

Icons and Memory

Aristotle on Remembrance

Jack M. Greenstein

Icons are so completely substituted for their objects as hardly to be distinguished from them. Such are the diagrams of geometry. A diagram, indeed, so far as it has a general signification, is not a pure icon; but in the middle part of our reasonings we forget that abstractness in great measure, and the diagram is for us the very thing. So in contemplating a painting, there is a moment when we lose the consciousness that it is not the thing, the distinction of the real and the copy disappears, and it is for the moment a pure dream — not any particular existence, and yet not general. At that moment we are contemplating an *icon*.

C. S. Peirce

A famous passage in Aristotle's short treatise *De Memoria et Reminiscentia* offers one of the earliest and most influential discussions of icons. Aristotle explains memory in terms of a certain kind of mental entity, called a "phantasm." In his theory of cognition, phantasms (*phantasmata*) are the contents of *phantasia*, a disposition of the mind "resulting from an actual exercise of the power of sense" (DA 429a1) which has "for its content what can be perceived" (DA 428b12) and serves as an interface between sense and intellect.¹ Phantasms figure in Aristotle's account of perceiving, thinking, imagining, dreaming, desiring and remembering.² In *De Memoria*, Aristotle attributes an iconic character to the phantasms of memory. He describes remembering as a mental operation analogous to contemplating a portrait painting; just as a portrait painting is both a sensible object in itself (a painting) and a likeness of something else (the sitter), so too a memory phantasm is both a sensuous cognition in itself and a likeness of a previous cognition. Accordingly he defines memory as the having of a phantasm regarded as an icon of that of which it is a phantasm (*De Memoria* 451a15–16, quoted below).

In ancient Greek philosophy, the word "icon" has a broad range of associations which do not entirely correspond to modern usages. In his edition of Aristotle's *De Memoria*, which serves as the basis for this study, Richard Sorabji explains that for Plato and Aristotle, "an *eikôn* of X, strictly speaking, is both similar to, and derived from X."³ Plato holds that the degree of similarity need not be very great, but Aristotle's discussion of memory phantasms in terms of portraiture implies that, for him, the degree of likeness is considerable. For this reason, Sorabji perspicaciously translates *eikôn* as "copy" rather than "likeness."

As Sorabji's term "copy" suggests, Aristotle's understanding of the icon as derivative distinguishes his conceptions from modern definitions. Modern treatments of iconicity start with the definition of the icon by the American philosopher C. S. Peirce. In Peirce's semiotics, a sign is an object which stands for another object to a mind on some ground or for some reason. He distinguishes three kinds of signs: icons, indices, and symbols. In this famous trichotomy, indices, not icons, are held to be derivative from their objects (*CP* 2.274–308). As signs representing their objects by contiguity, indices are derivative because, as Peirce explains, their representative quality is due to "blind compulsion" brought about by the "brute force" of a "real," "physical connection" (*CP* 2.283–91, 299–300, 306) with their objects.⁴ Icons, on the other hand, are signs representing their objects by likeness or similarity (*CP* 2.275–282, 304).⁵ As the epigraph to this paper suggests, the representative quality of an icon is a property or properties common to the icon and its object. Peirce acknowledges that icons would possess the character which renders them significant, even if they had no object and thus did not function as signs (*CP* 2.304).

Although widely accepted, this definition is problematic. For icons to function as signs, they must exhibit a representative character which stands to some mind for another object on the grounds that it is like a property found in that other object. By definition, likeness is a relation between two things. But semioticians are not able to explain how an icon designates the particular object to which it is like. Nor are they able to explain how, without this designation, it is possible to determine which of the various properties possessed by an icon render it a sign by being like a property found in its object. For this reason, the contemporary semiotician Thomas Sebeok calls the philosophical difficulties "inevitably" raised by defining the icon strictly in terms of likeness "intractable" and "mind-boggling."⁶

This paper draws on Aristotle's theory of memory to suggest a revision to the modern definition of the icon. Aristotle's conception of the icon as both similar to and derived from its object is crucial to his analogy between remembrance and contemplation of a portrait painting. Since memory is of the past, all things that are remembered must have been previously sensed or thought. Aristotle holds that, in some cases, it is possible to estimate how long ago something occurred, but this estimation of a time interval is not a necessary condition for memory (*DM* 452b29–453a4). Rather, as long as a present cognition is a likeness of a past cognition, it is a memory. Indeed, Aristotle goes so far as to suggest that whether one is remembering depends upon whether a phantasm is an "*eikôn*" or simply an appearance (*DM* 451a2–5, a8–12, quoted below). I show that, for Aristotle, the iconic quality of memory phantasms not only distinguishes memories from other kinds of phantasms, but also insures that the phantasms of memory are cognitions of prior cognitions. The idea that iconicity insures the prior cognitive status of what is represented by an icon helps explain why viewers can see and recognize in paintings the likenesses of things which they have not previously seen in person. It also suggests a resolution to two of the most intractable philosophical dilemmas arising from the modern definition of the icon.

Until recently, the passage from *De Memoria* in which memory phantasms are likened to portrait paintings was taken as proof that, in Aristotle's theory, a wide variety of cognitive processes require mental images. For this reason, the standard English editions of Aristotle's psychological works translated *phantasia* as "imagination" and *phantasmata* as "images."⁷ Accordingly, Aristotle's claim that all thinking requires "phantasms" was understood to mean that "the soul never thinks without an image" (*DA* 431a16). This diction is retained by Richard Sorabji in his standard edition of *De memoria* and leads him to argue that memory phantasms cannot be distinguished from other kinds of phantasms by reference to their image-like character (Sor. 10, discussed below).

However, over the past two decades there has been a fundamental shift of opinion on Aristotle's phantasms and *phantasia*. Careful reconsideration of the role of *phantasia* in Aristotle's theory shows that in most contexts, including those most central to this theory of sense and thought, phantasms need not, and indeed should not, be understood as possessing picture-like or object-like characteristics.⁸ As Martha Craven Nussbaum explains:

Aristotle speaks of *phantasia* and *phantasmata*. But the evidence indicates that his basic interest is in how things in the world appear to living creatures, what the creatures see their objects *as*. Sometimes he does speak of decaying-sense images that are like that which they represent. Occasionally these are characterized as *phantasmata*. But the evidence offers us no license for reading images into every passage, nor does the image view seem to be of such central importance to Aristotle that it robs his general observations of their broad interest. We do not need to assume that the role of *phantasia* in action and thinking must be explained by reading in images. We will find, in fact, that a more plausible and interesting account can be produced without them.⁹

This more plausible and interesting account is summarized below.

Nonetheless, even Nussbaum concedes that Aristotle's theory of memory is one place where there is concrete evidence for linking phantasms with images.¹⁰ This paper re-examines this link in light of the new understanding of *phantasia* in cognition. I show that Aristotle's comparison of memory phantasms with portrait icons turns, in particular, on an analogy between the operation of (inner) sense and intellect in remembrance and their operation in viewing icons. Aristotle attributes to memory phantasms both a material basis and a psychological function. The material basis of a memory phantasm is an imprint, which he considers so analogous to an impression made by a seal in wax that variations in the ability of people to form lasting memories are explained by differences in the material quality of their receiving surfaces (*DM* 450a25–450b10). The psychological function is a form of iconism, whereby the phantasm is contemplated both as a thing in itself and as a likeness of something else. Accordingly, whatever specifically pictorial character memory phantasms have is here attributed to their material basis

and iconic function. This functional analogy between memory phantasms and icons is so strong, central and consistent as to suggest that it is shaped by Aristotle's conception of iconicity itself.

Aristotle's conception of iconicity emerges most clearly in his discussion of painting and poetry as imitative arts. The claim that painting is an imitative art has often been criticized on the grounds that (as Nussbaum puts it) "representing has always been more a matter of interpreting than of reproducing."¹¹ But Aristotle does not equate imitation with reproduction or copying in the narrow sense of the word. Instead, he explicitly likens the representational power of poetry to that of painting. Few modern scholars would characterize Greek poetry as an accurate transcription or a straightforward reproduction of actual events. Often its characters are fictive, mythical or historical personages, whom the poet could not know by personal acquaintance and must construct by art. Yet, Aristotle holds that painting is no less interpretative than poetry. In fact, he repeatedly cites the example of portrait painting in order to explain how poetic imitation necessarily involves interpretation (*Poetics* 1447a18–21, 1448a4–6, 1450a24–28, 1450b1–3, 1454b8–14, 1460b8–11).

