

Chapter I

THE THREE LATIN SOURCES FOR THE CLASSICAL ART OF MEMORY¹

AT a banquet given by a nobleman of Thessaly named Scopas, the poet Simonides of Ceos chanted a lyric poem in honour of his host but including a passage in praise of Castor and Pollux. Scopas meanly told the poet that he would only pay him half the sum agreed upon for the panegyric and that he must obtain the balance from the twin gods to whom he had devoted half the poem. A little later, a message was brought in to Simonides that two young men were waiting outside who wished to see him. He rose from the banquet and went out but could find no one. During his absence the roof of the banqueting hall fell in, crushing Scopas and all the guests to death beneath the ruins; the corpses were so mangled that the relatives who came to

¹ The English translations of the three Latin sources used are those in the Loeb edition of the classics: die *Ad Herennium* is translated by H. Caplan; the *De oratore* by E. W. Sutton and H. Rackham; Quintilian's *Institutio oratorio* by H. E. Butler. When quoting from these translations I have sometimes modified them in the direction of literalness, particularly in repeating the actual terminology of the mnemonic rather than in using periphrases of the terms.

The best account known to me of the art of memory in antiquity is that given by H. Hajdu, *Das Mnemotechnische Schriftum des Mittelalters*, Vienna, 1936. I attempted a brief sketch of it in my article 'The Ciceronian Art of Memory' in *Medioeve e Rinascimento, Studi in onore di Bruno Nardi*, Florence, 1955, II, pp. 871 ff. On the whole, the subject has been curiously neglected.

take them away for burial were unable to identify them. But Simonides remembered the places at which they had been sitting at the table and was therefore able to indicate to the relatives which were their dead. The invisible callers, Castor and Pollux, had handsomely paid for their share in the panegyric by drawing Simonides away from the banquet just before the crash. And this experience suggested to the poet the principles of the art of memory of which he is said to have been the inventor. Noting that it was through his memory of the places at which the guests had been sitting that he had been able to identify the bodies, he realised that orderly arrangement is essential for good memory.

He inferred that persons desiring to train this faculty (of memory) must select places and form mental images of the things they wish to remember and store those images in the places, so that the order of the places will preserve the order of the things, and the images of the things will denote the things themselves, and we shall employ the places and images respectively as a wax writing-tablet and the letters written on it.²

The vivid story of how Simonides invented the art of memory is told by Cicero in his *De oratore* when he is discussing memory as one of the five parts of rhetoric; the story introduces a brief description of the mnemonic of *places* and *images* (*loci* and *imagines*) which was used by the Roman rhetors. Two other descriptions of the classical mnemonic, besides the one given by Cicero, have come down to us, both also in treatises on rhetoric when memory as a part of rhetoric is being discussed; one is in the anonymous *Ad C. Herennium libri IV*; the other is in Quintilian's *Institutio oratorio*.

The first basic fact which the student of the history of the classical art of memory must remember is that the art belonged to rhetoric as a technique by which the orator could improve his memory, which would enable him to deliver long speeches from memory with unfailing accuracy. And it was as a part of the art of rhetoric that the art of memory travelled down through the European tradition in which it was never forgotten, or not forgotten until comparatively modern times, that those infallible guides in all human activities, the ancients, had laid down rules and precepts for improving the memory.

² Cicero, *De oratore*, II, lxxxvi, 351-4.

It is not difficult to get hold of the general principles of the mnemonic. The first step was to imprint on the memory a series of *loci* or places. The commonest, though not the only, type of mnemonic place system used was the architectural type. The clearest description of the process is that given by Quintilian.³ In order to form a series of places in memory, he says, a building is to be remembered, as spacious and varied a one as possible, the fore-court, the living room, bedrooms, and parlours, not omitting statues and other ornaments with which the rooms are decorated. The images by which the speech is to be remembered—as an example of these Quintilian says one may use an anchor or a weapon—are then placed in imagination on the places which have been memorised in the building. This done, as soon as the memory of the facts requires to be revived, all these places are visited in turn and the various deposits demanded of their custodians. We have to think of the ancient orator as moving in imagination through his memory building *whilst* he is making his speech, drawing from the memorised places the images he has placed on them. The method ensures that the points are remembered in the right order, since the order is fixed by the sequence of places in the building. Quintilian's examples of the anchor and the weapon as images may suggest that he had in mind a speech which dealt at one point with naval matters (the anchor), at another with military operations (the weapon).

There is no doubt that this method will work for anyone who is prepared to labour seriously at these mnemonic gymnastics. I have never attempted to do so myself but I have been told of a professor who used to amuse his students at parties by asking each of them to name an object; one of them noted down all the objects in the order in which they had been named. Later in the evening the professor would cause general amazement by repeating the list of objects in the right order. He performed his little memory feat by placing the objects, as they were named, on the window sill, on the desk, on the wastepaper basket, and so on. Then, as Quintilian advises, he revisited those places in turn and demanded from them their deposits. He had never heard of the classical mnemonic but had discovered his technique quite independently. Had he extended his efforts by attaching notions to the objects remembered on the places he might have caused still greater amazement by

³ *Institutio oratorio*, XI, ii, 17-22.

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delivering his lectures from memory, as the classical orator delivered his speeches.

Whilst it is important to recognise that the classical art is based on workable mnemotechnic principles it may be misleading to dismiss it with the label 'mnemotechnics'. The classical sources seem to be describing inner techniques which depend on visual impressions of almost incredible intensity. Cicero emphasises that Simonides' invention of the art of memory rested, not only on his discovery of the importance of order for memory, but also on the discovery that the sense of sight is the strongest of all the senses.

It has been sagaciously discerned by Simonides or else discovered by some other person, that the most complete pictures are formed in our minds of the things that have been conveyed to them and imprinted on them by the senses, but that the keenest of all our senses is the sense of sight, and that consequently perceptions received by the ears or by reflexion can be most easily retained if they are also conveyed to our minds by the mediation of the eyes.⁴

The word 'mnemotechnics' hardly conveys what the artificial memory of Cicero may have been like, as it moved among the buildings of ancient Rome, *seeing* the places, *seeing* the images stored on the places, with a piercing inner vision which immediately brought to his lips the thoughts and words of his speech. I prefer to use the expression 'art of memory' for this process.

