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# A Comparison of the Classical and Modern Concepts of Memory with Suggestions for Further Study

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A COMPARISON OF THE CLASSICAL AND MODERN CONCEPTS

OF MEMORY WITH SUGGESTIONS FOR FURTHER STUDY

(TITLE)

BY

Kathleen Oros Reed

**THESIS**

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF

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YEAR

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## CHAPTER I

### NATURE AND PURPOSE OF THE STUDY

#### Introduction and Origin of Study

Rhetorical theory concerns itself with five canons in the preparation of a speech: invention, arrangement, style, memory, and delivery. "The fourth element, memory, has received less attention than any of the others, historically as well as in contemporary research."<sup>1</sup> Yet in the classical period of rhetoric, memory was glowingly spoken of as "the storehouse of all knowledge,"<sup>2</sup> the animating principle of all of the departments of rhetoric. Interested by this apparent contradiction, the writer was led to choose the topic of memory for a graduate research paper. The task developed into more than a mere report of the ancient art. What at first appeared to be a routine assignment evolved into a discovery of a significant controversy in the field of speech. This controversy first became apparent in the comparison of Bromley Smith's article, "Hippias and the Lost Canon of Memory,"<sup>3</sup> and Wayne E. Hoogestraat's

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<sup>1</sup>Donald E. Hargis, "Memory in Rhetoric," Southern Speech Journal, 17 (1951), p. 114.

<sup>2</sup>Quintilian, Institutio Oratoria, trans. and ed. H. E. Butler (Cambridge, Massachusetts: Harvard University Press, 1961), IV, ii.

<sup>3</sup>Bromley Smith, "Hippias and a Lost Canon of Rhetoric," The Quarterly Journal of Speech, XII (June, 1926), pp. 129-145.

article, "Memory: The Lost Canon?"<sup>1</sup>

Smith's article is not only an account of the teachings of Hippias on the subject but is also a short history of memory in rhetoric through the nineteenth century. Smith's conclusion was that the canon of memory has become extinct. "Thus after two thousand years the principle taught by Hippias has vanished from the art of public speaking."<sup>2</sup> He continued to say later, though, that "Memory itself remains and is highly essential, yet it has lost its ancient importance."<sup>3</sup> His article leaves the reader with the questions, "Has memory vanished from public speaking altogether?" and if not, "To what degree does memory remain?" These are the questions which seemed to have prompted the writing of Wayne E. Hoogestraat's article mentioned previously. Hoogestraat challenged the ideas presented by Smith and concluded with an apparent antithesis, "Memory, the fourth canon of rhetoric, has always been and apparently will always be an essential part of public speaking."<sup>4</sup> He continued, "Though two thousand years have passed, the fourth canon maintains its position as a focal element in public speaking."<sup>5</sup>

The two sharply opposing views point to a subject on which much dissent exists in the field of speech. The small number of modern rhetorics, speech texts and articles written on the subject

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<sup>1</sup>Wayne E. Hoogestraat, "Memory: The Lost Canon?," The Quarterly Journal of Speech, XLVI (April, 1960), pp. 141-147.

<sup>2</sup>Smith, 136.

<sup>3</sup>Ibid., 144.

<sup>4</sup>Hoogestraat, 147.

<sup>5</sup>Ibid.



seemed to stand as a silent witness to Smith's contention that memory remains but has lost its ancient significance. As shown in Chapter III of this paper, a number of speech texts did no more than merely mention that memory was once a canon of classical rhetoric. Yet other writers saw fit to devote entire chapters to memory in speechmaking.

The dissent was not so perplexing when it was discovered that several conflicting definitions and concepts of the canon of memory exist, many reflecting sparse knowledge of the canon's history and application.

Interpretations of the canon of memory ranged from one extreme to another. For example, Smith considered it to be solely the artificial training of the memory by mnemonic devices.<sup>1</sup> Hoogestraat took the broader view that it was the training and strengthening of the memory regardless of the particular method advocated.<sup>2</sup> Others like Monroe, Oliver and Cortright, and Thonssen and Gilkinson<sup>3</sup> equated the canon of memory with verbatim memorization of any kind, while still others like Charles Sears Baldwin<sup>4</sup> identified it with the decadent practice of declamation. Most of the proponents of memory, however, defined it in general terms and regarded it as essential to

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<sup>1</sup>Smith, 139.

<sup>2</sup>Hoogestraat, 147.

<sup>3</sup>Alan H. Monroe, Principles and Types of Speech, (5th ed. Chicago: Scott, Foresman and Company, 1962) p. 10; Robert T. Oliver and Rupert L. Cortright, Effective Speech (New York: Holt, Rinehart and Winestone, 1961), p. 40; Lester Thonssen and Howard Gilkinson, Basic Training in Speech, (2nd ed. Boston: D.C. Heath and Company, 1953) p. 181.

<sup>4</sup>Charles Sears Baldwin, Medieval Rhetoric and Poetic (Gloucester, Mass.: Peter Smith, 1959), pp. 15-16.

every speech situation. Such writers include Loren Reid and Gilman, Aly and White.<sup>1</sup> In several instances the writer has discovered suggestions given for memory development in various speech texts, and it is difficult to determine whether the suggestions are re-interpretations of the classical canon or personal suggestions based on modern scientific principles, or perhaps just suggestions based on personal experience. In short, there is hardly a semblance of unanimity on the subject of memory in contemporary rhetoric. In fact, through negligence and lack of attention from researchers and scholars, the canon of memory has been sorely bashed about. Frances A. Yates in the preface to her current book, The Art of Memory, pointed to the need for further study on the subject:

I have tried to strike out a pathway through a vast subject but at every stage the picture which I have drawn needs to be supplemented or corrected by further studies. This is an immensely rich field for research, needing the collaboration of specialists in many disciplines.

Obviously, "the stage of the picture" for this study was the canon of memory in rhetoric. After preliminary investigation, it was decided that a more complete comparison of the classical and modern concepts of memory was needed to answer some of the questions posed by previous writers and to point the way for further research on memory in the field of speech.

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<sup>1</sup>Loren Reid, First Principles of Public Speaking (Columbia, Missouri: Artcraft Press, 1954), p. 8; Wilbur E. Gilman, Bower Aly and Hollis L. White, The Fundamentals of Speaking (New York: The MacMillan Co., 1962), p. 196

<sup>2</sup>Frances A. Yates, The Art of Memory (Chicago: The University of Chicago Press, 1966), p. xiii.

Review of the Literature

In an effort to ascertain the originality of this study, the writer attempted to discover whether or not any similar studies had been made or were in progress. A review of the major professional journals in the field of speech and related areas was made in this regard which resulted in the discovery of several articles pertaining to the subject of memory. One such article was "Methods of Memorization for the Speaker and Reader"<sup>1</sup> by Earl W. Wells which used psychological findings as a basis for suggestions for the speaker and reader. Wells stated that memory and how it functions was still a mystery, but that nevertheless, the ability to remember could be improved. Wells explained his purpose succinctly when he stated, "I simply believe that all memory work, whether it be in arithmetic, in political science, or in public speaking, should be intelligently directed according to principles theoretically or experimentally sound."<sup>2</sup>

Another such article was "Memory in Rhetoric"<sup>3</sup> by Donald E. Hargis which was a survey of memory in rhetorical literature from the classical period through the middle ages. This ten page article could only give cursory coverage to the many sources included in the study.

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<sup>1</sup>Earl W. Wells, "Methods of Memorization for the Speaker and Reader," The Quarterly Journal of Speech, XIV (February, 1928), pp. 39-64.

<sup>2</sup>Ibid., 43.

<sup>3</sup>Hargis, pp. 114-124.

In addition, Joseph B. Hennessey, Jr. wrote an article pertaining to the subject entitled "A Theory of Memory as Applied to Speech."<sup>1</sup> Like Wells, Hennessey admitted that little knowledge was available to explain how memory works, but at the same time some have been able to suggest ways of improving its performance. Hennessey attempted to explain the location of the area for remembering in the cerebrum, how memory occurs, and what makes up memory. He based his information upon psychological findings. Finally, he made suggestions for the preparation of a speech on the basis of his technical explanation of the memory.

There were also certain speech texts which deserve mention in this review of literature because of their noteworthy coverage of the subject of memory. The first of these texts was James A. Winans' Speech-Making<sup>2</sup> which devoted attention to memory, especially in Chapter XX, "Further Study of Delivery."

In Public Speaking for College Students,<sup>3</sup> Lionel Crocker devoted an entire chapter to memory. In addition, Bryant and Wallace discussed the subject thoroughly in their Fundamentals of Public Speaking<sup>4</sup> even though their book, Oral Communication: A Short Course, used in the survey for this paper, did not give significant attention to memory.

<sup>1</sup>Joseph B. Hennessey, Jr., "A Theory of Memory as Applied to Speech," Today's Speech (February, 1959), pp. 15-19

<sup>2</sup>James A. Winans, Speech-Making (New York: Appleton-Century-Crofts, 1938), pp. 404-422.

<sup>3</sup>Lionel Crocker, Public Speaking for College Students (New York: American Book Company, 1941), pp. 83-96.

