The first two chapters of the *Metaphysics*, in their treatment of how human beings come to know, reflect a similar movement within Aristotle’s history of philosophy given in Book I. The movement from sensation to memory, and from memory to experience, which is described as a movement from particulars to universals, corresponds to the movement in the history of philosophy from material causes to progressively more intellectual principles. Aristotle’s treatment of the different modes of knowing demonstrates different levels of freedom and self-determinacy; each higher level builds on the lower level and subsumes it into itself. It exemplifies the movement of the soul in its ascent towards the first principle: the object of first philosophy, which is also the only truly self-determined object (982b26). As the ordered stages of coming to know reflect the order of nature itself (echoing the argument running through *De Anima* Book II), it also provides the means for correcting certain problems articulated by Aristotle’s predecessors about the nature of being.

The problems encountered by the Platonic and Pythagorean understanding of being, which emphasizes the intelligible, can be explained and corrected by thinking through how we come to know, most importantly in terms of how our minds come to relate particulars with universals. The correspondence between how human beings come to know (and the mistakes that are possible due to our ability to think abstractly), with how philosophy has developed in history, is strongly suggestive as revealing something true about the structure of the divine *logos* itself, which as a result implies a non-accidental and entirely necessary link between the object of first philosophy and nature.

Philosophy, from its earliest beginning, becomes the ultimate manifestation of freedom from necessity: something that is pursued for its own sake, fulfilling a unique need for human beings altogether different from their more practical needs. This is “confirmed by the fact that this sort of knowledge began to be pursued once the necessities of life had been secured” and that, “since they pursued philosophy in order to escape from ignorance, they were pursuing science in order to know and not for any utilitarian end” (982b20-24). Aristotle credits the fundamental human drive for understanding the world as a force which compelled thinkers to continue to seek knowledge about the world, writing that, “it is owing to their wonder that men both now begin and first began to philosophize” (982b13). Philosophy, as the ultimate manifestation of human thinking for its own sake, culminates in Aristotle’s conception of the highest manifestation of freedom, truth, and self-determinacy: God as the true object of metaphysical inquiry (983a5-10). This is the only free science pursued for its own sake, and its object is also the only free object (982b26).
However, material conditions must be in place for people to be sufficiently free to pursue thinking for its own sake. “Yet,” Aristotle writes, “the acquisition of it must in a sense end in something which is the opposite of our original inquiries. For all men begin, as we said, by wondering that things are as they are” (983a12). The inquiry, though possible only through freedom from material constraints, must begin through material principles. This fact is extremely suggestive of the correspondence of the structure of human thought, with its progressive levels of self-determinacy and freedom, to the structure of being itself (981b25-35). As such, the structure of human thought itself reveals something about the structure of being and the way by which mind ascends to the first principle. The movement through the modes of knowing, which are different levels of freedom, leads to the ultimate level of freedom and self-determination encompassed by the divine.

Aristotle is unambiguous that the object of first philosophy is God (983a6-8), and that the gods are not jealous (983a4); humans should strive to understand God’s mode of knowing of God because God is in the best state. This hints at the fact that there is a correspondence between human thought and divine logos. Indeed, this facet of human thinking—thinking for its own sake—is the very source of philosophical thinking, “for he who chooses to know for the sake of knowing will choose most readily that which is most truly knowledge, and such is the knowledge of that which is most knowable,” i.e. the divine (982a35-982b1). In Book II, the allusion is made even clearer when Aristotle writes about bats, whose eyes are unaccustomed to the day, just as “the reason in our soul [is unaccustomed] to the things which are by nature more evident of all” (993b10). This passage implies that human reason can be habituated to thinking divine thoughts, i.e. thought thinking itself. Aristotle credits the philosophers who came before him precisely with “developing before us the powers of thought”(993b15). Such a thinking will not be immediately available to our reason; however, by training our minds, we can develop it.

Aristotle also writes that the most divine object possesses the most truth, which makes it the most knowable in itself, and so which makes the end of theoretical knowledge truth (993b20). Divine objects “must always be most true” and “they themselves are the cause of the being of other things,” so that “as each thing is in respect of being, so it is in respect of truth” (993b26-30). Aristotle begins the Metaphysics by explaining how we come to know, and that knowledge of something is measured by knowing its cause, which will then explain “why” of its being. Divine objects, as the most universal, “are on the whole the hardest for men to know; for they are the farthest from the senses”(982a23). Yet the history of philosophy and how we come to know both begin at the same point: sensation. Aristotle wonders, “how could we know the object of sense without having the sense in question?” (993a9) Similarly, how could we know God’s science of God if our reason is not derived from it in some way, and especially if, as it was mentioned above God is “the cause of the being of other things” (983b30)? Understanding the nature of how we come to know (epistemology) becomes more important than ever in terms of understanding how we can come to know the ultimate truth about being (ontology).

