col. b> Metaphysics, ch 3; and Plutarch, On the Opinions of the Philosophers I.3. Among the Fathers, it is touched on in Augustine, On the City of God at the beginning of book VIII; Epiphanius [of Salamis], Panarion III.80; Irenaeus, Against Heresies II.19; Clement of Rome, Recognitions; Clement of Alexandria, Stromata I; Eusebius, Preparations for the Gospel at the beginning of book XIV; and Ambrose, Hexameron I.2. The views of these philosophers can be gathered under two headings: one for those who posit multiple material first principles (which we will discuss here) and the other for those who only posit one but err in assigning it (which we will discuss in the following section).

The view of those positing infinite material principles.

2. The first view, then, was that the material cause of everything consists of indivisible corpuscles or atoms, which Leucippus, Democritus, Epicurus, Metrodorus, and Anaxagoras posited to be infinite. Almost all of them thought these corpuscles to be similar to each other and of the same ratio, and that they composed different beings.
only through variety in position, figure, and order. They thought that corruption of things was nothing other than the scattering and disorder of atoms but that generation is a new composition of them. But Anaxagoras posited atoms that are partly similar and partly dissimilar, so that homogeneous things come to be from similar atoms and dissimilar things from dissimilar atoms as in the case of heterogeneous parts of organic bodies (for example, flesh from flesh atoms, but bone from bone atoms, and so on for the others).

In turn, certain of them seem to have posited these atoms as wholly indivisible. For this reason, in order so that those atoms can compose a body, they said the body coalesces not only from those atoms but also from some emptiness or void. For if they were all immediately and solidly conjoined, a large mass would never accrete, as is taken from Aristotle, *Metaphysics* I.4. But others seem not to have thought them mathematically indivisible but only physically indivisible. According to this interpretation it is not necessary to place some void between those atoms in order for the magnitude of a body to increase from them.

In turn, some of these philosophers did not posit any efficient cause beyond these atoms nor any final cause. Rather, they thought that some things dissolve from the various coming together of these atoms and from their perpetual movement, and other things spring up by chance. And for this reason, as <400> Aristotle relates, Epicurus said that these corpuscles have a natural weight by which all things are brought about. But others, such as Anaxagoras, posited an efficient cause acting with intellect and will, and composing different things from these corpuscles.

3. But that part pertains to the disputations about the efficient and final causes. Now, as far as the present issue is concerned, these philosophers do not, in the first place, think that there is a true material cause, which is a potency physically receptive of any act. For those atoms are not in potency to receiving some physical form. Nor can they be called the matter of a whole composite except in the way in which integral parts are called the matter of the whole and the way in which stones and wood are called the matter of a house.

A further result is that according to that way of philosophizing the forms of natural beings are, as it were, only artificial forms, namely, a kind of figure arising from the different positions and orderings of atoms. And thus there will be no true substantial generation and corruption, but only various coordinations and dissipations of atoms. And, although Anaxagoras posits atoms...
of different rationes, nevertheless, it is necessary to posit all [of them] confused and mixed together in individual things so that through their being drawn out one thing can be generated from another. And thus all things differ only in that certain things have certain atoms more openly or in more exterior parts while others are more concealed or in more hidden parts, which difference is only one of position and coordination of atoms. Add that it cannot be understood how such different corpuscles having repugnant conditions are intimately conjoined in individual things. It is no less inexplicable how these hidden corpuscles could be brought to light from some thing or other so that other things seem to be generated or, rather, composed.

4. Another thing that is absurd in all these philosophers is that they posit an infinite multitude of these corpuscles. For either they think that there is an infinite multitude of these atoms in individual natural entities or only in the whole universe while there is only a finite multitude in individual bodies or their parts. The view in the former sense is utterly absurd. For it cannot be that infinite atoms compose some body, unless they grow into an infinite magnitude. For if <col. b> atoms are not fashioned mathematically indivisible but physically indivisible, each will have some magnitude. Either they will all have equal magnitude, since there is no ratio of inequality, or at least a minimal atom can be assigned to which all the others will be equal or greater. Therefore, an infinity of atoms of this sort necessarily compose an actually infinite magnitude.

But if the atoms are mathematically indivisible, they cannot compose a magnitude except empty space be interposed, which space will be divisible and of some magnitude. From this it is likewise concluded that an infinity of atoms thus distant from each other necessarily effect an infinite body, occupying or including infinite space, partly empty and partly filled with atoms.

Nor can a counterexample be produced from the infinite points existing in a line. For in that case there are no immediate points, since the whole line is continuous. But in the case of the atoms it would be necessary—given that any designated atom be some proximate distance from it through a some certain and definite distance and so on for the remaining ones—it would therefore be necessary that those infinite corpuscles occupy infinite space in that way.