<sup>4</sup>Donald C. Bryant and Karl R. Wallace, Fundamentals of Public Speaking, (3rd ed.; New York: Appleton-Century-Crofts, 1960), pp. 205-208 and pp. 245-248.

Finally, a very lengthy and thorough chapter on memory in speechmaking was found in Horace G. Rahskopf's Basic Speech Improvement.<sup>1</sup>

To further survey the available literature on the subject of memory, certain indexes of research in the field of speech were checked.<sup>2</sup> It was found that one similar study had been done by Philip Lewis Bright entitled "A Progressive Synthesis of the Concepts of Memory in the Writings of Selected Ancient Rhetoricians," done at the University of Washington in 1961.<sup>3</sup> As the title of his thesis indicates, Mr. Bright's study was limited only to a survey of the classical rhetoricians. No attempt was made in his thesis to compare memory in classical rhetoric to memory in modern rhetoric.

In light of such investigation, therefore, it seemed that a thorough survey and comparison of memory in ancient times with memory in the modern period of rhetoric had not been made. There especially had not been such a comparison made in a specific effort to make suggestions for further study on the subject of memory in the field of speech. In addition, the review of literature indicated certain similarities and significant changes between the classical and modern periods of rhetoric regarding memory which seemed to warrant further study.

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<sup>1</sup>Horace G. Rahskopf, Basic Speech Improvement (New York: Harper and Row, Publishers, 1965), pp. 201-209.

<sup>2</sup>J. Jeffery Auer, "Doctoral Dissertations in Speech, Work in Progress," Speech Monographs, XXXI-XXXVI (1964-1969); Franklin Knower, "Graduate Theses: An Index of Graduate Work in Speech," Speech Monographs, II-XXXVI (1935-1969); Clyde W. Dow and Max Nelson, "Abstracts of Theses in the Field of Speech," Speech Monographs, XIII-XXXVI (1946-1969).

<sup>3</sup>Knower, XXIX (August, 1962), pp. 189-222.

The Significance of the Study

This study was of great personal value to the writer. It was an instrument through which the disciplines of research and the critical method were learned. Through this study, the writer gained a better familiarity, not only with the subject of memory, but with the entire history of rhetoric. Perspective, too, was gained as to the present status of rhetoric, which led the writer to form personal convictions and conclusions about the future of rhetoric and public address. Without this study, the same degree of perspective would not have been gained.

More important, however, it was hoped that this study would not only be of personal significance, but also of rhetorical and historical significance as well. Because this survey investigated memory thoroughly and made comparisons between two rhetorical periods which had not been made previously, it has been of value as a contribution to the sum total of knowledge in the field of speech. If the suggestions for further study herein have been of some help in finding a clearer and more definite understanding of memory's place in speech, then, too, the field of speech will benefit.

Historically, this study was of value in seeking to give a better idea of the relationships existing between the classical period in rhetoric and the modern. If it can be seen how the past affects the present, perhaps it can be learned how the present might affect the future.

Therefore, this study was of personal, rhetorical and historical significance.

### The Working Hypothesis

It was the hypothesis of this study that significant changes have occurred between the classical and modern treatments of the rhetorical canon of memory. Therefore, it was the purpose of this study to discover, through a thorough examination and comparison of the classical and modern concepts of the rhetorical canon of memory, areas for further study and research on the subject of memory. In order to make such suggestions, certain questions must be answered in the course of this investigation:

1. What constitutes the classical canon of memory in rhetoric?
2. What constitutes the modern concepts of memory in rhetoric?
3. What are the similarities between the classical and modern concepts of memory in rhetoric?
4. What are the differences between the classical and modern concepts of memory in rhetoric?

The answers to these questions should furnish the information necessary to make suggestions for further study in the field of memory.

### Procedure of the Study

As stated previously, the present study was concerned with two phases of the rhetorical canon of memory—the classical and the modern. The procedure in Chapter II was to examine the ancient canon, first in light of its Greek origins, including the views of Plato and Aristotle, and then in terms of its Roman context as represented by the writer of the Rhetorica ad Herennium, Cicero and Quintilian.<sup>1</sup>

The modern concept of memory has been determined through a

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<sup>1</sup>In a letter from Dr. John Bateman, Head of the Department of Classics at the University of Illinois (see Appendix A) Dr. Bateman expresses the opinion that the Roman contributions constitute the most significant material on the classical canon of memory.

random survey of speech texts listed in the bibliography of the Speech Association of America,<sup>1</sup> representing modern rhetoric mostly over the period of the last ten years. At this point it is necessary to explain how the books were chosen for the survey. When a person speaks of "modern rhetoric," it is not altogether clear what he means. The word "rhetoric" has lost much of its meaning in the classical sense. No longer does it refer only to the art of discourse, but also includes written communication as well.<sup>2</sup> On the other hand, it has come to be sometimes applied derogatorily to those who speak only in terms of empty embellishments. The same confusion over the meaning of the word is expressed by P. J. Corbett:

Although the student may often have heard the term rhetoric used, he probably does not have a clear idea of what it means. His uncertainty is understandable, because the word rhetoric has acquired many meanings. Rhetoric may be associated in his mind with the writing of compositions and themes or with style—figures of speech, flowery diction, variety of sentence patterns and rhythms—or with the notion of empty, bombastic language or rodomontade (to use a bombastic word), of "sound and fury signifying nothing," of "sounding brass and tinkling cymbals." Perhaps tucked away somewhere in his consciousness is the notion of rhetoric as the use of language for persuasive purposes.<sup>3</sup>

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<sup>1</sup>Speech Association of America, "Check List of Books and Equipment in Speech from the 1969-1970 Directory" (New York: Speech Association of America, 1969), pp. 280-286.

<sup>2</sup>Giles Wilkeson Gray, "Some Teachers and the Transition to Twentieth-Century Speech Education" in History of Speech Education in America ed. by Karl R. Wallace (New York: Appleton-Century-Crofts, Inc., 1954), p. 422.

<sup>3</sup>Edward P. J. Corbett, Classical Rhetoric for the Modern Student (New York: Oxford University Press, 1965), p. 20.



Since the establishment of the Speech Association of America in 1914, the province once known as "rhetoric" became known as "speech."<sup>1</sup> More recently, the word "communication" has come into vogue, also. In addition to this situation, professional orators have lost their place in modern society, and the purpose of most speech courses is to instruct the beginner in the fundamentals of public speaking. Thus it is that "modern rhetoric" consists of speech and communication textbooks many of which are for beginners.

In order to select from all of the texts available, it was decided that a random<sup>2</sup> sample be taken of the book bibliography of the "Check List" published by the Speech Association of America. All fundamentals texts, public speaking texts, and communications texts were numbered consecutively from number one through one hundred forty-eight. Not included in the texts to be sampled were texts on language and phonetics; voice and diction; discussion, debate, and parliamentary procedure; collections of speeches; interpretations; radio, television and film; theatre, speech and hearing disorders; speech education; dictionaries and other general references. By the nature of the books, the latter list would not deal with the subject of memory; therefore, they were not included so that the survey would be more accurate.

For a truer random sampling, a table of random numbers was consulted.<sup>3</sup> Starting at the top of the first column of numbers, the

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<sup>1</sup>Gray.

<sup>2</sup>The meaning of the word "random" in this study is qualified. Random numbers were applied to an alphabetical list.

<sup>3</sup>David V. Huntsberger, Elements of Statistical Inference (Boston: Allyn and Badon, Inc., 1961) p. 260.

writer scanned the last three digits of each number down the column and circled those numbers which fell somewhere between one and one hundred forty-eight until thirty numbers had been circled. The number thirty, or approximately twenty percent of the total list, is more than mathematically representative of the entire group and, therefore, constitutes a valid random sample. Thus, the survey of memory in modern rhetoric in Chapter III consists of a random sample of thirty available books drawn from the above mentioned bibliography.

#### Organization and Materials of the Study

This study was organized in four chapters: (1) Nature and Purpose of the Study; (2) The Classical Canon of Memory; (3) Memory in Modern Rhetoric; and (4) Summary and Conclusions.

Chapter I included an introduction and explanation of the origin of the study, a review of the literature pertinent to an understanding of the study, the significance of the study, the working hypothesis, the scope and limitation of the study, along with the statement of the organization and materials of the study and the conclusion.

Chapter II was a survey of memory in the classical period of rhetoric. Materials for this survey include certain Greek and Roman sources listed in Appendix B.

Chapter III was a survey of memory in modern rhetoric. The list of books chosen through the random sample survey explained previously in this chapter were also listed in Appendix B.

Chapter IV gave a summary of the two surveys by showing the similarities and differences between the classical and modern concepts of memory in addition to pointing major changes which have evolved in

the treatment of this canon. Finally, in the conclusion section of this chapter, suggestions were made for further study and investigation on the subject of memory in rhetoric.

Two appendixes and a bibliography followed Chapter IV. Appendix A included correspondence from Dr. John Bateman, Head of the Department of Classics at the University of Illinois and from Professor Harry Caplan of Cornell University giving advice on the study. Appendix B listed the textbooks surveyed in the random sample for Chapter III.

The bibliography contained a listing of source materials used in this study.