Aristotle wonders about the starting point of such an inquiry into the nature of being by asking, “and how could we learn the principles of all things? Evidently we cannot start by
knowing anything before” (992b24). It is then no surprise that the history of philosophy unfolded the way it did, progressing from its necessary beginning point of “wondering that things are as they are” (983a14)—the immediacy of sensation—to an inquiry into why things are as they are—the synthesis of experiences into universals. The movement in coming to know, then, goes from knowing the “that” to knowing the “why”—i.e. from the knowledge of particulars to the knowledge of universals. Yet even in sensation there is a level of independence and self-determinacy, indicated by the fact that, the senses “apart from their usefulness are loved for themselves” (980a23). The sense of sight is what allows humans to know the differences between things, and it is also the starting point of being able to observe change and wonder at this change.

The movement in coming to know moves from sensation, to memories formed from a collection of sensations, to a stabilization of sensation through experience. Experience connects the particulars of memory into an ordered whole, as “several memories of the same thing produce finally the capacity for a single experience” (981a1). There is then the transition from experience to art/reasoning. This transition is one from particulars to universals, as the habituation of sensation will lead to an intimate knowledge of cause and effect (981a5). As such, one who knows the art will be able to teach, because he or she knows the cause of the particular instances explained through the art. This process in coming to know an art is one where the cause is learned through its effects and not vice versa.

In the history of philosophy, philosophers start by positing principles that are purely material, resembling the purely sensible beginning point in the acquisition of knowledge, which is shared by all animals (980b25). Some animals have the capacity for memory along with sensation, though no animal is capable of memory without sensation. In nature, each lower principle is instrumentally necessary for the higher levels to function (De Anima Book II). As each higher level encompasses the activities of the lower, so one each will say something true about the other, which aligns with Aristotle’s conception of God as being the cause of being and truth (993b26). However, inherent in human thought is the ability to abstract, which makes it possible to posit universals without having to necessarily experience the particulars (981a20). This creates the risk of positing a universal without progressing through all of the lower levels that are supposed to be derived from it, and as a result this universal will be missing a level that is instrumentally necessary for this universal to be true. This becomes the case with the universals posited by Plato and the Pythagoreans, which cannot explain why the natural world is the way that it is. However, this conception of how human beings come to know already points towards the solution: locating universals in the things themselves.

In explaining the movement of philosophy from one principle to another, Aristotle writes that, “the very facts opened the way for them and joined in forcing them to investigate the subject” (984a20). That is, there was something in the objects themselves—in reality itself—that revealed a tension in their conceptions of why things are the way they are. These thinkers were then “forced by the truth itself” to keep searching and positing additional principles (984b10). For example, Aristotle writes that material causes were posited until there was dissatisfaction in explaining how things are generated
which then led to the introduction of an efficient cause. There was also the dissatisfaction with understanding how material principles could explain the beauty and regularity in the world, which at the same time exhibits so much disorder and ugliness. This led to the development of contrary principles (e.g. Empedocles’ Love and Strife), which come to characterize the history of philosophy from here until Plato, to explain why this would be.

In his history of philosophy, Aristotle looks for a manifestation of his four causes in previous thinkers just as much as he points towards what their conceptions fail to explain. He proceeds in this manner from the Materialists to Plato, and in each find one or two of his causes; in every case, the missing causes point to a tension within that particular conception of reality. Aristotle writes that, “no one is able to attain the truth adequately, while, on the other hand, we do not collectively fail, but every one says something true about the nature of things.” Saying something about being is easy, considering that being can be spoken of in many different ways, but it is also difficult, considering that the whole truth is very difficult to grasp. Aristotle also reflects that, “in general, if we search for the elements of existing things without the many senses in which things are said to exist, we cannot find them.” These points highlights the importance of the Categories, where Aristotle explores the different ways being is spoken of, to finally assert ousia as the central sense of being, which he names as one of his causes of being at the beginning of the Metaphysics.

Aristotle notes a significant development with the Pythagoreans: they start conceptualizing things as having internally defined natures. It is the first time that the idea of the ousia (with essence as number) makes an appearance, as well as the appearance of formal cause, albeit “superficially.” The Pythagoreans developed their theory, based on observation, that the natural world was expressible through mathematics, and so “thought [mathematical] principles were the principles of all things.” Aristotle notes that this abstraction from sensibles to number was inadequate and did not fit in with the nature of reality, writing that, “if there was a gap anywhere, they readily made additions so as to make their whole theory coherent.” The sensible is completely assimilated into the mathematical, and this abstraction in thought is a reversal in the ontology, even though “their investigations and discussions are all about nature.” The sensibles are predicated of number and not vice versa. As a result, the numbers are real, and the sensible world is deceiving as a source of truth. This reversal has consequences: the Pythagoreans confuse the universal and the instance, and so cannot really explain the world.