We moderns who have no memories at all may, like the professor, employ from time to time some private mnemotechnic not of vital importance to us in our lives and professions. But in the ancient world, devoid of printing, without paper for note-taking or on which to type lectures, the trained memory was of vital importance. And the ancient memories were trained by an art which reflected the art and architecture of the ancient world, which could depend on faculties of intense visual memorisation which we have lost. The word 'mnemotechnics', though not actually wrong as a description of the classical art of memory, makes this very mysterious subject seem simpler than it is.

An unknown teacher of rhetoric in Rome⁵ compiled, *circa* 86-82 B.C., a useful text-book for his students which immortalised,

* *De oratore*, II, lxxxvii, 357.

⁵ On the authorship and other problems of the *Ad Herennium*, see the excellent introduction by H. Caplan to the Loeb edition (1954).

not his own name, but the name of the man to whom it was dedicated. It is somewhat tiresome that this work, so vitally important for the history of the classical art of memory and which will be constantly referred to in the course of this book, has no other title save the uninformative *Ad Herennium*. The busy and efficient teacher goes through the five parts of rhetoric (*inventio, dispositio, elocutio, memoria, pronuntiatio*) in a rather dry text-book style. When he comes to memory⁶ as an essential part of the orator's equipment, he opens his treatment of it with the words: 'Now let us turn to the treasure-house of inventions, the custodian of all the parts of rhetoric, memory.' There are two kinds of memory, he continues, one natural, the other artificial. The natural memory is that which is engrafted in our minds, born simultaneously with thought. The artificial memory is a memory strengthened or confirmed by training. A good natural memory can be improved by this discipline and persons less well endowed can have their weak memories improved by the art.

After this curt preamble the author announces abruptly, 'Now we will speak of the artificial memory.'

An immense weight of history presses on the memory section of *Ad Herennium*. It is drawing on Greek sources of memory teaching, probably in Greek treatises on rhetoric all of which are lost. It is the only Latin treatise on the subject to be preserved, for Cicero's and Quintilian's remarks are not full treatises and assume that the reader is already familiar with the artificial memory and its terminology. It is thus really the main source, and indeed the only complete source, for the classical art of memory both in the Greek and in the Latin world. Its role as the transmitter of the classical art to the Middle Ages and the Renaissance is also of unique importance. The *Ad Herennium* was a well known and much used text in the Middle Ages when it had an immense prestige because it was thought to be by Cicero. It was therefore believed that the precepts for the artificial memory which it expounded had been drawn up by 'Tullius' himself.

In short, all attempts to puzzle out what the classical art of memory was like must be mainly based on the memory section of *Ad Herennium*. And all attempts such as we are making in this book to puzzle out the history of that art in the Western tradition

⁶ The section on memory is in *Ad Herennium*, III, xvi-xxiv.

must refer back constantly to this text as the main source of the tradition. Every *Ars memorativa* treatise, with its rules for 'places', its rules for 'images', its discussion of 'memory for things' and 'memory for words', is repeating the plan, the subject matter, and as often as not the actual words of *Ad Herennium*. And the astonishing developments of the art of memory in the sixteenth century, which it is the chief object of this book to explore, still preserve the 'Ad Herennian' outlines below all their complex accretions. Even the wildest flights of fancy in such a work as Giordano Bruno's *De umbris idearum* cannot conceal the fact that the philosopher of the Renaissance is going through yet once again the old, old business of rules for places, rules for images, memory for things, memory for words.

Evidently, therefore, it is incumbent upon us to attempt the by no means easy task of trying to understand the memory section of *Ad Herennium*. What makes the task by no means easy is that the rhetoric teacher is not addressing us; he is not setting out to explain to people who know nothing about it what the artificial memory was. He is addressing his rhetoric students as they congregated around him *circa* 86-82 B.C., and *they* knew what he was talking about; for *them* he needed only to rattle off the 'rules' which they would know how to apply. We are in a different case and are often somewhat baffled by the strangeness of some of the memory rules.

In what follows I attempt to give the content of the memory section of *Ad Herennium*, emulating the brisk style of the author, but with pauses for reflection about what he is telling us.

The artificial memory is established from places and images (*Constat igitur artificiosa memoria ex locis et imaginibus*), the stock definition to be forever repeated down the ages. A *locus* is a place easily grasped by the memory, such as a house, an intercolumnar space, a corner, an arch, or the like. Images are forms, marks or simulacra (*formae, notae, simulacra*) of what we wish to remember. For instance if we wish to recall the genus of a horse, of a lion, of an eagle, we must place their images on definite *loci*.

The art of memory is like an inner writing. Those who know the letters of the alphabet can write down what is dictated to them and read out what they have written. Likewise those who have learned mnemonics can set in places what they have heard and deliver it

from memory. 'For the places are very much like wax tablets or papyrus, the images like the letters, the arrangement and disposition of the images like the script, and the delivery is like the reading.'

If we wish to remember much material we must equip ourselves with a large number of places. It is essential that the places should form a series and must be remembered in their order, so that we can start from any *locus* in the series and move either backwards or forwards from it. If we should see a number of our acquaintances standing in a row, it would not make any difference to us whether we should tell their names beginning with the person standing at the head of the line or at the foot or in the middle. So with memory *loci*. 'If these have been arranged in order, the result will be that, reminded by the images, we can repeat orally what we have committed to the *loci*, proceeding in either direction from any *locus* we please.'

The formation of the *loci* is of the greatest importance, for the same set of *loci* can be used again and again for remembering different material. The images which we have placed on them for remembering one set of things fade and are effaced when we make no further use of them. But the *loci* remain in the memory and can be used again by placing another set of images for another set of material. The *loci* are like the wax tablets which remain when what is written on them has been effaced and are ready to be written on again.