5. But the view taken in the latter sense is also improbable. In the first place, all the things that Aristotle writes in Physics III and On the Heavens I against the infinite magnitude of the world
go against it. Furthermore, it is evident that the whole sphere of generable and corruptible things is finite, since it ends at the sphere of the moon. To attribute a composition from atoms to the heavens and to extend those to infinity cannot be philosophical, since neither experience nor reason can lead us to thinking that. Finally, if some body of finite magnitude is constituted of only a finite number of atoms, then this fashioning of atoms cannot suffice for the generations and corruptions of things. First, because almost an infinite variety of things can be generated from the same thing. Also, because the magnitude of a body must always be greatly diminished in any generation and corruption through the dissipation of atoms, yet experience makes clear that that does not always happen. Unless perhaps it is said that a certain rotation of atoms, as it were, always comes to be, while the interior atoms are drawn out to the external parts while the exterior ones are pushed to the inmost parts, and for that reason the magnitude of the thing is not diminished. But nothing could be more absurd than this. For whence does it happen that nothing of the thing itself can be changed except according to place or external appearance. And that drawing out and pushing in of atoms is contrary to experience.

<401> For when fire is generated from flax, the generation happens not only in the exterior parts but in the inmost parts and in the whole magnitude. And when a human being dies, the corruption happens in all the parts, in the internal parts as much as in the external parts. This view, therefore, is utterly absurd. Nor does it have any foundation that is necessary to address. For we will explain later what the true sense is of the principle ‘out of nothing nothing comes’, the principle in which the cited philosophers are grounded as much as others.

The opinion of those positing multiple but finite principles.

6. The second view also posits multiple principles or multiple first material causes of generable things, but only a finite number. Empedocles thinks this. He says that the four elements—fire, air, water, and earth—are the four first material causes out of which mixtures are generated. But those four do not have a prior cause or material principle.

Nevertheless, this view is false and can obviously be refuted. For in the first place, although it touches on the composition or generation of mixtures from elements, it does not, however, consider the transformation of the elements into each other. Yet it is clear
that air is converted into fire and water into earth and conversely. But the elements cannot be the material principle of this kind of transformation. Rather, there must be some subject common to all of them.

But perhaps Empedocles thinks that the elements are not transformed substantially and for this reason are not constituted of matter and substantial form but are a kind of wholly simple being subject to accidents. But against this we will in the first place show below that it is no less certain that there are substantial forms of the elements than of any other natural beings and, consequently, that they are truly and substantially transformed into each other. Furthermore, even if we were to admit that [the elements are not transformed substantially], that would be no reason to multiply material principles or first substantial subjects. Rather, one should then say that there is one and the same substantial subject in all the elements, which is called distinct elements when affected by different accidents. And since that subject would also be the material principle of mixtures, the result is that in the thing itself and substantially there is only one first material cause for all things.

7. But suppose Empedocles were to say that that diversity of natural accidents <col. b> that is observed in the elements sufficiently indicates an essential distinction between substantial subjects. From this is taken an effective argument ad hominem. When air is transformed from fire such that it remains affected by the proper accidents of the fire, not only does a change happen in the accidents but also in the substance itself. But it cannot happen in the whole substantial entity on account of the reasons given in the section above concerning annihilation and creation. It is necessary, therefore, also to admit that there is in the elements some subject prior to them and common to them by reason of which they can be mutually transformed. Therefore, they are not first material causes, but something else is prior to them out of which they are constituted. And from this it is also concluded that these elements are not the first material causes of mixtures, since in them themselves is given a prior matter for them. That prior matter is also a material cause of the mixtures, since it remains in them and is informed by their forms. That, therefore, is also the first cause in that order of the mixtures, especially in view of the fact that according to the true view the elements do not remain formally in the mixture. That is, they do not remain according to the proper substantial forms, since the substantial form of a mixture

\[4\] DM 13.1.6.
cannot fall (if I may speak in this way) above the form of an element or inform matter as already informed by the form of an element. Therefore, the elements according to their proper substances are not enduring and proper material causes of mixtures. But the same matter that is the first material cause of the elements themselves is also the first material cause of the mixtures.

*The resolution of the question.*

8. It should be said, therefore, that there is only one prime matter or first material cause of all sublunar things. This is the common view of all the philosophers to whom we refer in the following [sections]. It is sufficiently proven by the argument already made against Empedocles and by the latter discussion given in the previous section, where we show from the common and mutual transformation of sublunar things that there is a common matter. For that argument equally proves that the subject that remains under all these transformations is only one, both because the contrary principles from which generations and corruptions come about must concern the same thing and also because that subject is of itself indifferent to any forms whatsoever of corruptible things and to their dispositions. And therefore no distinction or multiplication in it is required. In fact, there is nothing from which it would have that. Conversely, every form of a generable thing of any species can be introduced in any part whatsoever of this matter, if it is appropriately disposed. This is a sign that this matter in itself is one and of the same ratio and sufficient in its genus for causing all the effects that can be materially caused in these things if the other causes in the other necessary genera are applied or concur.

9. The only possible objection is that, since the material cause is intrinsic and essential and since these generable and corruptible things are essentially diverse, therefore one and the same matter cannot be in all of them. But this objection touches on the question whether matter is a part of the quiddity of material substances. We will discuss this question below in the more appropriate place. For now it is briefly responded that the essences of these material things are diverse or dissimilar with respect to forms but similar with respect to prime matter. Nor does this pose any obstacle to essential difference. For essential diversity does not exclude agreement and similarity in some part.