As S. H. Butcher explains, Aristotle is drawn to the example of portrait painting precisely because it proves that the imitation of character in poetry requires representing things, not as they are, but as they appear to and are interpreted by *phantasia*.¹² Aristotle maintains (*Poetics* 1460b8–11) that, as imitators, painters (*zôgraphos*) and other "icon-makers" (*eikonopoios*) "must of necessity imitate one of three objects — things as they were or are, things as they are said or thought to be, or things as they ought to be." Imitation necessarily involves decisions about who the represented people are, what they are like and how they should be shown to be. As Aristotle argues, "it follows that we [poets] must represent men either as better than in real life, or as worse, or as they are. It is the same in painting. Polygnotus depicted men as nobler than they are, Pauson as less noble, Dionysius drew them true to life" (*Poetics* 1448a4–6). These passages are evidence that Aristotle regards icons as cognitively derived from their objects. The likenesses that they present are necessarily the result of artistic interpretation. There can be little question that portrayals of people as better or worse than they are, means interpreting visual appearances as signs of virtuous or defective character (Cf. *Prior Analytics* 70b6ff). Yet, a "true to life" portrayal (*Poetics* 1448a6) is no less cognitive in nature, because it requires interpreting visual appearances as signs of the sitter's character as it actually is. A central goal of my analysis of Aristotle's theory of remembrance is to describe more clearly his understanding of the icon as both like and cognitively derived from its object.

For Aristotle, memory is a disposition of the soul for storing and recalling sensations and thoughts. In *De Memoria*, he argues that memory encompasses two distinct operations. Remembrance or memory proper is the activity of recalling stored cognitions as past cognitions. Memory of this sort resides in inner sense (*DM* 451a15–18), and is found to some degree in all animate beings with a sense of time, but, as we shall see,

requires both sense and intellect for full actuation. Reminiscence or recollection (*DM* 451b12–452b8), on the other hand, is the activity of searching memory by going from one stored previous cognition to another; it is a somewhat intellectual activity found only in human beings.

Sorabji (35–42) shows that Aristotle’s *De Memoria* is a response to Plato’s contention that recollection (or reminiscence) is a means for recovering knowledge of ideas implanted in the soul before birth. Aristotle argues (contrary to Plato) that remembrance encompasses knowledge of all sorts (Sor. 1). Although a more intellectual process, recollection culminates in remembrance (*DM* 451b7–10). It does not recover forgotten innate ideas, because it can only recover what remembrance can recall.

Aristotle demonstrates that all memories originate in sense by showing that remembrance is a function of sense. He reminds his students of a central thesis of *De Anima* (esp. 424a17–432a14).¹³ To wit: that “it is not possible to think without a phantasm” (*DM* 449b31–450a1). Memory in general is the state or condition of possessing previously cognized sensations and previously cognized thoughts. The same movements of the soul active in *phantasia* also produce the contents of memory (*DM* 450a25–b11). An affection (*pathos*) arising from perception (*aisthêsis*), Aristotle maintains, should be thought of as a “sort of picture [*zôgraphême*], the having of which we say is memory. For the change that occurs [in inner sense] marks in it a sort of imprint [*typos*] of the sense-impression [*aisthêma*], as people do who seal things with signet rings” (*DM* 450a30–32). Although Aristotle also applies the analogy of the signet ring to perception, it is more than mere metaphor. For he attributes variations in the ability of people to form lasting memories to material differences in their receiving surfaces. Subsequent discussion gradually extends the analogy between memory and pictures. First he likens the memory imprint to “a drawing in us” (*DM* 450b16). Then in a lengthy passage (*DM* 450b20–451a18, quoted below), he describes remembrance as the action of mind in taking the phantasm that appears when sense is applied to a memory imprint to be both a picture (*graphê, zôon*) and an “icon” (*eikôn*).

Plato’s writings already contain a lengthy discussion of memory as palimpsest of imprints sealed in the wax of mind (*Theaetetus* 191b–96c). Plato proposes the analogy (which he credits to Homer) as part of an analysis of the nature of mistaken judgment. For this reason, he focuses on the relation between memory and new perceptions, rather than on that between memory and past perceptions. Mistaken judgment is attributed, on the one hand, to defects in the imprints caused by faults in the receiving surface, and, on the other, to a mis-matching of perceptions with memory imprints. Plato uses his two discussants as examples for the latter case. He has in mind, he says, a memory of what Theaetetus is like and a memory of what Theodorus is like. These are never confused in thought. However, he might falsely judge a rushed, distant or indistinct perception of one to be a perception of the other, just as, when distracted or in a hurry, he might put his feet into the wrong shoes. However, after developing the analogy of memory by means of imprints at much greater length than Aristotle does, Plato abruptly

drops it. The analogy, he argues, does not account for errors in the application of scientific knowledge, because the incorrect addition of numbers cannot be due to a mismatching of a perception and an imprint. For this reason, memory by means of imprints does not encompass scientific knowledge.

By contrast, Aristotle is concerned to show that memory by means of imprints comprehends all kinds of knowledge. A mathematician, he explains, uses a diagram to demonstrate that the sum of the angles of a triangle equals two right angles, but does not take account of the fixed size and shape of the drawing. “The same effect occurs in thinking as in drawing a diagram” (*DM* 450a1). The intellect makes use of phantasms, but does not take account of their determinate size or shape. Yet, the ability to judge magnitude resides in primary sense, where *phantasia* resides. Since “it is not possible to think of anything without continuity...,” he writes, “it is apparent that knowledge of these [things] is due to the primary perceptive part. Memory, even the memory of objects of thought, is not without a phantasm. So memory will belong to thought in virtue of an incidental association...” (*DM* 450a9, 11–12). For this reason, he concludes, “it is the objects of *phantasia* that are remembered in their own right, whereas things that are not grasped without *phantasia* are remembered in virtue of an incidental association” (*DM* 450a23–25). Thus, Aristotle argues contra Plato that all kinds of knowledge are remembered by means of phantasms originating in sense. Sense perceptions are remembered directly; abstract thoughts are remembered incidentally.

The nature of phantasms and *phantasia* has recently become a point of controversy. Aristotle defines *phantasia* as “a movement [of the soul] resulting from an actual exercise of the power of sense ... [that has] for its content what can be perceived and ... is necessarily similar in character to the sensation itself” (*DA* 429a1, 428b12–14).¹⁴ Phantasms (*phantasmata*) of both sense and memory arise by virtue of *phantasia* and constitute its contents (*DA* 429a1–2). Aristotle maintains that what active sense actually senses are things, not impressions. “The activity of the sensible object and that of sense is one and the same activity” (*DA* 425b26), he writes, so that “sensation is in a way what is sensible” (*DA* 431b23–24). In perception, phantasms are what is actually seen, heard, smelled, tasted and felt when sense is active. These “phantasms are like sensuous contents except in that they contain no matter” (*DA* 432a9). However, phantasms also include the voices of internal dialogue and the visions that appear with the eyes closed and while one engages in memory (*DA* 427b19–20). Aristotle accounts for these phantasms by arguing that they are somehow the result of sensations (*DA* 428b10–429a2 and elsewhere).¹⁵ Yet, because these phantasms appear without the object that triggers sense proper, they prove that *phantasia* is not the same as sense. Instead, it is as a kind of interface between sense and thought. Accordingly, phantasms have a role in thought. “For the thinking soul,” Aristotle explains, “phantasms serve as if they were the contents of perception” (*DA* 431a14). “The faculty of thinking ... thinks the forms in the phantasms.... Thought is the form of forms, and sense the form of sensible things” (*DA* 431b2, 432a2).