In order to make sure that we do not err in remembering the order of the *loci* it is useful to give each fifth *locus* some distinguishing mark. We may for example mark the fifth *locus* with a golden hand, and place in the tenth the image of some acquaintance whose name is Decimus. We can then go on to station other marks on each succeeding fifth *locus*.

It is better to form one's memory *loci* in a deserted and solitary place for crowds of passing people tend to weaken the impressions. Therefore the student intent on acquiring a sharp and well-defined set of *loci* will choose an unfrequented building in which to memorise places.

Memory *loci* should not be too much like one another, for instance too many intercolumnar spaces are not good, for their resemblance to one another will be confusing. They should be of moderate size, not too large for this renders the images placed

on them vague, and not too small for then an arrangement of images will be overcrowded. They must not be too brightly lighted for then the images placed on them will glitter and dazzle; nor must they be too dark or the shadows will obscure the images. The intervals between the *loci* should be of moderate extent, perhaps about thirty feet, 'for like the external eye, so the inner eye of thought is less powerful when you have moved the object of sight too near or too far away'.

A person with a relatively large experience can easily equip himself with as many suitable *loci* as he pleases, and even a person who thinks that he does not possess enough sufficiently good *loci* can remedy this. 'For thought can embrace any region whatsoever and in it and at will construct the setting of some locus.' (That is to say, mnemonics can use what were afterwards called 'fictitious places', in contrast to the 'real places' of the ordinary method.)

Pausing for reflection at the end of rules for places I would say that what strikes me most about them is the astonishing visual precision which they imply. In a classically trained memory the space between the *loci* can be measured, the lighting of the *loci* is allowed for. And the rules summon up a vision of a forgotten social habit. Who is that man moving slowly in the lonely building, stopping at intervals with an intent face? He is a rhetoric student forming a set of memory *loci*.

'Enough has been said of places', continues the author of *Ad Herennium*, 'now we turn to the theory of images.' Rules for images now begin, the first of which is that there are two kinds of images, one for 'dungs' (*res*), the other for 'words' (*verba*). That is to say 'memory for things' makes images to remind of an argument, a notion, or a 'thing'; but 'memory for words' has to find images to remind of every single word.

I interrupt the concise auditor here for a moment in order to remind the reader that for the rhetoric student 'things' and 'words' would have an absolutely precise meaning in relation to the five parts of the rhetoric. Those five parts are defined by Cicero as follows:

Invention is the excogitation of true things (*res*), or things similar to truth to render one's cause plausible; disposition is the arrangement in order of the things thus discovered; elocution is the accomodation of suitable words to the invented (things); memory

is the firm perception in the soul of things and words; pronunciation is the moderating of the voice and body to suit the dignity of the things and words.⁷

'Things' are thus the subject matter of the speech; 'words' are the language in which that subject matter is clothed. Are you aiming at an artificial memory to remind you only of the order of the notions, arguments, 'things' of your speech ? Or do you aim at memorising every single word in it in the right order ? The first kind of artificial memory is *memoria rerum*; the second kind is *memoria verborum*. The ideal, as defined by Cicero in the above passage, would be to have a 'firm perception in the soul' of both things and words. But 'memory for words' is much harder than 'memory for things'; the weaker brethren among the author of *Ad Herennium's* rhetoric students evidently rather jibbed at memorising an image for every single word, and even Cicero himself, as we shall see later, allowed that 'memory for things' was enough.

To return to the rules for images. We have already been given the rules for places, what kind of places to choose for memorising. What are the rules about what kind of images to choose for memorising on the places ? We now come to one of the most curious and surprising passages in the treatise, namely the psychological reasons which the author gives for the choice of mnemonic images. Why is it, he asks, that some images are so strong and sharp and so suitable for awakening memory, whilst others are so weak and feeble that they hardly stimulate memory at all ? We must enquire into this so as to know which images to avoid and which to seek.

Now nature herself teaches us what we should do. When we see in every day life things that are petty, ordinary, and banal, we generally fail to remember them, because the mind is not being stirred by anything novel or marvellous. But if we see or hear something exceptionally base, dishonourable, unusual, great, unbelievable, or ridiculous, that we are likely to remember for a long time. Accordingly, things immediate to our eye or ear we commonly forget; incidents of our childhood we often remember best. Nor could this be so for any other reason than that ordinary things easily slip from the memory while the striking and the novel stay longer in the mind. A sunrise, the sun's course, a sunset are

⁷ *De inventione*, I, vii, 9 (translation based on that by H. M. Hubbell in the Loeb edition, but made more literal in reproducing the technical terms *res* and *verba*).

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marvellous to no one because they occur daily. But solar eclipses are a source of wonder because they occur seldom, and indeed are more marvellous than lunar eclipses, because these are more frequent. Thus nature shows that she is not aroused by the common ordinary event, but is moved by a new or striking occurrence. Let art, then, imitate nature, find what she desires, and follow as she directs. For in invention nature is never last, education never first; rather the beginnings of things arise from natural talent, and the ends are reached by discipline.

We ought, then, to set up images of a kind that can adhere longest in memory. And we shall do so if we establish similitudes as striking as possible; if we set up images that are not many or vague but active (*imagines agentes*); if we assign to them exceptional beauty or singular ugliness; if we ornament some of them, as with crowns or purple cloaks, so that the similitude may be more distinct to us; or if we somehow disfigure them, as by introducing one stained with blood or soiled with mud or smeared with red paint, so that its form is more striking, or by assigning certain comic effects to our images, for that, too, will ensure our remembering them more readily. The things we easily remember when they are real we likewise remember without difficulty when they are figments. But this will be essential—again and again to run over rapidly in the mind all the original places in order to refresh the images.⁸

Our author has clearly got hold of the idea of helping memory by arousing emotional affects through these striking and unusual images, beautiful or hideous, comic or obscene. And it is clear that he is thinking of human images, of human figures wearing crowns or purple cloaks, bloodstained or smeared with paint, of human figures dramatically engaged in some activity—doing something. We feel that we have moved into an extraordinary world as we run over his places with the rhetoric student, imagining on the places such very peculiar images. Quintilian's anchor and weapon as memory images, though much less exciting, are easier to understand than the weirdly populated memory to which the author of *Ad Herennium* introduces us.