Aristotle criticizes Platonic philosophy on the basis that it failed to differentiate its principles enough from the Pythagoreans; as a result, its philosophical position will exhibit the same problems. Plato’s principles are characterized by Aristotle as the One and the Dyad, which produce, cause, and give being to the world of appearance. Aristotle criticizes Plato by asserting that as a result of his principles of the One and the Dyad (which are numerically defined), his Ideas or Forms will be numerical as well. As such, Aristotle points to a gap between the problem and the result of Plato’s philosophy, “for it follows that not the dyad but number is first, i.e. that the relative is prior to the
absolute” (990b20). Consequently, “the whole study of nature has been annihilated” (992b9), with Aristotle concluding that, “in general, though philosophy seeks the cause of perceptible things, we have given this up” (982a25).

In his discussion on how humans come to know, Aristotle warns that, “if a [doctor] has the theory without the experience, and recognizes the universal but does not know the individual included in this, he will often fail to cure” (981a20). A technician that captures the cause without having direct experience of the effect will not be useful in his art. There is the demand that those with “the highest degree of universal knowledge” know, in a sense, “all the instances that fall under the universal” (982a22). This criticism exemplifies the consequences of the Pythagorean and Platonic conceptions of the world, whereby the universals are not properly differentiated from the individual instances, which creates the problem of understanding why there would be particular instances (i.e. the natural world) at all. Aristotle, writing about the Pythagoreans, says, “they do not tell us at all, however, how there can be movement if limit and unlimited and odd and even are the only things assumed” (990a9) and so, “they have said nothing whatever about fire or earth or the other bodies of this sort, I suppose because they have nothing to say which applies peculiarly to perceptible things” (990a18).

Eliminating the natural world eliminates the sensible as a locus of truth, and so eliminates the beginning point of the entire process of human learning. Indeed, it would eliminate knowing altogether for humans. Writing about the Platonic Forms, Aristotle states: “but again they help in no wise either towards the knowledge of the other things (for they are not even the substances of these, else they would have been in them) or towards their being, if they are not in the particulars that share in them” (991a10-13). It reflects, once again, the necessity that the higher levels of being encompass the lower levels if they are to say something true (992a16). The demand placed on Platonic philosophy is, then, to show how the self-sufficient divine world completes itself through the external world (992a24-29). Aristotle does not find a way to reconcile both sides, noting that, “it would seem impossible that the substance and that of which it is the substance should exist apart” (991b1-2). As Aristotle explains that theory comes through experience in his first chapter of Book I of the Metaphysics (981a1), it points towards the necessity of observing individual instances (as the materialists had done) to understand the universal from which they are derived, as well as the demand for the cause to be understood through the caused, and not vice versa.

This echoes Parmenides’ method of repeatedly going back to the beginning of the inquiry in Plato’s Parmenides, while incorporating what had been gained from the previous discussions into his new beginning points. At the end of Book II of the Metaphysics, Aristotle brings us back to the world of nature as a starting point, albeit this time with the idea of formal nature as substance, located within each thing as a cause of their being. Aristotle exhorts the reader to move back to what he can know, and through his criticisms about the separateness of the Forms, points to the necessity that sensible being be a source of truth, not only as derived from the universal, but as instrumentally necessary for the universal (992a16; 992a30). By going back to the beginning, philosophy progresses
by repeating the same stages that led to its own discovery, albeit now in a far more universal way.

As the principle of thought and being form a meeting point, it makes a thing what it is and makes it knowable to us, “so that as each thing is in respect of being, so it is in respect of truth” (993b30). This reflects upon the ultimate object of the Metaphysics, “for whose sake both all mind and the whole of nature are operative” (992a31): so long as there is a continuity of the cause and the caused, there will be a community of properties between the cause and the effect. Based on this view, reason is not simply something that exists in our minds, but also exists in the object that we are thinking about and guiding us in how we think about it. Reason becomes a manifestation of the good, which Aristotle identifies as an end, with the divine logos as “the supreme good in the whole of nature” (982b8).

Aristotle’s causes become different, interrelated ways of describing the same essence. His search for causes is a search for how being is manifested in the world, so it becomes important for the essence to be located in the things themselves. Aristotle points towards the whole (as substance), and, in his history of philosophy, leads the reader towards an understanding of being that does not abstract in thought things that are intrinsic and co-dependent, already present in a unity in the substance itself. The tensions produced by such abstractions reveal themselves by being unable to fully explain the being of a thing, which demands fuller attention to the objects themselves in the totality of their being.

The first two chapters of the Metaphysics show the innate relation between the progress of philosophy and the progress of how we come to know as individuals, which is itself a process anchored in the natural order, revealing the structure of being itself, and consequently the universal hidden in the particulars. The explanation of the development of art as knowledge of universals proceeding from the experience of immediately apprehended particulars not only demonstrates the dangers involved in placing too much emphasis on the universal at the expense of sensible particulars, but also shows the way forward for Aristotle himself to reach a satisfactory understanding of the world. By showing how the formal cause is contained in the particular, as substance or essence, located in each thing individually, it also leads towards an understanding of causality as internally determined through the essence, yet one which is still derived from the ultimate source of being, the most self-sufficient essence: God. All the kinds of being depend on and derive their being from this central sense of being as ousia—being can thus be found moving philosophy forward from inside each being as its truth as well as from outside it, with both instances sharing an identity as self-determined and self-relational essences.