Although *phantasia* has for its contents sensuous forms of all five external senses, Aristotle emphasizes its connection with vision: “as sight is the most fully developed sense, the name ‘*phantasia*’ has been formed from light (*phaos*) because it is not possible to see without light” (*DA* 429a3–4). This emphasis led most ancient, medieval, Renaissance and modern interpreters to equate “*phantasia*” with “imagination” and “phantasms” with mental “images.”¹⁶ But recent interpreters contest this long-standing tradition. They point out that Aristotle’s use of the word “*phantasia*” is closely related to his use of the Greek verb “to appear” (*phainesthai*), which applies to all sorts of things and phenomena, and not only to sight.¹⁷ Because *phainesthai* is a passive word, Nussbaum argues that phantasms are “what appears” and not “images” produced by the mind. Drawing on Wittgenstein’s notion that imaging and related phenomena are a form of “seeing-as,” she explains that phantasms are “interpretations” of impressions as the “appearances” of sensible things. Since for Aristotle things, not impressions, are sensed, there is, as Nussbaum puts it, “no distinction . . . between the given, or received, and the interpreted.”¹⁸

Nussbaum’s insight that in Aristotle’s theory of *phantasia* there is no distinction between the given, the received and the interpreted helps explain the production of memory imprints. Like memory, perception (*aisthêsis*) is for Aristotle a process of imprinting. Aristotle likens perception (*aisthêsis*) to “the way in which a piece of wax takes on the impress [*semeion*] from a signet-ring without the iron or gold; what produces the impression [*semeion*] is a signet of bronze or gold, but not qua bronze or gold” (*DA* 424a17–22). Since the ring and wax are inverted impressions of one another, what they have in common is not the external shape of the surfaces as surfaces, but a form or pattern found in both that may be understood as a “sign” (*semeion*). This metaphor of the signet-ring leads to the idea that the sensible forms are received as impressions, an idea made explicit in *De Memoria*, but only implied in *De Anima*.¹⁹

The fixity and flatness of painting makes it difficult to understand how picture-like mental images would be capable of impressing themselves into memory. Aristotle maintains that the same movements of the soul active in *phantasia* also produce the contents of memory (*DM* 450a25–b11). Yet, as Sorabji emphasizes, Aristotle’s account of variations in the receiving surface of memory permits and even encourages a material or physiological understanding of the memory imprint.²⁰ For this reason, perhaps, Sorabji (7–8 esp. n. 1) leaves as an open question whether, for Aristotle, memory is a copy of past objects of perception or of one’s view of these objects.

Leaving this question open, however, sidesteps an issue that Aristotle explicitly poses: “Does one remember this affection, or the thing from which it was produced? For if the former, we would remember nothing absent; but if the latter, how is it that while perceiving the affection, we remember the absent thing which we are not perceiving?” (*DM* 450b13ff). Moreover, as I will argue below, Aristotle offers his analogy between memory phantasms and icons in order to show that the either-or alternatives posed by this and another rhetorical question are false dichotomies.

The new understanding of phantasms as “interpretations” makes it possible to resolve this problem. Since things not impressions are actually sensed, perception necessarily involves interpreting appearances as things. These things need not be objects as such. (One might, for example, see the red of an apple as the appearance of “red.”) But since phantasms figure in thought “as if they were the contents of perception,” they must have some thinkable form. For example, *phantasia* might interpret an upright visible shape as the appearance of a man, a friend, a father, a husband, a leader, an American, a professor, or something else. Thought then would interpret these interpretations as appearances of what it is to be a man or a friend or a father or a husband, and so forth. The interpretations of *phantasia* necessarily include a component that the intellect can interpret as the “form” or “appearance” of a definition, category, universal idea, theorem, or some other intelligible thing. This is why Aristotle insists that *phantasia* is necessary for the intellectual operation of suppositional thinking (*hupolepsis*) which takes something to be something.²¹

When phantasms are understood as interpretations of appearances as things, the distinction between memory imprints as traces of past objects and as one’s picture-like view of these objects disappears, as Nussbaum maintains. The same affection that produces the imprint in memory is interpreted by *phantasia* as the appearance of something. As the root meaning of the word “interpretation” suggests, the role of *phantasia* in memory is to “translate” or “carry across” the affective form of a perception. Without this interpretation, the perception would not be sensed and would not be memorable. Yet, the interpretation involves a component of thought, which is not directly present to sense, and hence cannot be directly impressed in memory. Since memory is located in sense, the sensuous content of the original perception is imprinted in memory directly, “whereas things that are not grasped without *phantasia* are remembered in virtue of an incidental association” (*DM* 450a23–25). But imprints are only latent or potential memories. They are not made present in mind until *phantasia* interprets or translates them as iconic appearances of the things that produced them (cf. *DM* 450b24–451a3, quoted below). Like the affections that produced the imprints, the phantasms activated by memory are interpretations of the appearances of things. These interpretations might differ in detail from the interpretations of the original affections, but the form of the memory imprint and of the sense impression are more or less the same. This is why it is sometimes possible to remember a detail to which one did not previously attend. Yet, since all acts of memory and acts of perception necessarily involve interpretation, it is not always possible to sort out memories of what was actually perceived from one’s view of what was perceived. Though speculative, such a reading, I suggest, does justice to Aristotle’s understanding of phantasms, to his analogy of the signet ring, and to ancient Greek conceptions of graphic pictures as icons.

Aristotle uses the icon to explain the relation of remembrance to immediate experience. My analysis of this aspect of Aristotle’s theory turns on the different functions of sense and thought in a key passage (quoted below) where Aristotle compares memory

phantasms with portraits. In this passage Aristotle speaks of perceiving, conceiving and contemplating. As explained above, perception (*aisthêsis*) is an activity of sense in gathering information about external objects. Since sense perceptions produce memory imprints, Aristotle locates memory in the “primary perceptive part” of the soul (*DM* 450a14), where *phantasia* interprets sense impressions as the appearances of things. Conception (*hupolepsis*) is suppositional thinking by which thought actively takes something to be something (*Sor.* 69, 77). It is the intellectual counterpart of *phantasia* which Aristotle insists is necessary for it.²² Contemplation (*theôrein*) is the speculative thinking necessary for scientific knowledge. Aristotle conceives it as the action of intellect in thinking about what is sensed and thought.²³

Aristotle’s remarks introducing the key passage on icons and memory in *De Memoria* show that his primary purpose is to distinguish between active sensing and thinking, on the one hand, and active remembering, on the other. Aristotle poses two rhetorical questions about the objects of memory (*DM* 450b11–19). First he asks whether the soul remembers sense impressions or the things and thoughts that produce them. Then why, if memory is something “like an imprint [*typos*] or drawing [*graphê*] in us,” should the perception of it “be the memory of a different thing,” rather than of the picture-like imprint itself. He then shows that, in both cases, neither proposed alternative provides a satisfactory explanation. If one remembers things and thoughts, how is one to know that it is a memory and not the thing or thought itself? If one remembers by perceiving impressions, how are absent objects remembered? Likewise if memory perceives the imprint as an imprint, how does one remember things and thoughts? And if it perceives things and thoughts, how does remembering differ from sensing and thinking? The quandary raised by these questions leads Aristotle to propose a model for remembrance which embraces both alternatives in both questions. He explains that the soul distinguishes memory from perception and thought because it remembers past things and thoughts by means of phantasms that it conceives of both as phantasms and as icons of the things and thoughts that produce them:

A figure drawn on a panel is both a figure [*zôon*] and an icon [*eikôn*], and while being one and the same, it is both even though, the being of the two is not the same. And one can contemplate it both as a figure and as an icon. In the same way, one must also conceive the [memory] phantasm in us to be something in its own right and to be of another thing. {1} In so far, then, as it is something in its own right, it is an object of contemplation or a phantasm. {2} But in so far as it is of another thing, it is a sort of icon and a reminder. {3} So again, when the change connected with the other thing is active, if the soul perceives the phantasm as something in its own right, it appears to come to one as a thought [*theorema*] or a phantasm. {4} But if one contemplates the phantasm as being of another thing, and (just as in the case of the drawing) as an icon, and {5} as of Coriscus, when one hasn’t seen Coriscus, then {6} (not only in the case of the drawing is the experience of so contemplating it dif-

ferent from when one contemplates it as a drawn figure; but also) {7} in the case of the soul the one phantasm occurs simply as a thought [*noema*], {8} the other, because it is an icon (as in the case of the drawing), is a reminder.

{9} And for this reason, when changes like this are produced in our soul as a result of a former perception, we sometimes do not know whether this is happening in accordance with the previous perception, and are in doubt whether it is memory or not. {10} At other times it happens that we have a thought and recollect that we heard or saw something earlier. This happens when one changes from contemplating the phantasm as the thing that it is to contemplating it as being of something else.

{11} The contrary also happens, as it did to Antiphon of Oreus and mad people. For they used to speak of their phantasms as things that occurred and as if they were remembering them. This happens whenever someone contemplates what is not an icon as if it were.