#### Conclusion

It was the purpose of this chapter to introduce the present study to the reader in an effort to provide a guideline with which to confront the remaining chapters of this study.

## CHAPTER II

### THE CLASSICAL CANON OF MEMORY

Like many other arts, the art of memory was born in ancient Greece, although its most thorough rhetorical development occurred in Rome. A survey of the Roman treatment of the canon of memory is adequate for an understanding of the rhetorical canon itself, however, historical perspective can be gained by viewing Greek contributions. This chapter, therefore, provides a summary of Greek and Roman influences on the rhetorical canon of memory.

#### Greek Backgrounds

James A. Notopoulos of Trinity College points out that "Man, in primitive Greek society was a 'mnemo-technician.'"<sup>1</sup> Before writing was invented, man naturally had to depend upon his memory to retain his thoughts and knowledge. Consequently, a deep respect for memory ability became apparent in Greek thought even after the invention of the written word.

During this oral tradition, as Notopoulos has termed it, reverence for memory existed in Greek mythology, in Greek religion, and in Greek literature. With the discovery of writing, the Greeks

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<sup>1</sup>James A. Notopoulos, "Mnemosyne in Oral Literature," Transactions and Proceedings of the American Philological Association, LXIX (1938), 467.

even sought to protect the art of memory with a sort of legal sanction.

In their mythology, the Greeks had Mnemosyne, the goddess of memory and mother of the nine Muses, who, in turn, represented the inventive powers of the human mind.

In their religions, especially in the religions of Pythagoreanism and Orphism, the Greeks considered memory a sign of the transmigration of the soul—of previous reincarnation. Notopoulos concludes that it was from the two previously mentioned religions that "...memory was enshrined as a goddess of great importance...it is from these that Plato received as a heritage the significance and importance of the spoken word and memory."<sup>1</sup>

Greek literature in the oral tradition also depended on memory. Especially in the case of Homeric poetry, the poet related the verses to the people by rote memorization, since there were no books. Memory in this case was used as both a retentive and a creative medium. As Notopoulos explains:

By memorizing the vast and complicated systems of formulaic diction the poet could call upon his memory not only for the exact phrase to fill out a particular verse, but for the creation of the general pattern of the poem. Memory was not only the end for which the poet strove, but was also the creative factor of the means of his inspiration. Without her oral composition was impossible.<sup>2</sup>

When writing was finally invented, it was looked upon with considerable suspicion. It was believed that such an invention would act as a detriment to the development of the memory and ultimately

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<sup>1</sup>Ibid., 481.

<sup>2</sup>Ibid., 473.

lead to the loss of knowledge. The ancient dictator of Sparta, Lycurgus, for one, put a sort of legal sanction on memory by forbidding his laws to be put in writing, fearing that such a practice would weaken the memory.<sup>1</sup>

From this evidence, it can be seen that memory played an important and vital part in the formation of early Greek culture at a time when memory furnished the only medium for transmitting and storing knowledge. It can also be seen that the faculty of memory was so much cherished that it was regarded with awe and reverence in Greek mythology, religion, literature and law.

It is not surprising then that in the fifth century, B.C., mnemonic systems began to be invented, taught and incorporated into the education of the ancient Greeks, even after writing was invented.

#### Simonides and Hippias

The art of memory—that is, memory developed or improved by a particular system—seemed to have its roots in Greek sophistry. The specific memory system of places and images involved with the classical canon of memory taught in the Roman rhetorics of Cicero and Quintilian is said to have been invented by Simonides of Ceos, a poet in fifth century Greece.

In his De Oratore, Cicero begins his dialogue on memory by relating the story of how Simonides of Ceos had been commissioned to write and deliver a poem in praise of a certain Scopas at a banquet. However, the poem also praised Castor and Pollux as well, so afterwards Scopas refused to pay but half the agreed sum for the poem, telling

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<sup>1</sup>Ibid., 475.

Simonides to collect the rest from the twin gods who were also praised. About this time, a message came that some young men were at the gate and wished very much to speak with Simonides. When he went outside, there was no one to be found, but just as soon as he was out of the banquet hall, the roof collapsed on the people inside, killing everyone except Simonides. It was such a disaster that the bodies were beyond recognition, yet Simonides claimed to be able to identify the bodies for their relatives by recalling where each guest was seated before he left.

Admonished by this occurrence, he is reported to have discovered, that it is chiefly order that gives distinctness to memory; and that by those, therefore who would improve this part of the understanding, certain places must be fixed upon, and that of the things which they desire to keep in memory, symbols must be conceived in the mind, and ranged, as it were, in those places; thus the order of places would preserve the order of things and the symbols of the things would denote the things themselves; so that we should use the places as waxen tablets, and the symbols as letters.<sup>1</sup>

The same story is related by Quintilian in Institutio Oratoria.

However, the idea of Simonides being the actual inventor of the art of memory is regarded with scepticism by L. A. Post of Haverford College. His theory holds that the story was invented by Hippias of Elis for commercial purposes. It seems that Hippias, a Sophist and a Jack-of-all-Trades, was famous for his astounding memory among other things.

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<sup>1</sup>Marcus Tullius Cicero De Oratore ed. by J. S. Watson, Cicero on Oratory and Orators (Philadelphia: David McKay, Publisher, 1897), ii. 86. 204-205.

<sup>2</sup>Quintilian, 213.

He is the Hippias mentioned so often by Plato as the teacher of the mnemonic art.<sup>1</sup>

Hippias' method of teaching memory is based upon the conception that the mind is like a waxen tablet on which words and images are engraved to be retained in the mind.<sup>2</sup> This reflects the same concept supposedly invented by Simonides. Post also remarks that Simonides' name had a certain commercial value, since people enjoyed quoting Simonides in their compositions and conversations at the time. As Bromley Smith suggests, since there is "...some uncertainty as to the priority of the discovery of mnemonics, perhaps the best thing to do in the circumstances is to regard Simonides as the discoverer and Hippias as the practical promoter, the man who first considered the training of the memory an essential discipline in the education of an orator."<sup>3</sup> Post also points out that there were other Greeks famous for their advocacy of the art of memory. He names Theodectes of Phaselis, a pupil of Isocrates in the fourth century B.C. and Metrodorus of Scepsis in the first century B. C.<sup>4</sup> Thus, it would appear that the art of memory began with the basic importance attached to it by the primitive Greeks and was developed into an actual art in the fifth century B. C.

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<sup>1</sup>L. A. Post, "Ancient Memory Systems," Classical Weekly, XXV (February 1, 1932), 107.

<sup>2</sup>Smith, 140.

<sup>3</sup>Ibid., 138.

<sup>4</sup>Post, 107.



Plato

Although Plato did not profess the art of memory in any of his writings, he did devote thought and attention to the nature of memory itself. In Philebus, he defined memory as "the preservation of consciousness."<sup>1</sup> However, unlike others to come after him, Plato made a distinction between memory and recollection. Recollection was defined as follows:

...the power which the soul has of recovering, when by herself, some feeling which she experienced when in company with the body...And when she recovers of herself the last recollection of some consciousness or knowledge, the recovery is termed recollection or reminiscence."<sup>2</sup>

In other words, memory was the preservation of conscious affections, and recollection was the recovery of them.

In another instance, Plato echoed the idea that the mind of man is comparable to a waxen tablet. It can be recalled that this analogy was mentioned by Cicero when relating the story of Simonides, and by Smith who stated that this was the theory upon which Hippias based his method of teaching the art of memory.

That Plato was familiar with the memory system of Hippias is evidenced in his Lesser Hippias in which he expressed a dislike for such an artificial system.<sup>3</sup> On the other hand, in Timaeus, Plato more or less advocated his own, more natural, method of memorization through Critias:

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<sup>1</sup>Plato Philebus 34, 367. Unless otherwise stated all references to Plato's works will be from The Dialogues of Plato, trans. by Benjamin Jowett (2 vols.; New York: Random House, 1937).

<sup>2</sup>Ibid.

<sup>3</sup>Plato Lesser Hippias 368.

And therefore, as Hermocrates has told you, on my way home yesterday I at once communicated the tale to my companions as I remembered it; and after I left them, during the night by thinking I recovered nearly the whole of it. Truly, as is often said, the lessons of our childhood make a wonderful impression on our memories; for I am not sure that I could remember all the discourse of yesterday, but I should be much surprised if I forgot any of these things which I have heard very long ago. I listened at the time with childlike interest to the old man's narrative; he was very ready to teach me, and I asked him again and again to repeat his words, so that like an indelible picture they were branded into my mind. As soon as the day broke, I rehearsed them as he spoke them to my companions, that they, as well as myself, might have something to say.<sup>1</sup>

Plato also recognized the importance of a good memory. In his philosophy, Plato believed a man should not specialize but rather should endeavor to be the universal man, the pursuer of wisdom and truth—indeed, a philosopher. In the Republic, he mentioned four times that memory was one of the essential qualities of the true philosopher:

Then a soul which forgets cannot be ranked among genuine philosophic natures; we must insist that the philosopher should have a good memory.<sup>2</sup>

...the philosopher's virtues, as you will doubtless remember that courage, magnificence, apprehension, memory, were his natural gifts.<sup>3</sup>

...that he [the philosopher] was to have quickness and memory and courage and magnificence.<sup>4</sup>

<sup>1</sup>Plato Timaeus 26.