It is one of the many difficulties which confront the student of the history of the art of memory that an *Ars memorativa* treatise, though it will always give the rules, rarely gives any concrete

⁸ *Ad Herennium*, III, xxii.

application of the rules, that is to say it rarely sets out a system of mnemonic images on their places. This tradition was started by the author of *Ad Herennium* himself who says that the duty of an instructor in mnemonics is to teach the method of making images, give a few examples, and then encourage the student to form his own. When teaching 'introductions', he says, one does not draft a thousand set introductions and give them to the student to learn by heart; one teaches him the method and then leaves him to his own inventiveness. So also one should do in teaching mnemonic images.⁹ This is an admirable tutorial principle though one regrets that it prevents the author from showing us a whole set or gallery of striking and unusual *imagines agentes*. We must be content with the three specimens which he describes.

The first is an example of a 'memory for things' image. We have to suppose that we are the counsel for the defence in a law suit. 'The prosecutor has said that the defendant killed a man by poison, has charged that the motive of the crime was to gain an inheritance, and declared that there are many witnesses and accessories to this act.' We are forming a memory system about the whole case and we shall wish to put in our first memory *locus* an image to remind us of the accusation against our client. This is the image.

We shall imagine the man in question as lying ill in bed, if we know him personally. If we do not know him, we shall yet take some one to be our invalid, but not a man of the lowest class, so that he may come to mind at once. And we shall place the defendant at the bedside, holding in his right hand a cup, in his left, tablets, and on the fourth finger, a ram's testicles. In this way we can have in memory the man who was poisoned, the witnesses, and the inheritance.¹⁰

The cup would remind of the poisoning, the tablets, of the will or the inheritance, and the testicles of the ram through verbal similarity with *testes*—of the witnesses. The sick man is to be like the man himself, or like someone else whom we know (though not one of the anonymous lower classes). In the following *loci* we

* *Ibid.*, III, xxiii, 39.

¹⁰ *Ibid.*, III, xx, 33. On the translation of *medico testiculos arietinos tenement* as 'on the fourth finger a ram's testicles', see the translator's note, Loeb edition, p. 214. The *digitus medicinalis* was the fourth finger of the left hand. Mediaeval readers, unable to understand *medico*, introduced a doctor into the scene; see below, p. 65

would put other counts in the charge, or the details of the rest of the case, and if we have properly imprinted the places and images we shall easily be able to remember any point that we wish to recall.

This, then, is an example of a classical memory image—consisting of human figures, active, dramatic, striking, with accessories to remind of the whole 'thing' which is being recorded in memory. Though everything appears to be explained, I yet find this image baffling. Like much else in *Ad Herennium* on memory it seems to belong to a world which is either impossible for us to understand or which is not being really fully explained to us.

The writer is not concerned in this example with remembering the speeches in the case but with recording the details or 'things' of the case. It is as though, as a lawyer, he is forming a filing cabinet in memory of his cases. The image given is put as a label on the first place of the memory file on which the records about the man accused of poisoning are kept. He wants to look up something about that case; he turns to the composite image in which it is recorded, and behind that image on the following places he finds the rest of the case. If this is at all a correct interpretation, the artificial memory would now be being used, not only to memorise speeches, but to hold in memory a mass of material which can be looked up at will.

The words of Cicero in the *De oratore* when he is speaking of the advantages of the artificial memory may tend to confirm this interpretation. He has just been saying that the *loci* preserve the order of the facts, and the images designate the facts themselves, and we employ the places and images like a wax writing tablet and the letters written on it. 'But what business is it of mine', he continues, 'to specify the value to a speaker and the usefulness and effectiveness of memory ? of retaining the information given you when you were briefed and the opinions you yourself have formed ? of having all your ideas firmly planted in your mind and all your resources of vocabulary neatly arranged, of giving such close attention to the instructions of your client and to the speech of the opponent you have to answer that they may seem not just to pour what they say into your ears but to imprint it on your mind? Consequently only people with a powerful memory know what they are going to say and for how long they are going to speak and in what style, what points they have already answered and

what still remains; and they can also remember from other cases many arguments which they have previously advanced and many which they have heard from other people."

We are in the presence of amazing powers of memory. And, according to Cicero, these natural powers were indeed aided by training of the type described in *Ad Herennium*.

The specimen image just described was a 'memory for things' image; it was designed to recall the 'things' or facts of the case and the following *loci* of the system would presumably have held other 'memory for things' images, recording other facts about the case or arguments used in speeches by the defence or the prosecution. The other two specimen images given in *Ad Herennium* are 'memory for words' images.

The student wishing to acquire 'memory for words' begins in the same way as the 'memory for things' student; that is to say he memorises places which are to hold his images. But he is confronted with a harder task for far more places will be needed to memorise all the words of a speech than would be needed for its notions. The specimen images for 'memory for words' are of the same type as the 'memory for things' image, that is to say they represent human figures of a striking and unusual character and in striking dramatic situations—*imagines agentes*.

We are setting out to memorise this line of verse:

Iam domum itionem reges Atridae parant¹²

(And now their homecoming the kings, the sons of Atreus are making ready)

The line is found only in the quotation of it in *Ad Herennium* and was either invented by the author to exhibit his mnemonic technique or was taken for some lost work. It is to be memorised through two very extraordinary images.

One is 'Domitius raising his hands to heaven while he is lashed by the Marcii Reges'. The translator and editor of the text in the Loeb edition (H. Caplan) explains in a note that 'Rex was the name of one of the most distinguished families of the Marcian gens; the Domitian, of plebeian origin, was likewise a celebrated gens'. The image may reflect some street scene in which Domitius

¹¹ *De oratore*, II, lxxxvii, 355.