{12} [Mnemonic] exercises safeguard memory by reminding one. And this is nothing other than contemplating something frequently as an icon and not as a thing in its own right. {13} Now it has been said what memory and remembering are, namely the having of a phantasm regarded as an icon of that of which it is a phantasm [*DM* 450b21–451a16; braces and brackets added].

Aristotle's discussion shows that he regards memory as a function of *phantasia* involving both sense and thought. Through conception, the intellect understands that memory phantasms are both mental things in their own right and icons of something else. Perception and contemplation function within these conceptions. The two references to perception (marked {3} and {9}) explain the activation of the memory phantasm within one conception and the other. The role of contemplation is much more complex and accounts for various cases in which memory is partial, mistaken or applicable in different contexts.

To explain the different ways in which memory functions in remembrance, Aristotle draws an elaborate analogy between a memory phantasm and a portrait. Like a portrait, a memory phantasm is both a thing in itself and an icon of something else. Within the conception of the phantasm as a thing in itself, it is either an "object of contemplation or a phantasm" {1}. Here, I suggest, Aristotle is describing the ability of the soul to classify memory by type on the basis of the kinds of affections that produced the imprints. This process requires the application of sense to the imprint in order to perceive its contents as a phantasm {3}, but remains within the conception of phantasms as things in their own right, because the phantasms and not their contents are being classified. (An analogous case, not raised by Aristotle, might be the arrangement of paintings by subject matter for an exhibition; although the paintings are selected and sorted by perceiving subject, the paintings themselves and not their subjects are arranged and put on display.) This ability to classify memory is essential for recollection, which Aristotle regards as the process of searching for a memory by going from a "starting point" to

“something similar, or opposite, or neighboring” (*DM* 451b19–20). Unless the phantasms are somehow sorted by type, this search would be no more than a random foray. Sorting by type is a form of contemplation, because it falls to the intellect to interpret phantasms as appearances of the categories to which things belong.

However, it requires sense to perceive imprints as phantasms in their own right for the intellect to sort. In the sentence marked {3}, the memory phantasm conceived as a thing in itself is perceived by sense. This perception results in the appearance of a phantasm or a thought (*theorema*). A phantasm appears when the affection of the soul that produced the memory imprint is a perception. Since the imprint preserves the sensible contents of the original affection, the phantasm that appears is itself an interpretation of sensible form as the appearance of a thing. The affections activated by the application of sense to memory imprints of this kind are so like the interpreted sense impressions that it is sometimes difficult to know whether they are memories or not {9}. When the affection of the soul that produced a memory imprint is a conception, a thought appears. Aristotle earlier explained that scientific knowledge is remembered through diagram-like phantasms bearing an incidental relation to thought:

The same effect occurs in thinking as in drawing a diagram. For in the latter case, although we do not make any use of the fact that the size of the triangle is determinate, we none the less draw it with a determinate size. And similarly someone who is thinking, even if he is not thinking of something with size, places something with size before his eyes, but thinks of it as not having a size [*DM* 450a1–4].

The affections activated during theoretical thought produce an imprint, just as the affections of sense do. When an imprint of a thought-affection is activated, it is perceived as a kind of mental “diagram,” which is interpreted by *phantasia* as the “appearance” of a category, universal idea, theorem, or some other intellectual thing.

The contemplation of phantasms as icons is more complex. Just as a portrait may be seen as the likeness of the sitter, so too contemplating a phantasm as the icon of something else is like contemplating that other thing. Aristotle takes a portrait of his student Coriscus as an example (*Sor.* 85). When a viewer contemplates the likeness of Coriscus in a portrait, it serves as a reminder {2 & 4}. However, Aristotle immediately offers a corollary {5}, which commentators have misunderstood. Sorabji and J. I. Beare agree on the sense of the text: what Sorabji renders “when one hasn’t seen Coriscus,” Beare renders “without having seen the actual Koriskos.”²⁴ Yet, Beare adds in brackets “at the moment” and Sorabji comments in his notes: “i.e. when one hasn’t sighted him, or when one doesn’t have him in sight. If one had him in sight one would not be remembering, but only recognizing” (*Sor.* 85). Neither offers a textual argument for his reading.²⁵

On the face of it, the interpretations offered by Sorabji and Beare seem unproblematic. In *Theaetetus*, Plato uses two students as examples in a discussion of the relation between memory and recognition. Aristotle, however, is concerned with memory and

past cognitions. In the readings of Sorabji and Beare, he wants to make it clear that, unlike Plato, he is not making an argument about the relation between memory and recognition.

Yet, further consideration shows that the case is not as simple as it seems. First, if remembrance depends on the object of memory not being at hand, why does Aristotle take as an example a student, rather than a well-known person who is not in his class? Moreover, as Beare and Sorabji interpret it, the clause in {5} is both unnecessary and misleading. It is unnecessary because even if Coriscus is present and being seen, one might still wish to remember him as he was at a former time or wish to remember, as Plato puts it, “what he is like” (*Theaetetus* 192d, trans. F. M. Cornford). In both cases, contemplating a portrait of Coriscus might serve as a model for the act of remembrance involved. For the issue at hand is not whether one has Coriscus in sight, but whether one is engaged in memory. There is no doubt that attending to a memory phantasm is a necessary condition for remembrance in Aristotle’s theory. Yet, strictly speaking, when a portrait is being contemplated as the likeness of a person {4}, it is the person *in the icon* which is being attended to; it is therefore irrelevant whether the sitter is actually present to sight. But if this is what Aristotle intends to express in clause {5}, he might more accurately have written: “and of Coriscus, whenever one is looking at the drawing [as an icon].” If this is what he intends, raising the issue of whether the actual Coriscus is being seen, is simply misleading.

These difficulties and another even more serious one discussed below lead me to suggest a stronger reading, which is no less compatible with Aristotle’s diction, but gives more credit to his thought. Instead of understanding “when one hasn’t seen Coriscus” and “without having seen the actual Koriskos” to mean that he is not now being seen, I propose that the clause means: even when one has never seen Coriscus. The thrust of my reading of {5–6} is that prior visual knowledge of Coriscus is irrelevant to the case of the portrait. Even viewers who have never seen Coriscus see his likeness in the portrait; and as long as a phantasm or portrait functions as an icon, it will also serve as a reminder {7–8}.

An objection might be raised that if this is what Aristotle intends he would use a different example, such as a portrait of Pericles or the Tyrant-Slayers. However, such an example would involve him in a lengthy discussion of how memory figures in the perception and recognition of things not previously seen. (A brilliant discussion of this issue from an Aristotelian viewpoint is offered by the eleventh-century Arab philosopher Ibn al-Haytham, known to the Latin West as Alhazen.²⁶) Instead, Aristotle merely indicates that prior visual knowledge of Coriscus is irrelevant to his example. Friends recognize Coriscus in his portrait. But even those members of Aristotle’s audience who have never seen Coriscus would also see his likeness in the portrait. This corollary, I will argue, acknowledges the conditions under which portraits are most often viewed. More important, whether intended or not, it greatly clarifies Aristotle’s argument and might even be logically necessary for it.

Prior knowledge of a sitter's appearance is not a necessary condition for seeing a portrait as the likeness of a person. In Aristotle's day, as in the present, most viewers have not seen many of the persons rendered in portraits before seeing the portraits themselves. Personal familiarity with mythical figures, fictional characters, historical personages, distinguished ancestors, and the like is, of course, out of the question, and political leaders and famous authors are often much more widely known by image and reputation than by personal acquaintance. Moreover, personal memory of an acquaintance's appearance lasts only a generation or two, but art is forever.²⁷ Yet, there is a sense in which even the portrait-likeness of familiar sitters is new. As explained above, Aristotle maintains that painters imitate things as they appear to *phantasia*. In many cases, they render persons as better or worse than they actually are. Yet, even true to life portrayals are the result of an artistic interpretation of appearances as appearances of persons as they are. Even viewers familiar with sitters rendered in true to life portrayals may not—I would say, could not—have seen them precisely as they appear in the portraits. In my reading, one point of {5–8} is that no prior visual knowledge of a sitter is necessary for a portrait to serve as an icon. Even viewers who have never seen the actual Coriscus see him in the portrait and need not appreciate it only “as a drawn figure” exhibiting, say, the artist's style or a pleasing shape. Likewise “in the case of the soul,” when a memory phantasm is contemplated in its own right, it might appear simply as a thought {7}, but when understood as a likeness of something else {8}, it also functions as a reminder, because like the portrait, it is an icon.²⁸

More important, the ability of viewers to see the likeness of sitters with whom they have no prior acquaintance is a necessary condition for Aristotle's analogy between portraits and memory phantasms. As noted above, Aristotle explicitly defines memory as the state of having memory phantasms in the soul. In his theory, the only source for memory phantasms are imprints, which record previous perceptions and thoughts. When faced with explaining how these imprints serve to make previous perceptions and thoughts available to the soul, he likens the phantasms that appear when the imprints are sensed to portraits. As the sensible contents of imprints, these phantasms constitute the only sources available to the soul for knowledge of the previous perceptions and thoughts. Therefore the analogy of the portrait would be applicable to a memory phantasm, only if, like the phantasm and the imprint with which it is associated, it constitutes the only available source for knowledge of its contents. Suggesting that Aristotle's viewers have visual knowledge of Coriscus not dependent on the portrait undercuts the force of the pictorial analogy and indeed of Aristotle's entire argument. For it opens the way for a follower of Plato to counter that remembrance depends upon a source of knowledge other than imprints produced by sensory experience. In my reading, Aristotle's corollary addresses this possible objection.