<sup>2</sup>Plato Republic 486.

<sup>3</sup>Ibid. 490.

<sup>4</sup>Ibid. 494.

Further, he of whom we are in search should have a good memory,....<sup>1</sup>

It is also of significance to the subject to know that Plato seemed to be a proponent of the oral tradition as opposed to writing. S. H. Butcher, the late professor of Greek at the University of Edinburgh, said of Plato that "in him is to be found the most outspoken disparagement of writing, as compared with speech, that occurs in Greek literature."<sup>2</sup> In his Phaedrus, Plato has Socrates relate the story of how the god, Theuth, discovered the art of writing, and presented it to the Egyptian king, Thamus, for approval. However, Thamus expresses nothing but disapproval, asserting that the discovery would weaken the memory:

"...The fact is that this invention will produce forgetfulness in the souls of those who have learned it. They will not need to exercise their memories, being able to rely on what is written, calling things to mind no longer from within themselves by their own unaided powers, but under the stimulus of external marks that are alien to themselves. So it's not a recipe for memory, but for reminding, that you have discovered. And as for wisdom you're equipping your pupils with only a semblance of it, not with truth. Thanks to you and your invention, your pupils will be widely read without benefit of a teacher's instruction: in consequence, they'll entertain the delusion that they have wide knowledge, while they are, in fact, for the most part incapable of real judgment. They will also be difficult to get on with since they will have become wise merely in their own conceit, not genuinely so."<sup>3</sup>

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<sup>1</sup>Ibid. 494.

<sup>2</sup>Some Aspects of the Greek Genius (Longon: Macmillan and Company, 1904), p. 168.

<sup>3</sup>Plato Phaedrus 275.

Plato concluded in this dialogue that a person would be foolish and simple to rely on the written word as "intelligible and certain" or to deem "that writing was at all better than knowledge and recollection of the same matters."<sup>1</sup>

So it can be seen that although Plato was no proponent of the artificial memory systems initiated in Greece and later incorporated as a part of rhetoric in Rome, his was a strong voice in favor of perpetuating the emphasis on good memory. By including memory as one prerequisite of his "philosopher" and by disapproving of the written word as a detriment to memory, he was instrumental in propagating the oral tradition and the importance of memory.

### Aristotle

Aristotle, too, must be considered as a contributor to the background of the canon of memory, although his contribution was largely theoretical. Unlike Plato, Aristotle went much farther into the nature of memory itself.

Memory, as Aristotle defined it in his treatise on memory and reminiscence, is a state or affection of Perception or Conception conditioned by a lapse of time.<sup>2</sup> He explained that the object of memory is the past, so all animals perceiving time are capable of remembering.<sup>3</sup> Thus, memory is not a function of pure intellect but rather of sense perception.<sup>4</sup>

<sup>1</sup>Ibid.

<sup>2</sup>Aristotle De Memoria et Reminiscentia, trans. J. I. Beare, Great Books of the Western World ed. Robert Maynard Hutchins (Chicago: E. B., Inc., 1955), 449<sup>b</sup>25.

<sup>3</sup>Ibid., 450<sup>a</sup>15.

<sup>4</sup>Ibid.

According to Aristotle there are differences between memory and recollection and relearning. Memory represents the continued retention of experience; recollection is the recovery of experience by the mind after its actual loss from consciousness; and relearning is the process of re-memorizing material after it has been completely lost from the consciousness.<sup>1</sup> All this was to imply that memory itself, being an innate function, by Aristotle's definition, cannot be improved, but that recollection could be improved by proper method and technique.<sup>2</sup>

So it would seem that Aristotle's conception of recollection (to which he devotes most of his attention in his treatise on memory) would be most closely allied with the theory underlying the rhetorical canon of memory, since this canon has to do with methodically improving retention.

In explaining the nature of memory, Aristotle revealed his familiarity with the old waxen tablet analogy:

The process of movement [sensory stimulation] involved in the act of perception stamps in, as it were, a sort of impression of the percept, just as persons do who make an impression with a seal. This explains why, in those who are strongly moved owing to passion, or time of life, no mnemonic impression is formed; just as no impression would be formed if the movement of the seal were to impinge on running water; while there are others in whom, owing to the receiving surface being frayed, as happens to [the stucco on] old [chamber] walls, or owing to the hardness of the receiving surface, the requisite impression is not implanted at all. Hence both very young and very old persons are defective in memory; they are in a state of flux the former because of their growth, the latter owing to their decay.<sup>3</sup>

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<sup>1</sup> Ibid., 452<sup>a</sup>10.

<sup>2</sup> Ibid., 451<sup>b</sup>30-31.

<sup>3</sup> Ibid., 450<sup>a</sup>30-450<sup>b</sup>10.

The fact that Aristotle was acquainted with and utilized this old analogy used by Simonides, Hippias, and Plato among others indicates that perhaps he was familiar with their writings and, consequently, with the mnemonic system itself. Whether or not his knowledge of this subject came from the rhetors mentioned remains to be seen, for it can be observed in De anima that Aristotle was familiar with the mnemonic system of places and images:

For imagining lies within our power whenever we wish (e. g. we can call up a picture, as in the practice of mnemonics by the use of mental images),...<sup>1</sup>

And in the Topica, Aristotle showed further understanding of the system, perhaps even indicating that he used the method himself when he said "...a memory of things themselves is immediately caused by the mere mention of their loci..."<sup>2</sup>

In his own treatise on memory, Aristotle defined and described memory, recollection, and relearning first and then, by explaining the difference between recollection and relearning, he presented his theory of association which deals basically with recollection. This theory was based on the idea that the mind has movements which succeed one another, and by remembering or starting at one of these, others will naturally follow from the subconscious.<sup>3</sup> Aristotle formulated four laws governing the movements which call up associations. One is that simultaneously formed ideas reproduce one another. For example

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<sup>1</sup>Aristotle De anima trans. J. A. Smith, Great Books of the Western World, ed. Robert Maynard Hutchins (Chicago: Encyclopaedia Britannica, Inc. 1955), 427<sup>b</sup>18-20, p. 660.

<sup>2</sup>Topica trans. W. A. Pickard-Cambridge (Chicago: Encyclopaedia Britannica, Inc. 1955), 163<sup>b</sup>30, p. 22.

<sup>3</sup>De Mem. 451<sup>b</sup>10.

when recalling an old friend, a recollection of the college dormitory may accompany the first thought, since the friend and college life were experienced simultaneously in the past.

The second law mentioned by Aristotle is that ideas in a continuous series reproduce one another most easily in the order in which they were formed. An example of this law would be that it is far easier to recall the musical scales in order than to recall them out of sequence. Aristotle explained, "accordingly, things arranged in a fixed order, like the successive demonstrations in geometry, are easy to remember [or recollect], while badly arranged subjects are remembered with difficulty."<sup>1</sup>

Similar ideas likewise reproduce one another. A good illustration here is that of the rhyme in which one word will help in recalling another if the two sound similar.

The fourth law of association is that contrasting ideas reproduce one another, too. This means that many times the exact opposite of a thing will be recalled when the thing is mentioned. For instance, if one were to think of white, he might then think of black, white's opposite, as a natural response.

In all cases, however, the mind moves along certain paths of association to recollect, and to do this effectively, said Aristotle, one must find a starting point:

This explains why it is that persons are supposed to recollect sometimes by starting from mnemonic loci. The cause is that they pass swiftly in thought from one point to another.<sup>2</sup>

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<sup>1</sup>Ibid., 452<sup>a</sup>.

<sup>2</sup>Ibid., 452<sup>a</sup>10-15.

The beginning is not the only workable place from which to start in Aristotle's opinion. The middle point is also a good place, especially if some part of the first half has been forgotten. Furthermore, one can also start at the end if it is desired. All this is because the mind does not work the same way every time, but depends upon the particular conditioning it has previously received.<sup>1</sup>

So it can be seen that although Aristotle did not put forth a system for memorization as such, he did explain his theory on how the memory and recollection function. In doing so, he revealed his familiarity with the mnemonic system in vogue at the time and showed that this system rests upon his own theoretical foundation which he formulated in his treatise on memory.

#### Roman Backgrounds

Since the Greek backgrounds of the classical canon of memory have been covered, it remained to discuss the Roman backgrounds of the canon. As was mentioned earlier, it was in the Roman period that the major development of this canon occurred. By surveying memory as mentioned in the Rhetorica ad Herennium (author unknown), and as mentioned in the works of Cicero and Quintilian, the canon of memory in rhetoric can be sufficiently understood.

#### The Rhetorica ad Herennium on Memory

The Rhetorica ad Herennium is the oldest existing piece of writing which cites memory as the fourth canon of rhetoric. In describing it, the unknown author stated, "Memory is the firm retention in the

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<sup>1</sup>Ibid., 452<sup>a</sup>25.



mind of the matter, words, and arrangement."<sup>1</sup> It is considered multi-valued by serving as "the treasure-house of the ideas supplied by Invention, to the guardian of all the parts of rhetoric..."<sup>2</sup>

According to this book, there are two kinds of memory—natural and artificial. "The natural memory is that memory which is embedded in our minds, born simultaneously with thought."<sup>3</sup> On the other hand, artificial memory is that which is trained by systematic discipline and practice. The author noted that in some things natural ability is preferable to artificial learning, but sometimes art enhances the natural ability as well. In this case, he said that any kind of a memory benefits from a method of discipline.