¹² *Ad Herennium*, III, xxi, 34. See translator's notes on pp. 216-17 in the Loeb edition.

of the plebeian gens (perhaps bloodstained to make him more memorable) is being beaten up by some members of the distinguished Rex family. It was perhaps a scene which the author himself had witnessed. Or perhaps it was a scene in some play. It was a striking scene in every sense of the word and therefore suitable as a mnemonic image. It was put on a place for remembering this line. The vivid image immediately brought to mind 'Dornitius-Reges' and this reminded *by sound resemblance* of 'domum itionem reges'. It thus exhibits the principles of a 'memory for words' image which brings to mind the words which the memory is seeking through their sound resemblance to the notion suggested by the image.

We all know how, when groping in memory for a word or a name, some quite absurd and random association, something which has 'stuck' in the memory, will help us to dredge it up. The classical art is systematising that process.

The other image for memorising the rest of the line is 'Aesopus and Cimber being dressed for the roles of Agamemnon and Menelaus in *Iphigenaia*'. Aesopus was a well-known tragic actor, a friend of Cicero; Cimber, evidently also an actor, is only mentioned in this text.¹³ The play in which they are preparing to act also does not exist. In the image these actors are being dressed to play the parts of the sons of Atreus (Agamemnon and Menelaus). It is an exciting off-stage glimpse of two famous actors being made up (to smear an image with red paint makes it memorable according to the rules) and dressed for their parts. Such a scene has all the elements of a good mnemonic image; we therefore use it to remember 'Atridae parant', the sons of Atreus are making ready. This image immediately gave the word 'Atridae' (though not by sound resemblance) and also suggested 'making ready' for the home-coming through the actors making ready for the stage.

This method for memorising the verse will not work by itself, says the author of *Ad Herennium*. We must go over the verse three or four times, that is learn it by heart in the usual way, and then represent the words by means of images. 'In this way art will supplement nature. For neither by itself will be strong enough, though we must note that theory and technique are much the

¹³ Loeb edition, translator's note, p. 217.

more reliable.¹⁴ The fact that we have to learn the poem by heart as well, makes 'memory for words' a little less baffling.

Reflecting on the 'memory for words' images, we note that our author seems now concerned not with the rhetoric students' proper business of remembering a speech, but with memorising verse in poems or plays. To remember a whole poem or a whole play in this way one has to envisage 'places' extending one might almost say for miles within the memory, 'places' past which one moves in reciting, drawing from them the mnemonic cues. And perhaps that word 'cue' does give a clue to how the method might be workable. Did one really learn the poem by heart but set up some places with 'cue' images on them at strategic intervals ?

Our author mentions that another type of 'memory for words' symbol has been elaborated by the Greeks. 'I know that most of the Greeks who have written on the memory have taken the course of listing images that correspond to a great many words, so that persons who wished to learn these images by heart would have them ready without expending effort in a search for them.'¹⁵ It is possible that these Greek images for words are shorthand symbols or *notae* the use of which was coming into fashion in the Latin world at this time.¹⁶ As used in mnemonics, this would presumably mean that, by a kind of inner stenography, the shorthand symbols were written down inwardly and memorised on the memory places. Fortunately our author disapproves of this method, since even a thousand of such ready-made symbols would not begin to cover all the words used. Indeed, he is rather lenient about 'memory for words' of any kind; it must be tackled just because it is more difficult than 'memory for things'. It is to be used as an exercise to strengthen 'that other kind of memory, the memory for things, which is of practical use. Thus we may without effort pass from this difficult training to ease in that other memory.'

The memory section closes with an exhortation to hard work.

¹⁴ *Ad Herennium*, loc. cit.

¹⁵ *Ibid.*, III, xxiii, 38.

¹⁶ Cicero is said by Plutarch to have introduced shorthand to Rome; the name of his freedman, Tiro, became associated with the so-called 'Tironian notes'. See *The Oxford Classical Dictionary*, article Tachygraphy; H. J. M. Milne, *Greek Shorthand Manuals*, London, 1934, introduction. There may be some connection between the introduction of Greek mnemonics into the Latin world, reflected in *Ad Herennium*, and the importation of stenography at about the same time.

'In every discipline artistic theory is of little avail without un-remitting exercise, but especially in mnemonics, theory is almost valueless unless made good by industry, devotion, toil, and care. You can make sure that you have as many places as possible and that these conform as much as possible to the rules; in placing the images you should exercise every day.'¹⁷

We have been trying to understand inner gymnastics, invisible labours of concentration which are to us most strange, though the rules and examples of *Ad Herennium* give mysterious glimpses into the powers and organisation of antique memories. We think of memory feats which are recorded of the ancients, of how the elder Seneca, a teacher of rhetoric, could repeat two thousand names in the order in which they had been given; and when a class of two hundred students or more spoke each in turn a line of poetry, he could recite all the lines in reverse order, beginning from the last one said and going right back to the first.¹⁸ Or we remember that Augustine, also trained as a teacher of rhetoric, tells of a friend called Simplicius who could recite Virgil backwards." We have learned from our text-book that if we have properly and firmly fixed our memory places we can move along them in either direction, backwards or forwards. The artificial memory may explain the awe inspiring ability to recite backwards of the elder Seneca and of Augustine's friend. Pointless though such feats may seem to us, they illustrate the respect accorded in antiquity to the man with the trained memory.

Very singular is the art of this invisible art of memory. It reflects ancient architecture but in an unclassical spirit, concentrating its choice on irregular places and avoiding symmetrical orders. It is full of human imagery of a very personal kind; we mark the tenth place with a face like that of our friend Decimus; we see a number of our acquaintances standing in a row; we visualise a sick man like the man himself, or if we did not know him, like someone we do know. These human figures are active and dramatic, strikingly beautiful or grotesque. They remind one more of figures in some Gothic cathedral than of classical art proper. They appear to be completely amoral, their function being solely to give an emotional impetus to memory by their personal

¹⁷ *Ad Herennium*, i 11, xxiv, 40.

¹⁸ Marcus Annaeus Seneca, *Controversiarum Libri*, Lib. I, Praef. 2.