Granting that Aristotle's analogy between memory phantasms and portraits applies to portraits of people with whom viewers are not previously acquainted clarifies the various roles of remembrance in Aristotle's account. When explaining that memory is of

the past, Aristotle describes remembrance as follows (*DM* 449b22): “for whenever someone is actively engaged in remembering, he always says in his soul that he heard, or perceived, or thought this before.” Sorabji (9–10) rightly criticizes this formulation on the grounds that Aristotle attributes memory to animals lacking judgment and reason which could not engage in such an internal dialogue. Julia Annas therefore suggests that the description not be taken as a condition for memory, but as part of Aristotle’s analysis of it.²⁹ If so, this formulation draws attention to a crucial aspect of Aristotle’s conception of the memory phantasm as icon. As explained above, for Aristotle, icons are both similar to and derived from their objects. To understand that memory phantasms are icons is therefore equivalent to saying that they derive from the phantasms or thoughts to which they are similar. Understood as a thing in its own right, a memory phantasm is an object of thought; accordingly, contemplating it as icon of something else insures that this something else is both like the present cognition and prior to it. Thus, the iconic status of the memory phantasm is sufficient to insure that it is in fact a memory.

The derivative nature of the icon explains the case described in the sentences marked {10} where a cognition that first seems to be a present thought (*noema*) is subsequently recognized by recollection to be a memory. This happens, Aristotle explains, “when one changes from contemplating the phantasm as the thing that it is to contemplating it as being of something else.” Sorabji falls into the same trap when explicating this passage as he does when explicating the passage on the viewer’s prior knowledge of Coriscus. His comment pre-supposes that there are two sets of things in the viewer’s mind that have to be brought together: “we start with an image of the thing that we later recollect, but fail at first to refer the image to the thing. Only after passing through a series of associated images [i.e. phantasms], do we manage to refer it” (Sor. 42). Refer what to what, one is tempted to ask, since the phantasm itself is the only cognition of the thing available to the soul. Aristotle is describing recollection not as a change in reference but as a change in attitude toward a single memory imprint: what first appears to sense as a new thought or perception, upon further contemplation is understood to be an icon or derivative likeness. (How this new understanding comes about is discussed below.) The contrary case {11}, however, is attributed to mental derangement. Mistaking a new sense phantasm or imaginative devising for an icon is a sign of madness, because it shows that the intellect is unable to properly fulfill one of its central tasks—discriminating one kind of cognition from another. Thus, memory phantasms function as reminders only when they are cognized as icons or derivative likenesses. And it is because portraits are recognized as derivative likenesses that they function as reminders even when a viewer has not previously seen the sitter. Conversely, (correctly and sanely) cognizing a phantasm as an icon is sufficient to insure that it is a reminder. For this reason, contemplating phantasms as icons, rather than as the appearances of imprints, provides reminders which safeguard memory {12}. Because icons are derivative, Aristotle is able to define “what memory and remembering are” as “the having of a phantasm regarded as an icon of that of which it is a phantasm” {13}.

My account raises two problems, for which it is possible to supply the same answer. First, if remembrance depends upon contemplating a phantasm as an icon, how does the soul distinguish between a memory phantasm (that is, the active affection associated with a memory imprint) and a new perception, conception, or imaginative devising? Second, in what way is a memory phantasm as icon derivative? With regards to the first question, Sorabji (11–12) claims, “Aristotle does not make the mistake of supposing that memory can be distinguished from perception or imagination simply by reference to the character of the images [that is, phantasms] involved.” He declines to discuss the matter in detail but in a footnote offers the following three suggestions, which are here numbered for ease of reference: “Among the characteristics of memory which might help to distinguish it from imagination, Aristotle might name [1] the (correct) judgment that one encountered the imaged thing before, [2] the attitude of regarding one’s image as a copy, and [3] the co-presence of a mental image revealing time elapsed” (Sor. 12 n. 1). None of these suggestions is particularly helpful. The idea [3] that there is a co-present mental image of the time elapsed is based on a reading of the text that I find problematic (see Sor. 18–21). But even if this reading is granted, it would apply only to a limited number of cases, since Aristotle states that the estimation of elapsed time is not a necessary condition for memory (*DM* 452b29–453a4), whereas he incorporates the iconic nature of the phantasm into his definition of memory {13}. The first two suggestions contradict the assertion that they are advanced to explain. Since memory imprints are the only records of prior cognitions, any judgment [1] that something being cognized by the mind has been encountered before has to be based on an assessment of the phantasm associated with that cognition. But how is the soul to know that it should assume [2] “the attitude of regarding one’s image as a copy” if memory cannot “be distinguished from perception or imagination simply by reference to the character of the images involved?”

Contrary to Sorabji, I propose that memories can be distinguished from current perceptions, new imaginative devisings and new thoughts simply by reference to the character of the phantasms involved. As noted above, the work of such recent scholars as Nussbaum shows that it is not necessary to impute a pictorial character to Aristotle’s phantasms in most contexts. Nussbaum proposes a Wittgensteinian reading that phantasms are interpretations of impressions as the appearances of things. This reading offers a more plausible and interesting account of Aristotle’s theory of *phantasia* in sense and thought than do readings based upon translating *phantasmata* as “mental images.” However, Aristotle’s account of remembrance is one of those places where there is concrete evidence for attributing a pictorial character to phantasms. Since I have already argued that the soul treats memory phantasms as icons, I will now argue that the soul knows to do this because it can distinguish memories from other sorts of phantasms on the basis of their character.

This paper has summarized the “more plausible” account that Nussbaum and others give of the role of *phantasia* in sense and thought. However, it has also shown that

Aristotle's account of remembrance is one of those places where there is concrete evidence of the presence of picture-like phantasms. Since I have already argued that this picture-like quality is due to the fact that the soul treats memory phantasms as icons, I will now argue that the soul knows to do this because it can distinguish memories from other sorts of phantasms.

That Aristotle regards memory phantasms as special and distinctive sorts of phantasms is suggested by his repeated references to them as definite entities: "something in its own right" {1, 3}, "an object of contemplation" {1}, "the thing that it is" {10}. Moreover, when he comes to define the kind of entity that these phantasms are, he emphasizes their picture-like character, first by describing the affection that produces a memory imprint as a "sort of picture, the having of which we say is memory" (*DM* 450a30–32); then, by giving an account of remembrance in which phantasms are compared with portrait icons; and finally by revising his definition of memory to read: "the having of a phantasm regarded as an icon of that of which it is a phantasm" {13}. Thus unlike phantasms in general, memory phantasms are distinctive mental entities that have a pictorial character in addition to an iconic function.