Artificial memory is then discussed at length. It includes backgrounds and images.

By backgrounds I mean such scenes as are naturally or artificially set off on a small scale, complete and conspicuous, so that we can grasp and embrace them easily by the natural memory—for example, a house, an intercolumnar space, a recess, an arch, or the like.<sup>4</sup>

The author gave instructions to set in backgrounds what one learns, and by remembering the background, one will remember what he learned, apparently by association. He compared backgrounds to mental waxen tablets or to papyrus and the images are the letters. The script would consist of the arrangement and disposition of the images,

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<sup>1</sup>Rhetorica ad Herennium, trans. Harry Caplan (Cambridge, Massachusetts: Harvard University Press, 1954), I. ii. 3. 7.

<sup>2</sup>Ibid., III. xvi. 28. 207.

<sup>3</sup>Ibid., III. xvi. 28. 207.

<sup>4</sup>Ibid., III. xvi. 29. 209.

while the delivery would be like reading the mental script aloud. If one is to follow this description, therefore, he should equip himself with a large number of backgrounds so that a large number of images can be set in them. However, the backgrounds should be arranged in a series so as to avoid confusion of the images. They also must be studied carefully so that they will last, for if they are not reviewed, they will slip from the memory completely. He suggested that each fifth background should be marked to avoid mistakes in the total number of backgrounds.

For example, if in the fifth we should set a golden hand, and in the tenth some acquaintance whose first name is Decimus, it will then be easy to station like marks in each successive fifth background.<sup>1</sup>

The backgrounds should also be set in deserted places rather than in well populated ones to avoid the confusion of seeing many people in the mental picture. Likewise, they ought to be varied in nature and form to maintain their distinctiveness and should be of intermediate size and medium extent:

for when excessively large they render the images vague, and when too small often seem incapable of receiving an arrangement of images. Then the backgrounds ought to be neither too bright nor too dim, so that the shadows may not obscure the images nor the lustre make them glitter. I believe that the intervals between backgrounds should be of moderate extent, approximately 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.<sup>2</sup>

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<sup>1</sup> Ibid., III. vvii. 31. 211.

<sup>2</sup> Ibid., III. xix. 32-33. 213.

If the student found his experience lacking for a full repertoire of backgrounds, he was advised to use his imagination which it is said will serve just as well. According to the author of the ad Herennium, then, backgrounds should be plentiful but if one did not have great experience from which to draw, he could resort to his imagination in order to create them. To avoid confusion and to keep them straight, they were to be set in deserted places; varied in nature and form; constructed of moderate size; lighted well, not too bright and not too dim; and each fifth one should be marked. The author then went on to discuss images:

An image is, as it were, a figure, mark, or portrait of the object we wish to remember; for example, if we wish to recall a horse, a lion, or an eagle, we must place its image in a definite background.

Images, then, are mental likenesses of objects, and these must be chosen for use in remembering. There are two kinds of likenesses for this purpose: subject matter likenesses and work likenesses.

Likenesses of matter are formed when we enlist images that present a general view of the matter with which we are dealing; likenesses of words are established when the record of each single noun or appellative is kept by an image.<sup>2</sup>

For a general picture to remember subject-matter, then, one should envision one background with perhaps several images or symbols to designate the entire picture.

The author admitted that the placing of images for words is a more difficult task. He recommended the use of several images placed in several backgrounds for remembering lines and phrases, but also

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<sup>1</sup>Ibid., III. xvi. 29. 209.

<sup>2</sup>Ibid., III. xx. 33. 215.

added that this method must be aided by the use of natural memory in this case. That is, the lines or phrases should be repeated several times to oneself, in addition to the use of images.

It was noted that some images tend to work better than others. Therefore, it is necessary to consider "which images to avoid and which to seek."<sup>1</sup> The author pointed out that:

...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 novel stay longer in mind.<sup>2</sup>

Images, then, should be as striking as possible—extremely beautiful, extremely ugly, blood smeared or mud smeared—whatever would help in making a clear impression of what they are to recall.

It stressed emphatically at this point that the individual should decide for himself what the exact images are to be for his use. The author recognized that an image which seems universal to one, may have no significance to another.

His concluding bit of advice is of special interest and importance. He did not recommend the memorizing of words as such.

His approval of such an endeavor was qualified when he stated:

I believe that they who wish to do easy things without trouble and toil must previously have been trained in more difficult things. Nor have I included memorization of words to enable us to get verse by rote, but rather as an exercise whereby to strengthen that other kind of memory, the memory of matter, which is of practical use. Thus we may without effort pass from

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<sup>1</sup>Ibid., III. xxi. 35. 219.

<sup>2</sup>Ibid., III. xxii. 35. 219.

this difficult training to ease in that other memory.<sup>1</sup>

So the memorizing of words is only advised as practice in improving the memory for remembering subject matter. The temptation of passing over the more difficult task was warned against, since practice is that element which guards the disciplined, artistic theory itself.

In summary, the Rhetorica ad Herennium recommended the cultivation of the artificial memory to aid the orator. This was to be done through the practice of associating backgrounds and images with that which is to be recalled. The stock of backgrounds should be plentiful. They can be drawn from actual experience or created in the imagination. They should be set in deserted places; varied in nature and form; constructed of moderate size; lighted well, and marked at intervals—all in order to maintain clarity and order.

The images, mental likenesses of objects, are of two types: subject-matter likenesses and word likenesses. They must be made striking in order to be remembered readily. The subject-matter images are said to be more practical to the orator than word images, but practice in using word images can be helpful to the orator in generally strengthening his memory.

#### Cicero on Memory

Cicero's De Oratore is written in dialogue form, and to introduce his section on memory, he spoke through Antonius who relates the same banquet story told earlier in this Chapter of Simonides of Ceos, who it was believed had invented an art of memory.

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<sup>1</sup>Ibid., III. xxiv. 39. 223-225.

Cicero then discussed his theory of places and images to aid the memory which is similar to the discussion of backgrounds and images in the ad Herennium. To emphasize the practicality of the theory's use, he explains:

...those things are the most strongly fixed in our minds, which are communicated to them, and imprinted upon them, by the senses; that of all the senses that of seeing is the most acute; and that, accordingly, those things are most easily retained in our minds which we have received from the hearing or the understanding, if they are also recommended to the imagination by means of the mental eye; so that a kind of form, resemblance, and representation might denote invisible objects, and such as are in their nature withdrawn from the cognizance of the sight, in such a manner, that what we are scarcely capable of comprehending by thought we may retain as it were by the aid of the visual faculty.<sup>1</sup>

This artificial memory is formed by picturing:

...many plain distinct places, at moderate distances; and such symbols as are impressive, striking, and well-marked, so that they present themselves to the mind, and act upon it with the greatest quickness.<sup>2</sup>

This list of requirements seems to be a condensation of the ad Herennium's recommendations on the same subject.

He also explained that this system of places and images can be used for remembering ideas or thoughts, or for remembering words. But the memory of words requires a greater number of symbols, which would appear to make the system too great of a burden. To the contrary, Cicero states:

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<sup>1</sup>De Oratore. 205-206.

<sup>2</sup>Ibid. 206.

Nor is that true which is said by people unskilled in this artifice, that the memory is oppressed by the weight of these representations, and that even obscured which in unassisted nature might have clearly kept in view; for I have seen men of consummate abilities, and an almost divine faculty of memory, as Charmadas at Athens, and Scepsius Metrodorus in Asia, who is said to be still living, each of whom used to say that, as he wrote with letters on wax, so he wrote with symbols as it were, whatever he wished to remember, on these places which he had conceived in imagination.<sup>1</sup>

In this passage, also, Cicero is acknowledging the waxen tablet theory of his Greek predecessors.

He concluded his section on memory with the qualification that he realizes that memory cannot be formed completely by the discipline of artificial memory but that when combined with the natural memory, it is a great aid in calling forth words and thoughts and their arrangements.

Thus, Cicero has outlined much the same course for improving the memory as does the author of the ad Herennium. A similar system of places and images, supposedly invented by Simonides, is considered the best system in aiding the natural memory. This is said to be so, because nothing is remembered so well as something strongly imprinted on the mind with the senses, especially that of the sight. Mental visualization in this case is as effective on the memory as is the actual sight of an object or place. It is stressed that these visualizations, however, must be as distinct, impressive, striking, and well-marked as possible in order to avoid confusion.

Remembering ideas and thoughts lends itself better to the use of places and images, according to both Cicero's De Oratore and the

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<sup>1</sup>Ibid. 206-207.

ad Herennium. A similar system of places and images, supposedly invented by Simonides, is considered the best system in aiding the natural memory. This is said to be so, because nothing is remembered so well as something strongly imprinted on the mind with the senses, especially that of the sight. Mental visualization in this case is as effective on the memory as is the actual sight of an object or place. It is stressed that these visualizations, however, must be as distinct, impressive, striking, and well-marked as possible in order to avoid confusion.