¹⁹ Augustine, *De anima*, lib. IV. cap. vii.

idiosyncrasy or their strangeness. This impression may, however, be due to the fact that we have not been given a specimen image of how to remember, for example, the 'things' justice or temperance and their parts, which are treated by the author of *Ad Herennium* when discussing the invention of the subject matter of a speech.²⁰ The elusiveness of the art of memory is very trying to its historian.

Though the mediaeval tradition which assigned the authorship of *Ad Herennium* to 'Tullius' was wrong in fact, it was not wrong in its inference that the art of memory was practised and recommended by 'Tullius'. In his *De oratore* (which he finished in 55 B.C.) Cicero treats of the five parts of rhetoric in his elegant, discursive, gentlemanly manner—a manner very different from that of our dry rhetoric teacher—and in this work he refers to a mnemonic which is obviously based on the same techniques as those described in *Ad Herennium*.

The first mention of the mnemonic comes in Crassus's speech in the first book in which he says that he does not altogether dislike as an aid to memory 'that method of places and images which is taught in an art.'²¹ Later, Anthony tells of how Themistocles refused to learn the art of memory 'which was then being introduced for the first time' saying that he preferred the science of forgetting to that of remembering. Anthony warns that this frivolous remark must not 'cause us to neglect the training of the memory'.²² The reader is thus prepared for Anthony's later brilliant rendering of the story of the fatal banquet which occasioned the invention of the art by Simonides—the story with which I began this chapter. In the course of the discussion of the art of memory which follows Cicero gives a potted version of the rules.

Consequently (in order that I may not be prolix and tedious on a subject that is well known and familiar) one must employ a large number of places which must be well lighted, clearly set out in order, at moderate intervals apart (*locis est utendum multis, illustribus, explicatis, modicis intervallis*); and images which are active, sharply denned, unusual, and which have the power of speedily

²⁰ *Ad Herennium*, III, iii.

²¹ *De oratore*, I, xxxiv, 157.

²² *Ibid.*, II, lxxiv, 299-300.

encountering and penetrating the psyche *{imaginibus autem agentibus, acribus, insignitis, quae occurrere celeriterque percutere animum possint}*.²³

He has boiled down rules for places and rules for images to a minimum in order not to bore the reader by repeating the text-book instructions which are so well known and familiar.

Next he makes an obscurely worded reference to some extremely sophisticated types of memory for words.

... the ability to use these (images) will be supplied by practise which engenders habit, and (by images) of similar words changed and unchanged in case or drawn (from denoting) the part to denoting the genus, and by using the image of one word to remind of a whole sentence, as a consummate painter distinguishing the position of objects by modifying their shapes.²⁴

He next speaks of the type of memory for words (described as 'Greek' by the author of *Ad Herennium*) which attempts to memorise an image for every word, but decides (like *Ad Herennium*) that memory for things is the branch of the art most useful to the orator.

Memory for words, which for us is essential, is given distinctness by a greater variety of images (in contrast to using the image of one word for a whole sentence of which he has just been speaking); for there are many words which serve as joints connecting the limbs of a sentence, and these cannot be formed by any use of similitudes—of these we have to model images for constant employment; but a memory for things is the special property of the orator—this we can imprint on our minds by a skilful arrangement of the several masks (*singulis personis*) that represent them, so that we may grasp ideas by means of images and their order by means of places.²⁵

The use of the word *persona* of the memory-for-things image is interesting and curious. Does it imply that the memory image heightens its striking effect by exaggerating its tragic or comic aspect, as the actor does by wearing a mask? Does it suggest that the stage was a likely source of striking memory images? Or does the word mean in this context that the memory image is like a known individual person, as the author of *Ad Herennium* advises, but wears that personal mask only to jog the memory?

²³ *Ibid.*, II, lxxxvii, 358.

²⁴ *Ibid.*, *loc. cit.*

²⁵ *Ibid.*, II, lxxxviii, 359.

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Cicero has provided a highly condensed little *Ars memorativa* treatise bringing in all the points in their usual order. Beginning with the statement, introduced by the Simonides story that the art consists in places and images and is like an inner writing on wax, he goes on to discuss natural and artificial memory, with the usual conclusion that nature can be improved by art. Then follow rules for places and rules for images; then the discussion of memory for things and memory for words. Though he agrees that memory for things is alone essential for the orator he has evidently put himself through a memory for words drill in which images for words move (?), change their cases (?), draw a whole sentence into one word image, in some extraordinary manner which he visualises within, as though it were the art of some consummate painter.

Nor is it true as unskilled people assert (*quod ab inertibus dicitur*) that memory is crushed beneath a weight of images and even what might have been retained by nature unassisted is obscured: for I have myself met eminent people with almost divine powers of memory (*summos homines et divinaprope memoria*), Charmadas at Athens and Metrodorus of Scepsis in Asia, who is said to be still living, each of whom used to say that he wrote down what he wanted to remember in certain places in his possession by means of images, just as if he were inscribing letters on wax. It follows that this practice cannot be used to draw out the memory if no memory has been given by nature, but it can undoubtedly summon it to come forth if it is in hiding.²⁶

From these concluding words of Cicero's on the art of memory we learn that the objection to the classical art which was always raised throughout its subsequent history—and is still raised by everyone who is told of it—was voiced in antiquity. There were inert or lazy or unskilled people in Cicero's time who took the common sense view, to which, personally, I heartily subscribe—as explained earlier I am a historian only of the art, not a practitioner of it—that all these places and images would only bury under a heap of rubble whatever little one does remember naturally. Cicero is a believer and a defender. He evidently had by nature a fantastically acute visual memory.

And what are we to think of those eminent men, Charmades and Metrodorus, whom he had met whose powers of memory were

²⁶ *Ibid.*, II, lxxxviii, 360.

'almost divine' ? As well as being an orator with a phenomenal trained memory, Cicero was in philosophy a Platonist, and for the Platonist memory has very special connotations. What does an orator and a Platonist mean when he speaks of memories which are 'almost divine' ?

The name of the mysterious Metrodorus of Scepsis will reverberate on many later pages of this book.