Aristotle's discussion of the character of this entity is condensed and difficult. As Sorabji emphasizes, Aristotle's account permits and even encourages a material or physiological understanding of the imprint.³⁰ The phantasm that produces the imprint is only "a sort of picture," but the phantasm associated with the imprint is fully analogous to a drawing or portrait. This portrait-like character is not due to its status as a mental "object" in the ordinary sense of the word. Rather, the phantasm as "thing in its own right" is an "affection" of sense (*DM* 450a10–11). This affection has a sensuous content, which might involve a physiological component, but contains no matter (*DA* 432a9). To describe more clearly what is sensuous about it, Aristotle (*DM* 449b30–450a14) reminds his readers of an argument in *Physics* (VI, 1. 231a18–232a22). There he explains that knowledge of natural things necessarily involves cognitions of three interrelated "continua:" magnitude, change and time. All natural things, he argues, are subject to change. However, change is an alteration of magnitude over time. In *De Memoria* (450a8–14), he adds that, inasmuch as affections are changes of the soul, they are necessarily accompanied by cognitions of magnitude and time. These cognitions belong to inner sense, which discriminates the properties of natural objects by interpreting sense-impressions as the "appearances" of things. But memory imprints are material traces, which once formed, do not change, or change only very slowly. If they are like the affections that produce them, this likeness is due to similarities in magnitude, not in time.

The fixity or durative character of memory imprints, I suggest, accounts for the pictorial or iconic character of memory phantasms. The likeness that the person Coriscus presents to the eyes of a viewer is in a more or less constant state of flux. By contrast the likeness of Coriscus in a portrait icon has a fixity and duration of appearance. As E. H. Gombrich emphasizes, modern scientists have shown that the brief, temporary

retention of sense-impressions is crucial for “momentary” perception.³¹ One form of retention is the physiological process, so important to television and film, which makes an impression of light and sound persist for a very brief moment after the actual stimulus is over. This form of retention demarks the minimal possible duration of a sensory moment. Another form, of greater relevance here, is the ability to cast the mind back a few seconds in order to recall the sounds of words which one may have failed to take in while they were being spoken. Variouslly termed “immediate memory,” “primary retention” or “echo memory,” this longer form of passing retention is responsible for the duration of what philosophers used to call the “specious present.” As Gombrich explains, primary retention accounts for the fact that “successive impressions do in fact persist *together* and are not wholly experienced as successive. Without this holding operation we could not grasp a melody or understand the spoken word.”³² Nearly half a millennium ago, Leonardo da Vinci came to the same conclusion, when he argued that temporary retention of impressions is the reason that falling raindrops appear as lines, not globes, and that certain changes between successive tones in music are more pleasing than others.³³ Without being able to retain a musical tone in our mind for some time after it ceases to sound, he reasoned, we can not appreciate the melodic harmony of successive notes in music. Aristotle too was interested in the temporary persistence of sense-impressions, especially those caused by extreme sensations (*DA* 424a29–32, 429a30–b5, *De Insomnis* 459b5–22). After a bright flash of light, he explains, it is not possible to see anything else for a few seconds. But if the eyes are closed after looking into a bright light, an after-image appears and then slowly dissipates. The temporality of primary retention and after-images differs radically from that of actual memory. Try as we might, we cannot retain an after image or extend the sound of a tone in primary retention. They must pass way in a few seconds. But once a sight, speech or musical composition is committed to memory, it can be recalled for as long as one likes.

I believe that Aristotle draws attention to the different temporal quality of sense-impressions and memory phantasms in a difficult and under-appreciated passage:

When someone first learns or experiences something, he does not recover any memory, since none has preceded. Nor does he acquire memory from the start, for once the state or affection has been produced within a person, then there is memory. So memory is not produced within someone at the same time that the experience is being produced within him. . . . Remembering itself does not occur until time has elapsed. For a person remembers now what he saw or experienced earlier. He does not now remember what he experienced now. Further, it is apparent that a person can remember from the start, once he has perceived or experienced something, without having just now recollected it (*DM* 451a21–31).

Here Aristotle characterizes “first learning” and immediate sense-experience as something that starts and ends. Memory is not acquired at the start, but only after an affection has been produced. As long as the first learning persists, there can be no memory of it. But as soon as the initial affections have dissipated, remembrance can begin. The process of remembrance requires perceiving the imprint left by the initial affection. Perception of the imprint results in a phantasm which is both like and derived from the initial affection. But because the imprint remains fixed, the phantasms associated with it do not pass away as rapidly as the affections of the soul produced by sense-impressions do.

The soul is able to recognize memory phantasms from this persistence. In Book Two of *De Memoria* (452b7–8), Aristotle explains that time is cognized either “in units of measurement or indeterminately.” Cognizing time in units of measurement requires linking an event to external movements that can be measured, such as days, seasons, years, or something else.³⁴ An example is remembering that “he did something or other the day before” (*DM* 452b29–a2). But time can also be understood proportionately, as more or less (*DM* 452b8–29). In *De Anima*, Aristotle attributes to sense the power to discriminate. This power, he argues, is based on an ability to discern the “due proportions” of sensible forms (*DA* 425a27, 426b7). The discernment of due proportions requires an innate mean or middle point (*mesotes*), in relation to which the (positive or negative) magnitude of all impressions are distinguished.³⁵ In *De Memoria* (452b8–13), Aristotle proposes that inner sense discriminates between more and less time “in the same way that [a person] distinguishes magnitudes.” He does not say what innate mean is used in this discernment. I suggest that the point at which impressions dissipate and the potential for memory begins is one such possible mean. If so, the persistence of memory phantasms can be recognized “in the same way that [a person] distinguishes magnitudes” as lasting longer than it takes for a sense-impression to become a memory.³⁶ By continuing to perceive the phantasm, the soul comes to know that it should “change from contemplating the phantasm as the thing that it is to contemplating it as being of something else” {10}. And because this recognition is based on innate knowledge, only the mentally deranged mistake their memories for new perceptions {11}.

The persistence of memory imprints also accounts for the derivative nature of the phantasms associated with them. Sorabji proposes that there is a causal link between present memories and past cognitions. However, he is unable to describe it beyond acknowledging that it “did not have to take the form of a physical trace or structural analogue” (Sor. 10–11). We are now in a better position to understand what this non-physical causal relation is. Phantasms are affections or changes of the soul. To discern that a change is persistent is to grant that it is a continuation or potentially constant repetition of a change that happened before. For if a current change is not related to a prior change it can not be characterized as persisting. Thus, for Aristotle the persistence of memory characterizes it as derivative in a cognitive sense.

Aristotle’s treatment of the icon in terms of the cognitive function of memory might be generalized in a way that revises and clarifies the modern conception of the iconic

sign. As Thomas Sebeok explains, current discussions of iconicity coalesce around C. S. Peirce's definition of the icon as a sign representing its object by similarity or likeness.³⁷ Aristotle's discussion suggests that this definition be revised to read: an icon is a sign representing its object by similarity or likeness *that characterizes its object as cognitively prior to the sign*. Since, as the epigraph suggests, iconic likeness or similarity is a quality potentially common to the sign and its object, this is equivalent to saying: an icon is a sign representing its object by a similarity or likeness that is cognitively derivative from the object. Or more simply: *the icon is a sign whose representative quality is a cognitively derivative likeness*. In this definition "cognitive" refers to any function of the mind, from sense to thought.

This revised definition preserves and even sharpens the fundamental distinction between icons, indices, and symbols. Since indices are signs representing their objects through an existential relation or physical connection, they always have a temporal relation to their objects. However, this temporal relation differs from case to case, as two examples from Peirce prove. A bullet-hole, Peirce's most surprising example of an index, represents a shot by the brute force of the shot's prior existence, because without the shot there would be no hole. As Peirce emphasizes, the connection between the sign and its object is real, physical, and caused by a prior action, because a hole is there, "whether anyone has the sense to attribute it to a shot or not" (CP 2. 304). In the case of a weather-cock, however, the physical connection between the index and its object (the wind) is concurrent, because, as Peirce explains, "in the first place it really takes the same direction of the wind, so that there is a real connection between them, and in the second place we are so constituted that when we see a weathercock pointing in a certain direction it draws our attention to that direction, and when we see the weathercock veering with the wind, we are forced by the law of mind to think that direction is connected with the wind" (CP 2. 286). Since symbols are signs representing their objects by "rule," "habit," or social "law," they do not ordinarily have a temporal relation to their objects, but they are usually cognitively — not temporally — posterior to a code. A graphic or phonic sign serves as a word as long as it functions as a symbol within an differential system of language. As Joseph Ransdell explains, in Peirce's theory, every occurrence of a word in speech or writing bears an iconic relation to an abstract symbolic word established by the arbitrary rules of language.³⁸ For this reason, Peirce regards both phonemes and graphemes to be iconic signs for linguistic words and linguistic words to be conventional signs or symbols for concepts. Thus, if the content plane of language seems to be logically — not temporally — prior to the expression plane in both speech and writing, it is because written and oral forms of expression are icons of and hence cognitively derivative from an abstract system of symbols, which are themselves signs generated in actuality by written and spoken expressions.