Remembering ideas and thoughts lends itself better to the use of places and images, according to both Cicero's De Oratore and the ad Herennium, which called it "subject-matter." But the memorization of words is more difficult, and Cicero did not necessarily advocate the learning of a speech word for word. It was suggested that this exercise is still worthwhile, however, to give the memory practice.

There is also the admission that good memory cannot be formed solely from the artificial memory system, but that the aid of the natural memory is required first. On the other hand, the good natural memory can find a significant help in the discipline of the artificial memory.

#### Quintilian on Memory

In his Institutio Oratoria, Quintilian introduced the fourth canon of rhetoric by stating that all the departments of the mind are coordinated by the memory:

For our whole education depends upon memory, and we shall receive instruction all in vain if all we hear slips from us, while it is the power of memory alone that brings before us all the store of precedents, laws, rulings, sayings, and facts which the orator must possess in abundance



and which he must always hold ready for immediate use. Indeed it is not without good reason that memory has been called the treasure-house of elequence.<sup>1</sup>

According to Quintilian, it is not enough to be able to memorize, but it is also imperative to be able to memorize quickly, to be able to remember that which is thought out as well as written out, and to be able to remember the opponent's arguments and the position in which they should be treated. Because of the role played by memory in oratory Quintilian declared:

...it is memory which has brought oratory to its present position of glory. For it provides the orator not merely with the order of his thoughts, but even of his words, nor is its power limited to stringing merely a few words together; its capacity for endurance is inexhaustible, and even in the longest pleadings the patience of the audience flags long before the memory of the speakers.<sup>2</sup>

It is of interest to note that Quintilian felt that memory is of as great importance in extemporaneous speaking as it is in prepared speaking:

For while we are saying one thing, we must be considering something else that we are going to say: consequently, since the mind is always looking ahead, it is continually in search of something which is more remote: on the other hand, whatever it discovers, it deposits by some mysterious process in the safe-keeping of memory, which acts as a transmitting agent and hands on the delivery what it has received from the imagination.<sup>3</sup>

It is important to realize that Quintilian stressed the art of extempore speaking for the orator as the highest reward for his labor. Of what good would a prepared speech be at a trial when the opponent

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<sup>1</sup>Quintilian, IV. ii. 1. 213.

<sup>2</sup>Ibid., XI. ii. 7-8. 215-217.

<sup>3</sup>Ibid., XI. ii. 3. 213-215.

introduces unanticipated arguments? Although, prepared speeches are safer, the art of extemporaneous speaking serves a vital function in emergencies and requires greater training and practice on the part of the orator. Quintilian stated: "I do not ask him to prefer to speak extempore, but merely that he should be able to do so."<sup>1</sup>

Quintilian disagreed with Plato that writing is the ruination of the memory. Rather, he stated that combined with the concentration of the mind, writing facilitates memorization.

Simonides was cited in this source, too, as the first person to discover an art of memory, and the same banquet story is related as it was in Cicero's De Oratore to lead into an explanation of the places and images system. Localities it is said, are supposedly very helpful in aiding the memory, and he went on to explain:

For when we return to a place after 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.<sup>2</sup>

Here Quintilian was echoing Aristotle's first law of association—that simultaneously formed ideas reproduce one another.

As a preliminary example, Quintilian suggested the use of a large house with several rooms for the place. In the room are to be placed the images of the ideas or words to be remembered. The details of the place should be clear so that there be no delay in identifying them. Then the images should be chosen carefully to represent that which is to be recalled. These images must then be linked to places

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<sup>1</sup>Ibid., X. vii. 4. 135.

<sup>2</sup>Ibid., XI. ii. 17. 221.

in the imaginary house in a specific order, following the arrangement of the house itself. He added that public buildings, long journeys, parts of cities and even pictures can be used as well as houses for this purpose. Furthermore, they can be real places or imaginary.

Quintilian's explanation of the places and images system is very much like the ad Herennium's and Cicero's. In fact, at one point, he quoted Cicero verbatim when describing the requirements for good places and images.

Although Quintilian recognized the usefulness of such a memory system for certain purposes, he surprisingly doubted its entire usefulness to the orator:

It will, however, be of less service in learning the various parts of a set speech. For thoughts do not call up the same images as material things, and a symbol requires to be specially invented for them although even here a particular place may serve to remind us, as, for example, of some conversation that may have been held there. But how can such a method grasp a whole series of connected words?<sup>1</sup>

In short, he continued to question its usefulness, noting that the entire process would require an almost infinite number of places and images for words, while some words like conjunctions would have no physical symbols at all to represent them. Instead of such a cumbersome system, Quintilian offered his own, more simple suggestions for memorizing the parts of a speech.

First, if it is a long speech to be committed to memory, it should be divided into sections to be learned part by part. In order to avoid too many sections to memorize, however, they should not be

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<sup>1</sup>Ibid., XI. ii. 24-25. 225.

made too short. Each major section should be marked somehow for quick identification. If a person has such a weak memory as not to be able to remember his own markings, he can fall back on the mnemonics system discussed previously. This suggestion puts the modern student in mind of the outlining system of current popularity.

Another suggestion was to learn a passage from the same tablets on which one has written it.

For he will have certain tracks to guide him in his pursuit of memory, and the mind's eye will be fixed not merely on the pages on which the words were written, but on the individual lines, and at times he will speak as though he were reading aloud. Further, if the writing should be interrupted by some erasure, addition or alteration, there are certain symbols available, the sight of which will prevent us from wandering from track. This device bears some resemblance to the mnemonic system which I mentioned above, but if my experience is worth anything, it is at once more expeditious and more effective.<sup>1</sup>

He also mentioned that learning should be done in a subdued voice. This should be done for several reasons. For example, if the memorizing is done silently, the mind is apt to wander to stray thoughts. Also, the memory may obtain benefit from the effort of both speaking and listening.

On the other hand, if we attempt to learn by heart from another reading aloud, we shall find that there is both loss and gain; on the other hand, the process of learning will be slower, because the perception of the eye is quicker than that of the ear, while, on the other hand, when we have heard a passage once or twice, we shall be in a position to test our memory and match it against the voice of the reader.<sup>2</sup>

Testing the memory is valuable in that the harder passages are discovered and can then be practiced by themselves. Practice, in fact,

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<sup>1</sup>Ibid., XI. ii. 32-33. 229-231.

<sup>2</sup>Ibid., XI. ii. 34. 231.

was considered the most powerful aid to memory by Quintilian.

Division and artistic structure is listed as the second most powerful aid:

For the purpose of getting a real grasp of what we have written under the various heads, division and artistic structure will be found of great value, while, with the exception of practice, which is the most powerful aid of all, they are practically the only means of ensuring an accurate remembrance of what we have merely thought out.<sup>1</sup>

Again this description reminds one of what was probably one of the first recommendations of the use of outlining in speech preparation. He even added that if the structure is constructed well, the memory will be so aided that even if the speaker is interrupted, he should be able to continue without trouble.

Quintilian reiterated, however, that practice and industry provide the supreme method of memory:

The most important thing is to learn much by heart and if possible, to do this daily, since there is nothing that is more increased<sup>2</sup> by practice or impaired by neglect than memory.

Practice can also take the form of reading and re-reading, learning a little at a time. He pointed out, too, that the interval of one night can strengthen the memory, as if thoughts need to age for a time before actually imprinting themselves in the mind. On the other hand, memorization which takes place in an extremely short time fails to last, according to his observations. The length of time something is retained in the memory seems to have a direct correlation to the length of time spent in implanting it there.

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<sup>1</sup>Ibid., XI. ii. 36. 233.

<sup>2</sup>Ibid., XI. ii. 40. 235.

Finally, Quintilian discussed the question as to whether it is better to learn a speech verbatim or whether it is better to learn the essence of the speech and to speak extemporaneously. He recognized that no universal answer is possible. However, he added:

Give me a reliable memory and plenty of time, and I should prefer not to permit a single syllable to escape me: otherwise writing would be superfluous. It is specially important to train the young to such precision, and the memory should be continually practiced to this end, that we may never learn to become indulgent to its failure. For this reason I regard it as a mistake to permit the student to be prompted or to consult his manuscript, since such practices merely encourage carelessness, and no one will ever realise that he has not got his theme by heart, if he has no fear of forgetting it. It is this which causes interruptions in the flow of speech and makes the orator's language halting and jerky, while he seems as though he were learning what he says by heart and loses all the grace that a well-written speech can give, simply by the fact that he makes it obvious that he has written it. On the other hand, a good memory will give us credit for quickness of wit as well, by creating the impression that our words have not been prepared in the seclusion of the study, but are due to the inspiration of the moment, an impression which is of the utmost assistance both to the orator and to his cause. For the judge admires those words more and fears them less which he does not suspect of having been specially prepared beforehand to outwit him. Further, we must make it one of our chief aims in pleading to deliver passages which have been constructed with the utmost care, in such manner as to make it appear that they are but casually strung together and to suggest that we are thinking out and hesitating over words which we have, as a matter of fact, carefully prepared in advance.<sup>1</sup>

However, if the memory is dull or if time is short, one should learn the facts well and speak freely without writing the speech out:

For the loss of even a single word that we have chosen is always a matter for regret, and it is hard to supply a substitute when we are searching

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<sup>1</sup>Ibid., XI. ii. 45-47. 239-241.

for the word that we had written. But even this is no remedy for a weak memory, except for those<sup>1</sup> who have acquired the art of speaking extempore.