Cicero's earliest work on rhetoric was the *De inventione* which he wrote about thirty years earlier than the *De oratore*, at about the same time that the unknown author of *Ad Herennium* was compiling his text book. We can learn nothing new from the *De inventione* about Cicero on the artificial memory for the book is concerned with only the first part of the rhetoric, namely *inventio*, the inventing or composing of the subject matter of a speech, the collection of the 'things' with which it will deal. Nevertheless the *De inventione* was to play a very important part in the later history of the art of memory because it was through Cicero's definitions of the virtues in this work that the artificial memory became in the Middle Ages a part of the cardinal virtue of Prudence.

Towards the end of the *De inventione*, Cicero defines virtue as 'a habit of mind in harmony with reason and the order of nature' a stoic definition of virtue. He then states that virtue has four parts, namely Prudence, Justice, Fortitude, and Temperance. Each of these four main virtues he subdivides into parts of their own. The following is his definition of Prudence and its parts:

Prudence is the knowledge of what is good, what is bad and what is neither good nor bad. Its parts are memory, intelligence, foresight (*memoria, intelligentia, providentia*). Memory is the faculty by which the mind recalls what has happened. Intelligence is the faculty by which it ascertains what is. Foresight is the faculty by which it is seen that something is going to occur before it occurs.²⁷

Cicero's definitions of the virtues and their parts in the *De inventione* were a very important source for the formulation of what afterwards became known as the four cardinal virtues. The definition by 'Tullius' of the three parts of Prudence is quoted by Albertus Magnus and Thomas Aquinas when discussing the virtues in their *Summae*. And the fact that 'Tullius' makes memory a part of Prudence was the main factor in their recommendation

²⁷ *De inventione*, II, liii, 160 (trans. H. M. Hubbell in the Loeb edition).

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of the artificial memory. The argument was beautifully symmetrical, and related to the fact that the Middle Ages grouped the *De inventione* with the *Ad Herennium* as both by Tullius; the two works were known respectively as the First and Second Rhetorics of Tullius. Tullius in his First Rhetoric states that memory is a part of Prudence; Tullius in his Second Rhetoric says that there is an artificial memory by which natural memory can be improved. Therefore the practice of the artificial memory is a part of the virtue of Prudence. It is under memory as a part of Prudence that Albertus and Thomas quote and discuss the rules of the artificial memory.

The process by which the scholastics switched artificial memory from rhetoric to ethics will be discussed more fully in a later chapter.²⁸ I briefly refer to it here in advance because one wonders whether the prudential or ethical use of artificial memory was entirely invented by the Middle Ages, or whether it too may have had an antique root. The stoics, as we know, attached great importance to the moral control of the fantasy as an important part of ethics. As I mentioned earlier, we have no means of knowing how the 'things' Prudence, Justice, Fortitude, Temperance, and their parts would have been represented in the artificial memory. Would Prudence, for example, have taken on a strikingly beautiful mnemonic form, a *persona* like someone that we know, holding or having grouped round her secondary images to remind of her parts—on the analogy of how the parts of the case against the man accused of poisoning formed a composite mnemonic image?

Quintilian, an eminently sensible man and a very good educator, was the dominating teacher of rhetoric in Rome in the first century A.D. He wrote his *Institutio oratoria* more than a century after Cicero's *De oratore*. In spite of the great weight attaching to Cicero's recommendation of the artificial memory, it would seem that its value is not taken for granted in leading rhetorical circles in Rome. Quintilian says that some people now divide rhetoric into only three parts, on the ground that *memoria* and *actio* are given to us 'by nature not by art'.²⁹ His own attitude to the artificial memory is ambiguous; nevertheless he gives it a good deal of prominence.

²⁸ See Chapter III, below.

²⁹ *Institutio oratoria*, III, iii, 4.

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Like Cicero, he introduces his account of it with the story of its invention by Simonides of which he gives a version which is in the main the same as that told by Cicero though with some variant details. He adds that there were a good many versions of the story in Greek authorities and that its wide circulation in his own day is due to Cicero.

This achievement of Simonides appears to have given rise to the observation that it is an assistance to the memory if places are stamped upon the mind, which anyone can believe from experiment. For when we return to a place after a considerable absence, we not merely recognise the place itself, but remember things that we did there, and recall the persons whom we met and even the unuttered thoughts which passed through our minds when we were there before. Thus, as in most cases, art originates from experiment.

Places are chosen, and marked with the utmost possible variety, as a spacious house divided into a number of rooms. Everything of note therein is diligently imprinted on the mind, in order that thought may be able to run through all the parts without let or hindrance. The first task is to secure that there shall be no difficulty in running through these, for that memory must be most firmly fixed which helps another memory. Then what has been written down, or thought of, is noted by a sign to remind of it. This sign may be drawn from a whole 'thing', as navigation or warfare, or from some 'word'; for what is slipping from memory is recovered by the admonition of a single word. However, let us suppose that the sign is drawn from navigation, as, for instance, an anchor; or from warfare, as, for example, a weapon. These signs are then arranged as follows. The first notion is placed, as it were, in the forecourt; the second, let us say, in the atrium; the remainder are placed in order all round the impluvium, and committed not only to bedrooms and parlours, but even to statues and the like. This done, when it is required to revive the memory, one begins from the first place to run through all, demanding what has been entrusted to them, of which one will be reminded by the image. Thus, however numerous are the particulars which it is required to remember, all are linked one to another as in a chorus nor can what follows wander from what has gone before to which it is joined, only the preliminary labour of learning being required.

What I have spoken of as being done in a house can also be done in public buildings, or on a long journey, or in going through a city, or with pictures. Or we can imagine such places for ourselves.