The cognitive character of the derivative relation insures that the object represented by an icon need not be real. Peirce characterizes the object represented by an icon as a "possibility," supposition or "potential mood" (CP 2. 276, 291). As the epigraph to this

paper indicates, the representational function of the icon blurs the distinction between dream and reality, and the particular and the general. Peirce's beautiful description emphasizes the immediacy and transience of the icon. But I suggest that the represented object is always understood as having been possibly perceived, thought, imagined, dreamed, represented or conceived before. A priority of this sort was recently proposed as a defining characteristic of painting as an art. In his Mellon Lectures, Richard Wollheim argues that painting becomes an art when mark-making becomes thematized. He defines thematization as that which happens when a mark-maker "takes stock of" or "abstracts some hitherto unconsidered aspect of what he is doing or what he is working on, and makes the thought of this feature contribute to guiding his future activity."³⁹ For Wollheim, the painter is a viewer whose cognition of his work's prior state directs his future practice. When the painting is completed, its prior state becomes fixed. Thematization accounts for the cognitive priority of fictive figures in painting whom no viewer, including the artist, has seen before the work is produced. It also explains why contemplating the likeness of this figure is an act of re-cognition, even for viewers who have never seen the painting before. This painted figure is no more than a possible person, who need not (and strictly speaking cannot) exist outside of the painting. Nonetheless, because seeing this likeness requires a re-cognition, a painting always serves as a reminder.

My revised definition points to the possible resolution of two "mind-boggling" philosophical problems raised by the modern concept of icon. Sebeok calls them the issues of symmetry and regression.⁴⁰ The problem of symmetry turns on the idea, so clearly expressed by Peirce, that the similarity linking icon and object could as easily belong to the object as to the icon. Modern semioticians have assumed that an icon signifies its object but its object does not signify its icon. An example of this asymmetry might be a polaroid snap-shot of the *Mona Lisa*. Although Leonardo's painting is as much like the snap-shot as the snap-shot is like the painting, few would claim that the painting represents (or serves as a reminder of) the snap-shot. Sebeok, however, presents several cases in which the relation between icon and object cuts both ways. For example, in the case of charismatic personages, such as the Pope or a movie star, who is known to the public through photographs, films, television, radio and print, the living person may well serve as an iconic sign of an image, which a believer or a fan holds dear. Such indeed is implied when an entertainer such as Madonna is called a "pop icon."⁴¹ Another example, quoted by Sebeok, is described by Konrad Lorenz: "The form of a horse's hoof is just as much as an image of the steppe it treads as the impression it leaves is an image of the hoof."⁴² Sebeok suggests that "if this reflexivity can be shown to be an indispensable property of icons, then surely time's arrow must be incorporated in revisions of extant definitions."⁴³ This paper offers a possible model for a revised definition, but the incorporated element is not time as such but cognitive priority. This cognitive priority is a function of memory, interest and knowledge, rather than time's arrow. In the case of the hoof, the terrain has cognitive priority for a geologist and the hoof print for a

biologist. In the case of a “pop icon,” the image might have cognitive priority for star-struck groupies who espy their idol across the street, but not for a casting director, who sought to hire the entertainer herself. By insisting on the cognitive priority of the object to the sign, my revised definition of iconicity allows for symmetrical relations without making them universal criteria.

The issue of regression turns on the varying degrees of likeness. As Umberto Eco argues, at a sufficiently fundamental level of analysis, anything can be shown to be similar to anything else.⁴⁴ The example given by Eco is the hobby-horse, discussed by Gombrich, which serves as a substitute for a horse precisely because, like a horse, it can be straddled. Sebeok points to similarities due to genetic connection. An infant daughter, who is a spitting-image of her mother, might also, “in ever attenuated fashion, stand as an icon for her father, each of her siblings, all of her other relatives, and further, all other members of the human race, past, present and future, but also for all primates, and further still, all mammals, all chordates, and so on and on, in unending retrogression to ever more generalized denotata.”⁴⁵ The problem, as Paul Bouissac explains, is one of pertinence.⁴⁶ Every object has an infinite set of features, but only those serving as denotata are relevant in semiosis. Here too, Aristotle’s idea of the icon as a reminder or cognitively derivative likeness seems to resolve the issue. The hobby-horse would not serve as an icon of a horse for a zoologist who wished to study equine anatomy, because the similarity between the stick and the horse would not remind him of the cognitive status of the horse as an animal. However, an infant often reminds a doting grandmother of her own child, because she has memories of her daughter’s appearance and prior knowledge of and interest in family likeness. Thus the cognitive priority of the object determines the pertinent representative features of the iconic sign.

Aristotle’s insight that icons have a commemorative function distinguishes his understanding of iconicity from modern semiotic definitions. For centuries, theorists have sought to explain representation as a form of imitation. In the twentieth-century, however, the concept of imitation has come under attack from artists, critics, philosophers and theorists, who argue that artistic likeness depends not on sight or nature, but on convention and use. Yet, because painting represents things not previously seen, the rules of convention and the codes governing use have proved difficult, if not impossible, to describe. This paper suggests that Aristotle’s understanding of the icon as a reminder points to a possible resolution to this problem. If so, Aristotle may serve as a guide for contemporary semioticians and art theorists, just as he has for so many generations of thinkers in so many fields.

Notes

This paper was greatly improved by the generous and insightful comments of Professors Edward Lee and Sheldon Nodelman. My research assistant Margaret Garber offered many valuable suggestions.

Epigraph: C. S. Peirce, *Collected Papers of Charles Sanders Peirce*, 6 volumes in 3, ed. C. Hartshorne and P. Weiss (Cambridge, Massachusetts: Harvard University Press, 1960, 3. 362. (Abbreviated *CP* in subsequent references.)

1 All quotations of *De Anima* (abbreviated *DA*) are from J. Barnes, ed., *The Complete Works of Aristotle. The Revised Oxford Translation*, Bollingen Series LXXI, 2 (Princeton, New Jersey: Princeton University Press, 1984), vol. 1, 641–92, but “image” is changed to “phantasm” and “imagination” to “*phantasia*.”

2 For a brief survey of the relevant Aristotelian texts, see David Ross, *Aristotle* (6th ed., London and New York: Routledge, 1995 [1st ed. 1923]), 147–53.

3 Richard Sorabji, *Aristotle On Memory* (London: Duckworth, 1972), 2–4. This edition serves as the basis for all quotations of Aristotle’s *De Memoria*. However, the following changes to his translation have been made in the interest of emphasizing the technical nature of Aristotle’s diction: *eikôn* is rendered as “icon,” not “copy;” *phantasia* as “*phantasia*,” not “imagination;” and “*phantasmata*” as “phantasms,” not “images.” References to *De Memoria*, abbreviated *DM* and cited by Bekker number, and to Sorabji’s commentary, abbreviated Sor. and followed by the page number, will be included in the body of this text.

4 For the “brute force” of the index, see *Semiotics and Significs. The Correspondence between*

Charles S. Peirce and Victoria Lady Welby, ed. C. S. Hardwick (Bloomington: Indiana University Press, 1977), 66–71 (Peirce letter, December 14, 1908). For the index, see Thomas A. Sebeok, “Indexicality” in *Peirce and Contemporary Thought. Philosophical Inquiries*, ed. K. L. Ketner (New York: Fordham University Press, 1995), 222–42.

5 For the modern concept of the icon, see Thomas Sebeok, “Iconicity,” *MLN* 91 (1976): 1427–56. On Peirce, see Joseph Ransdell, “On Peirce’s Conception of the Iconic Sign,” in *Iconicity. Essays on the Nature of Culture. Festschrift for Thomas A. Sebeok on his 65th Birthday*, ed. P. Bouissac, M. Herzfeld, R. Posner (Tübingen: Stauffenburg-Verlag, 1986), 51–74.