And in a final bit of rather humorous advice, he added:

But if both memory and this gift be lacking, I should advise the would-be orator to abandon the toil of pleading altogether and, if he has any literary capacity, to betake himself by preference to writing.

In retrospect, it appears that Quintilian not only reiterated the previous teachings on the art of memory, but significantly added to the old suggestions some new advice which seems to be more practical.

Memory, then, to Quintilian was the vital guardian of all learning, including, of course, all the work done and progress made by orators—young and old.

He deemed memory to be just as vital to extempore speaking as it is in learning a prepared speech.

Writing is an aid to the memory when coupled with concentration on the intent to learn. The memory system of places and images was examined in detail, but he concluded this part of the discussion with skepticism as to its practicality in learning the parts of a speech. At this, he offered his own precepts for memorizing which heretofore had not appeared in other discussions of memory. His precepts include: dividing the speech into parts to be learned segment at a time; learning the speech from the same tablet on which the speech is first written; practicing in a subdued voice; structuring the speech artistically; and above all, practicing extensively.

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<sup>1</sup>Ibid., XI. ii. 49. 241.

<sup>2</sup>Ibid., XI. ii. 49. 241.

In discussing whether or not to learn a speech verbatim, his choice was learning it verbatim if time permits. However, if the time is limited, having a good grasp of the facts involved and speaking freely with the facts in mind was considered better than half-memorizing a speech. But in Book X he pointed out the fact that true skill in performing the latter alternative comes only through much practice at both speaking and writing.

#### Summary

In reviewing the classical canon of memory, two aspects of its history have been investigated: the Greek backgrounds and the Roman backgrounds of the canon. It has been shown that memory has played an important and vital part in the formation of early Greek culture at a time when memory furnished the only medium for transmitting and storing knowledge. What has been termed "the oral tradition in Greece" showed a reverence for memory in Greek mythology, religion, and literature. The invention of writing was considered a threat to the development of memory, thus ultimately causing the loss of knowledge.

In the fifth century, B.C., mnemonic systems began to be invented, taught, and incorporated into the education of the ancient Greeks, even after writing was invented. It was at this time that memory grew amidst Greek sophistry. Simonides of Ceos and Hippias of Elis are remembered for being the foremost originators of the art of memory. There is also proof that many other Greeks were known for their advocacy of the art of memory, Theodectes of Phaselis and Metrodorus of Scepsis being among the most famous.



Plato and Aristotle are also early contributors to the information on the canon of memory. However, neither of them seemed so concerned with the art of memory as much as with the nature and theory of memory. Nevertheless, each showed evidence of being familiar with the mnemonic systems of their day, and their contributions probably provided the theoretical backgrounds for the further development of the art of memory itself.

The Roman period saw memory blossom as the fourth canon of rhetoric. The most representative rhetorics during this time were the Rhetorica ad Herennium by an author unknown, De Oratore by Cicero, and Institutio Oratoria by Quintilian.

The Rhetorica ad Herennium is the oldest existing piece of writing which actually lists memory as the fourth canon of rhetoric; consequently, it contains the first thorough instructions on how to improve the memory. It first distinguishes between natural memory and artificial memory. The natural memory refers to that facility of mind with which one is born. The artificial memory is that part of the memory which can be developed by practice and technique.

The technique for developing this part of the memory involves places and images to be associated with that which is to be remembered. With very minor variations, this system is described in all three Roman sources discussed in this paper.

All three writers make the distinction between two types of material which can be memorized by the places and images system: subject matter and words. What is more, all sources seem to direct instructions for the use of the system for the learning of the subject matter first, and then adding that the memorization of words is useful

for the training of the discipline of the memory more than anything else. Quintilian, especially, doubts the practicality of memorizing a speech word for word. The great volume of places and images required to recall each word would make the task disproportionate.

It seems that all three Roman sources examined in this study are in relative agreement as to the importance of memory. As noted previously, Quintilian was the only one who not only re-evaluated the work of others, but also makes new contributions to the old ideas on developing the memory. These ideas include the suggestion that writing, combined with the concentration of the mind, will aid memory and that learning the speech from the same tablet on which the speech is first written helps, also. Division and artistic structure was cited as being one of the most useful habits for memorizing, and in this connection, the orator is advised to learn his speech part by part if it is long. Above all else, however, Quintilian stressed the importance of practice, especially in a subdued voice, as being the prerequisite of learning anything by heart.

He was also the only one to mention extempore speaking in relation to memory, stating that the power of memory is just as important to the extempore speaker as it is to the orator with a prepared speech. But, according to Quintilian, it is better to get the speech by heart if time permits. If not, then it is better not to write the speech out at all, thereby attempting partial memorization, for the orator is liable to appear more awkward than if he just speaks freely on the facts.

In comparing the Greek and Roman viewpoints on the art of memory, it can be found that the system of places and images advocated

by early Greeks like Simonides and Hippias was mirrored most closely by the author of the ad Herennium and by Cicero. Plato, on the other hand, in disapproving of mnemonics and in advocating such methods as imagery, repetition, rehearsal, and time interval, was more closely mirrored by Quintilian, who recommended the same things as an alternative to the impractical places and images system. The only divergent point between these two occurred on the subject of writing. As was pointed out earlier, Plato was a strong enemy of writing, and Quintilian actually recommended it as a device for improving the memory. Aristotle's laws of association, however, were not adopted by any of the Roman writers as such, except for the first which was that simultaneously formed ideas reproduce one another.

One point of agreement existed among all writers mentioned in this chapter, however, and that was that all of them expressed their belief in the importance of memory. It was just that some believed memory could and should be improved by artificial means, and others did not.

## CHAPTER III

### MEMORY IN MODERN RHETORIC

With the survey of the classical canon of memory, it remained to determine what constituted the modern concepts of memory in rhetoric. It was the purpose of this chapter, therefore, to survey a selection of modern rhetorics in order to determine the status of memory in modern rhetoric.

A random sample of the books listed in the "Check List" of the Speech Association of America mentioned earlier was taken and the thirty books surveyed for this study are listed in Appendix B of this paper. The books surveyed fell into three general categories: (1) texts including a specific coverage of memory; (2) texts including indirect mention of memory; and (3) texts including no mention of memory.

#### Survey of Textbooks

##### Texts Including a Specific Coverage of Memory

Of the thirty books surveyed, five of them gave significant coverage to the subject of memory. Of these five, two discussed memory in terms of speech preparation. They were: Persuasive Speaking: Theory Models Practice<sup>1</sup> by Patrick O. Marsh; Public Speaking:

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<sup>1</sup>(New York: Harper and Row, 1967).

a Rhetorical Perspective<sup>1</sup> by Jane Blankenship. The other three dealt with the technical aspects of how memory works. They were: The Bases of Speech<sup>2</sup> by Gray and Wise; Communication and Culture: Readings in the Codes of Human Interaction<sup>3</sup> by A. G. Smith, and Foundations of Communication Theory<sup>4</sup> by Sereno and Mortensen.

Persuasive Speaking: Theory Models Practice by Patrick O. Marsh followed a classical rhetoric approach used by Quintilian.<sup>5</sup> Jane Blankenship's book mentioned Quintilian and retold the ancient story of Simonides inventing the art of memory, but it did not actually follow a classical approach to the canon of memory. Marsh's text was intended for an advanced persuasion course for people preparing for the professions requiring the ability to give major speeches. Blankenship's book was intended for beginning public speakers. At the beginning of his Chapter Ten, which dealt exclusively and extensively with memory, Marsh stated:

Memory has become known as rhetoric's lost canon because of its general disappearance from public speaking textbooks. The omission in modern writings of what classical rhetorical theory held to be elemental probably stems from the fact that the effects of memory are less tangible than those of the other canons and thus are more easily overlooked or misunderstood. Nevertheless, memory, as it will be broadly defined here, transcends the popular connotation of being a device by which the speaker frees himself from the manuscript or from his notes; memory, in this broader sense, is indeed an essential component of persuasion and is not merely a convenience.

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<sup>1</sup>(New Jersey: Prentice-Hall, 1966)

<sup>2</sup>3rd ed. (New York: Harper and Row, Publishers, 1959).

<sup>3</sup>(New York: Holt, Rinehart and Winston, Inc., 1966).

<sup>4</sup>(New York: Harper and Row, Publishers, 1968).

<sup>5</sup>Marsh, p. xiii.

<sup>6</sup>Ibid., p. 291.

Marsh treated the subject of memory under four major headings:

- (1) Memory as a Source of Persuasion; (2) The Nature of Memory; (3) Useful Memory Methods; and (4) Recovering from Memory Lapses.

Miss Blankenship treated the subject in relation to invention, arrangement, detail, style, and delivery.