We require therefore places, either real or imaginary, and images

or simulacra which must be invented. Images are as words by which we note the things we have to learn, so that as Cicero says, 'we use places as wax and images as letters'. It will be as well to quote his actual words:—'One must employ a large number of places which must be well-lighted, clearly set out in order, at moderate intervals apart, and images which are active, which are sharply denned, unusual, and which have the power of speedily encountering and penetrating the mind. Which makes me wonder all the more how Metrodorus can have found three hundred and sixty places in the twelve signs through which the sun moves. It was doubtless the vanity and boastfulness of a man glorying in a memory stronger by art than by nature.'³⁰

The perplexed student of the art of memory is grateful to Quintilian. Had it not been for his clear directions about how we are to go through the rooms of a house, or a public building, or along the streets of a city memorising our places, we might never have understood what 'rules for places' were about. He gives an absolutely rational reason as to why the places may help memory, because we know from experience that a place does call up associations in memory. And the system which he describes, using signs like an anchor or a weapon for the 'things', or calling up one word only by such a sign through which the whole sentence would come into mind, seems quite possible and is within the range of our understanding. It is in fact what we should call mnemotechnics. There was then, in antiquity, a practice of which that word can be used in the sense in which we use it.

The peculiar *imagines agentes* are not mentioned by Quintilian though he certainly knew of them since he quotes Cicero's abbreviation of the rules which were themselves based on *Ad Herennium*, or on the kind of memory practice with its strange images which *Ad Herennium* describes. But after quoting Cicero's version of the rules, Quintilian dares to contradict that revered rhetorician very abruptly in the totally different estimate which he gives of Metrodorus of Scepsis. For Cicero, the memory of Metrodorus was 'almost divine.' For Quintilian this man was a boaster and something of a charlatan. And we learn from Quintilian an interesting fact—to be discussed further later—that the divine, or pretentious (according to one's point of view) memory

³⁰ *Ibid.*, XI, ii, 17-22.

system of Metrodorus of Scepsis was based on the twelve signs of the zodiac.

Quintilian's last word on the art of memory is as follows:

I am far from denying that those devices may be useful for certain purposes, as for example if we have to reproduce many names of things in the order in which we heard them. Those who use such aids place the things themselves in their memory places; they put, for instance, a table in the forecourt, a platform in the atrium, and so on for the rest, and then when they run through the places again they find these objects where they put them. Such a practice may perhaps have been of use to those who, after an auction, have succeeded in stating what object they had sold to each buyer, their statements being checked by the books of the money-takers; a feat which it is alleged was performed by Hortensius. It will however be of less service in retaining the parts of a speech. For notions do not call up images as material things do, and something else has to be invented for them, although even here a particular place may serve to remind us, as, for example, of some conversation which we may have held there. But how can such an art grasp a whole series of connected words? I pass by the fact that there are certain words which it is impossible to represent by any likeness, for example conjunctions. We may, it is true, like short-hand writers, have definite images for everything, and may use an infinite number of places to recall all the words contained in the five books of the second pleading against Verres, and we may even remember them all as if they were deposits placed in safe keeping. But will not the flow of our speech inevitably be impeded by the double task imposed on our memory? For how can our words be expected to flow in connected speech, if we have to look back at separate forms for each individual word? Therefore Charmadas and Metrodorus of Scepsis, to whom I have just referred, of whom Cicero says that they used this method, may keep their systems for themselves; my precepts will be of a simpler kind.³¹

The method of the auctioneer who places images of the actual objects he has sold on memory places is precisely the method used by the professor whose mode of amusing his students we described earlier. This, Quintilian says, will work and may be useful for certain purposes. But the extension of the method to remembering a speech through images for 'things' he thinks is more trouble **than it** is worth since images for 'things' must all be invented. Even

³¹ *Ibid.*, XI, ii. 23-6.

in the simple form of the anchor and weapon type of image he seems not to advise it. He says nothing of the fantastic *imagines agentes*, either for things or words. Images for words he interprets as memorising shorthand *notae* on the memory places; this was the Greek method which the author of *Ad Herennium* discarded but which Quintilian thinks that Cicero admired in Charmadas and Metrodorus of Scepsis.

The 'simpler precepts' of memory training which Quintilian would substitute for the art of memory consist mainly in the advocacy of hard and intensive learning by heart, in the ordinary way, of speeches and so on, but he allows that one can sometimes help oneself by simple adaptations of some of the mnemonic usages. One may use privately invented marks to remind one of difficult passages; these signs may even be adapted to the nature of the thoughts. 'Although drawn from the mnemonic system' the use of such signs is not without value. But there is above all one thing which will be of assistance to the student.

namely to learn a passage by heart from the same tablets on which he has committed it to writing. For he will have certain tracks to guide him in pursuit of memory, and the mind's eye will be fixed not merely on the pages on which the words were written, but on individual lines, and at times he will speak as though he were reading aloud ... This device bears some resemblance to the mnemonic system which I mentioned above, but, if my experience is worth anything, is at once more expeditious and more effective.

I understand this to mean that this method adopts from the mnemonic system the habit of visualising writing on 'places', but instead of attempting to visualise shorthand *notae* on some vast place system it visualises ordinary writing as actually placed on the tablet or page.

What it would be interesting to know is whether Quintilian envisages preparing his tablet or page for memorisation by adding to it signs, *notae*, or even *imagines agentes* formed according to the rules, to mark the places which the memory arrives at as it travels along the lines of writing.

There is thus a very marked difference between Quintilian's attitude to the artificial memory and that of the author of *Ad Herennium* and of Cicero. Evidently the *imagines agentes*, fantasti-

³² *Ibid.*, XI, ii, 32-3.

cally gesticulating from their places and arousing memory by their emotional appeal, seemed to him as cumbrous and useless for practical mnemonic purposes as they do to us. Has Roman society moved on into greater sophistication in which some intense, archaic, almost magical, immediate association of memory with images has been lost ? Or is the difference a temperamental one ? Would the artificial memory not work for Quintilian because he lacked the acute visual perceptions necessary for visual memorisation? He does not mention, as Cicero does, that Simonides' invention depended on the primacy of the sense of sight.

Of the three sources for the classical art of memory studied in this chapter, it was not on Quintilian's rational and critical account of it that the later Western memory tradition was founded, nor on Cicero's elegant and obscure formulations. It was founded on the precepts laid down by the unknown rhetoric teacher.