6 Sebeok, “Iconicity,” 1443.

7 See, for example, the standard translation of *De anima* by J. A. Smith in J. Barnes, ed., *The Complete Works of Aristotle. Phantasma and phantasia* are also rendered as “image” and “imagination” in H. G. Apostle, ed. and trans., *Aristotle’s On the Soul (De Anima)* (Grinnell, Iowa: The Peripatetic Press, 1981); D. W. Hamlyn, trans., *Aristotle: De Anima* (Oxford: Clarendon, 1968); and W. S. Hett, *Aristotle: On the Soul, Parva Naturalia, On Breath*, Loeb Classical Library (Cambridge, Massachusetts: Harvard University Press, 1955). However, the editor changes “image” to “phantasm” in M. Durrant, ed., *Aristotle’s “De Anima” in focus* (London and New York: Routledge, 1993), where the translation is otherwise based on R. D. Hicks, ed. and trans. *Aristotle: De Anima* (Cambridge: Cambridge University Press, 1907).

8 See especially, Martha Craven Nussbaum, *Aristotle’s “De Motu Animalium”* (Princeton, New Jersey: Princeton University Press, 1978), 221–269; and Malcolm Schofield, “Aristotle on Imagination” in *Aristotle on Mind and the*

- Senses. Proceedings of the Seventh Symposium Aristotelicum*, ed. G.E.R. Lloyd and G.E.L. Owen (Cambridge: Cambridge University Press, 1978), 99–140.
- 9 Nussbaum, *Aristotle's "De Motu Animalium,"* 255.
- 10 Nussbaum, *Aristotle's "De Motu Animalium,"* 249–51.
- 11 Nussbaum, *Aristotle's "De Motu Animalium,"* 226–27. Cf Nelson Goodman, *Languages of Art* (Indianapolis, 1968), esp. chaps. I & VI.
- 12 See S. H. Butcher, *Aristotle's Theory of Poetry and Fine Art*, 4th ed. (New York: Dover, 1951 [1911]), 121–62, esp. 122–28. I use Butcher's translation in quotations of the *Poetics*.
- 13 For discussion, see M. Nussbaum and A. Oksenberg Rorty, eds., *Essays on Aristotle's "De Anima"* (Oxford: Clarendon, 1992); and M. Durrant, ed., *Aristotle's "De Anima" in focus*.
- 14 My account is heavily indebted to Nussbaum, *Aristotle's "De Motu Animalium,"* 223–69; and Dorothea Frede, "The Cognitive Role of *Phantasia*" in *Essays on Aristotle's 'De Anima'*, 279–95. Schofield ("Aristotle on the Imagination") differs on some points because he emphasizes the role of *phantasia* in "non-paradigmatic sensory experiences" (101).
- 15 See Schofield, "Aristotle on the Imagination."
- 16 For *phantasia* as imagination, see H. A. Wolfson, "The Internal Senses in Latin, Arabic, and Hebrew Philosophical Texts," *Harvard Theological Review* 28 (1935): 69–133.
- 17 See Nussbaum, *Aristotle's "De Motu Animalium,"* 241–55; and Schofield, "Aristotle on the Imagination," 110–25.
- 18 Nussbaum, *Aristotle's "De Motu Animalium,"* 261.
- 19 Sorabji (82) points out that the only explicit mention of *aisthēmata* in *De Anima* is in connection with the theory of thinking, not perceiving.
- 20 Richard Sorabji, "Body and Soul in Aristotle," *Philosophy* 49 (1973): 63–89 and 76–78.
- 21 Cf Schofield, "Aristotle on the Imagination," 126–31.
- 22 Cf Schofield, "Aristotle on the Imagination," 126–31.
- 23 See Malcolm F. Lowe, "Aristotle on Kinds of Thinking" in *Aristotle's "De Anima" in Focus*, 110–127; Charles H. Kahn, "Aristotle on Thinking" in *Essays on Aristotle's "De Anima,"* 359–79.
- 24 *The Works of Aristotle Translated into English*. The *Parva Naturalia*, ed. and trans. J. I. Beare and G. R. T. Ross (Oxford: Clarendon, 1908), 450b30.
- 25 However, the interpolation and comment bring their texts closer to other translations. See W. S. Hett, ed., *Aristotle. On the Soul, Parva Naturalia, On Breadth*, 297: "although he has not just seen Coriscus;" and W. D. Ross, *Aristotle. Parva Naturalia* (Oxford, 1955), 238: "though he has not been looking at Coriscus."
- 26 For discussion, A. I. Sabra, "Sensation and Inference in Alhazen's Theory of Visual Perception" in *Studies in Perception: Interrelations in the History of Philosophy and Science*, eds. P. K. Machamer and R. G. Turnbull (Columbus: Ohio State University Press, 1978), 160–85, esp. 171–79; idem, "Form in Ibn al-Haytham's Theory of Vision," *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 5 (1989): 115–40, esp. 130–140; and my "On Alberti's 'Sign.' Vision And Composition in Quattrocento Painting," *Art Bulletin*, 79 (forthcoming 1997).
- 27 Such is the thrust of the famous statement on portraiture attributed to Michelangelo in a letter by Niccolò Martelli: "Having ... to sculpt the illustrious Lords of the most distinguished house of the Medici, [Michelangelo] did not take from Duke Lorenzo, nor from Lord Giuliano the

model [i.e. their features] exactly as nature had portrayed and composed them, but he gave them a grandeur, a proportion, a decorum ... which it seemed to him would bring them more praise, saying that in a thousand years no one could testify that they had been otherwise..." Letter X, sect. 9, from Niccolò Martelli to Rugasso, July 28, 1544; quoted in Charles de Tolnay, *Michelangelo*, vol. 3: *The Medici Chapel* (Princeton, New Jersey: Princeton University Press, 1948), 68.

28 This point was clearly understood by Thomas Aquinas, who argued that images were apprehended by intellect in the same way that thoughts were. For discussion, see my "On Alberti's 'Sign.'"

29 Julia Annas, "Aristotle on Memory and the Self" in *Essays on Aristotle's "De Anima"*, 302–303.

30 Sorabji, "Body and Soul in Aristotle," 76–78.

31 E. H. Gombrich, "Moment and Movement in Art," *Journal of the Warburg and Courtauld Institutes* 27 (1964); reprinted in *The Image and the Eye. Further Studies in the Psychology of Pictorial Representation* (Ithaca, New York: Cornell University Press, 1982), 40–62.

32 Gombrich, "Moment and Movement in Art," 48.

33 For discussion, see my "Leonardo, Mantegna and the Times of Painting" in *The Renaissance from Milan to Venice: Discoveries in the 15th- and 16th-Century Art of Northern Italy*, Papers in Art History from the Pennsylvania State University (University Park: Penn State University Press, forthcoming 1997).

34 This, at any rate, is Augustine's understanding of Aristotelian time. See his *Confessions*, XI, 23–24.

35 See Thomas J. Slakey, "Aristotle on Sense-Perception" in *Aristotle's "De Anima" in Focus*, 75–89.

36 It might be possible to describe a method for estimating the time lapse between the formation of a memory and its recall without appealing to co-present images of ever-growing time-lines of the sort that Sorabji had proposed. In Aristotle's theory of the life-span, aging is accompanied by physiological changes that necessarily affect the material quality of memory's receiving surface. Might not the soul be able to judge the relative age of a memory from the quality of the imprint when contemplating a phantasm in its own right as the appearance of the imprint? But this is no more than a vague suggestion.

37 Sebeok, "Iconicity," 1431–34.

38 Ransdell, "On Peirce's Concept of the Iconic Sign," 63–66.

39 Richard Wollheim, *Painting as an Art*, A. W. Mellon Lectures in the Fine Arts, 1984 (London: Thames and Hudson, 1987), 20.

40 Sebeok, "Iconicity," 1443–45.

41 This symmetry was also built into the Byzantine definition of the icon. See John of Damascus, *On the Divine Image. Three Apologies Against Those Who Attack the Divine Images*, trans. D. Anderson (Crestwood, New York: St. Vladimir's Seminary Press, 1980), 101: "For the likeness of the emperor is not different in the image; so that a person who sees the image views the Emperor in it; and again he who sees the Emperor recognizes that it is he who is expressed in the image."

42 Quoted by Sebeok, "Iconicity," 1444.

43 Thomas Sebeok, *Signs. An Introduction to Semiotics* (Toronto: University of Toronto Press, 1994), 28–30.

44 Umberto Eco, *A Theory of Semiotics* (Bloomington: Indiana University Press, 1976), 191–217.

45 Sebeok, "Iconicity," 1445.

46 Paul Bouissac, "Iconicity and Pertinence" in *Iconicity*, 193–214.