As a source of persuasion, Marsh contended that memory contributes to the over-all persuasiveness of a speech by giving the speaker three kinds of control: "...control of information to be used in the speech; control of his own thoughts while speaking; and control of what is to be retained by his listeners."<sup>1</sup>

By "control of the information to be used in the speech," Marsh meant that in its broadest sense, memory represents the speaker's total storehouse of experience. Blankenship described memory in almost exactly the same terms. Therefore, the speaker's memory furnishes him with material with which to make speeches.

It was also acknowledged that memory gives the speaker control over his own thoughts, and this is important for the obvious reasons of helping him to remember what it is he wants to say. In addition, though, efficient memory results in improved delivery:

By remembering the progression of ideas in a speech, he can concentrate on adapting his delivery to the audience without the fear of forgetting his ideas. Thus, the improved delivery resulting from an efficient memory contributes to the persuasiveness of the speech indirectly.<sup>2</sup>

Marsh added that the speaker who is sure of his material will reflect confidence in his manner, thereby adding to his ethos and furthering

<sup>1</sup>Ibid.

<sup>2</sup>Ibid., p. 293.

the persuasive end of his speech. Blankenship made no mention of this.

In a new direction, Marsh extended the canon of memory to cover the listener's memory as well. He maintained that "audiences tend to remain under the influence of the persuasive appeal in proportion to their retention of the details of the speech."<sup>1</sup> Therefore, it is the responsibility of the speaker to make his speech easy to remember. To do this he must have an understanding of how the memory works. Although Blankenship mentioned the audience in connection with repetition, she did not make a major point of it as Marsh did.

Marsh believed that because the three kinds of control given the speaker by an effective memory are so important to the persuasive process, memory still deserves canon status.

In his treatment of the nature of memory, Marsh defined memory as "...the ability to recognize, to recall, or to relearn material through the processes of impression, association, or repetition."<sup>2</sup> This definition differs with Aristotle's definition (See Chapter II, p. 22.) in that it included recollection and relearning in the definition of memory, whereas Aristotle defined all three separately. Miss Blankenship defined memory in terms of the speech situation:

...memory is the storing and recall of the materials and proofs of a speech, both the individual pieces of evidence and the relationships they bear to each other.<sup>3</sup>

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid., p. 294

<sup>3</sup>Blankenship, p. 153.

Their definitions show that both Marsh and Blankenship believed memory is inextricably involved in the learning process.

Marsh went on to differentiate between the three by defining recognition as "a type of memory in which the object is given and is to be identified on the basis of a previous experience with it."<sup>1</sup> Recall, cited as the most difficult of the three, was defined as that which "...requires that the object be reproduced by the remembering person after an original learning."<sup>2</sup> And Marsh added that relearning "...reveals how much of original learning has been retained by comparing the time required for the first and subsequent learnings."<sup>3</sup>

Marsh introduced a new term to this study of the canon of memory—"memory trace." A memory trace is an impression or a neural result of a stimulation.<sup>4</sup> Of impressions, Marsh said that vividness of stimulation is the key to creating lasting impressions. This principle was recognized in the classical period of rhetoric, too. Miss Blankenship stressed the same principle in relation to invention and detail. "If the speaker's ideas are strong, if they are vital, they can be remembered more easily."<sup>5</sup> Also she made it clear that vividness and clarity of detail helps the memory of the speaker and audience as well.

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<sup>1</sup>Marsh, p. 294.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

<sup>4</sup>Ibid.

<sup>5</sup>Blankenship, p. 154.



Association can also aid impressions by linking them together in the mind "...so that when one is stimulated the other is also activated."<sup>1</sup> Miss Blankenship emphasized the importance of association in arrangement. She said, "...a conscious awareness should be formed of the associations between ideas and perceived patterns of organization."<sup>2</sup>

Marsh added that repetition, too, is helpful in making lasting impressions, because it strengthens the trace so that the stimulus can be remembered.

From experimental research, Marsh gleaned certain findings about the properties of memory which apply to public speaking. These will be discussed in the following paragraphs.

Marsh stated that material should be meaningful, because it is more easily retained than nonmeaningful material. "This emphasizes the importance of sound structure for speeches as well as vivid and concrete illustrations."<sup>3</sup> Although Blankenship did not mention meaningfulness of material, she encouraged the student to use vivid and concrete illustrations, too.

Frequent repetition facilitates the memory. In psychology, Marsh explained, this phenomenon is referred to as overlearning. "It is this factor that accounts for the effectiveness of frequent summaries and repetitious stylistic figures."<sup>4</sup>

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<sup>1</sup>Marsh.

<sup>2</sup>Blankenship, p. 155.

<sup>3</sup>Marsh.

<sup>4</sup>Ibid.

The presence of clear patterns also facilitates memory. These can be organizational patterns, rhythm patterns, or rhyme patterns. Marsh recommended that clear patterns can best be used in structuring the speech to make it easier to recall for both the speaker and the listener. On the other hand, Blankenship thought this principle could be best applied in relation to style. What she called reiterative patterns make it easier for the speaker and the audience to remember the speech. These can take several forms, such as: parallel structure, repetition of key words, alliteration, assonance and rhyme-sound repetition.<sup>1</sup>

In addition to the simple process of association mentioned earlier, Marsh listed a type of association known as interpolated links. These links are an attempt at finding the common ground between objects. As Marsh illustrated it, slow is the link between tarry and simmer, and tall is the link between cedar and captain.<sup>2</sup>

Recitation, as direct preparation for a later performance, has been shown to aid the memory, also. Marsh pointed out that other than the obvious advantages of practice recitation in learning a speech, recitation is also helpful in improving the listener's memory when, in audience-participation exercises, the audience is asked to recite.

"Memory is best when ideas are given a chance to incubate and mature."<sup>3</sup> In other words, a speech can be learned better when practice sessions are spaced evenly over a longer period of time rather than concentrated into a short period of time. "The listener's

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<sup>1</sup>Blankenship, p. 158.

<sup>2</sup>Marsh, p. 295.

<sup>3</sup>Ibid.

memory is similarly improved if an argument is mentioned briefly several times in a speech rather than concentrated in equal wordage at a single place in the speech."<sup>1</sup>

Marsh also pointed to evidence which shows that a long lesson will be remembered better than a short lesson when both of them are brought up to the level of one perfect performance. However, he did not suggest how this would be applicable to the speech situation.

Evidence shows that persons attempting to memorize a list, memorize from the ends toward the middle. Memory progresses better from the beginning than from the end, however, making the midpoint between the middle and the end the point hardest to recall. Marsh deduced that this pattern should be as true in a speech as with a list. "If this is the case, memory is likely to be most difficult during the confirmation and refutation portions of a speech—the portions that constitute the heart of the persuasive effort."<sup>2</sup> Because of this, Marsh suggested using every available mnemonic device during these portions of the speech.

Another experimental finding on memory concerns memory and opinions. Strong opinions either for or against a certain position in a communication tends to aid the memory.<sup>3</sup> Along with this, there is evidence to support the hypothesis that memory is aided by sympathetic attitudes. This means that experiences which are in harmony with existing frames of reference seem to be learned and remembered better

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<sup>1</sup>Ibid., pp. 295-296.

<sup>2</sup>Ibid., p. 296.

<sup>3</sup>Ibid.

than experiences which are foreign to or which are in conflict with an individual's frame of reference.

Conflict is not always found to be a detrimental element in relation to the memory. Marsh cited evidence which shows that the avoidance-avoidance conflict (one in which the listener is confronted with two equally undesirable choices) increases memory for short periods of time. "With the passage of time, however, either the conflict becomes resolved and the listener dismisses the speech from his mind, or the conflict intensifies to the point that the speech causing the conflict is defensively dismissed from consciousness."<sup>1</sup> Marsh stated that this concept would be useful for purposes of immediate memory as long as the conflicts were not too severe.

The last experimental finding to affect information about memory cited by Marsh is the fact that memory decay sets in almost instantly after the initial learning situation and continues decaying until the information is completely forgotten. Usually this process takes from seven to fourteen days. The rate of forgetting is a function of the kind of memory being discussed. For instance, the rate of forgetting is more rapid in the process of recollection than it is in recognition. "This factor accounts in part at least for the superiority of spaced recitation over concentrated or massed recitation."<sup>2</sup> Because Blankenship did not take an experimental approach, she made no mention of the preceding findings.

At this point, Marsh discussed several useful memory methods, including what he calls "the habit-peg method," "the number-rhyme

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<sup>1</sup>Ibid., p. 297.

<sup>2</sup>Ibid., p. 298.

method," and "the verbatim method." (Blankenship did not include any such systems in her chapter.) However, Marsh established this relationship by using the very places and images memory system explained and mentioned so often in Chapter II of this study. Marsh called it the habit-peg method and instead of the altars, columns, and arches suggested in the classical texts, he suggested substituting familiar sequences, such as the order of places a student regularly visits each day. Once these were fixed in one's mind, he could easily associate the things to be memorized (the images) to the list of places he visits. Marsh said that this method as well as the number-rhyme method which follows is particularly useful in memorizing speech outlines.

The number-rhyme method is useful when a short list of items must be recalled. To each number (up to as many as twelve) a rhyming word must be attached which in turn can be associated in some way with the item to be remembered. This method is based upon the theory of association. All the student has to do is to call off the number, remember the rhyming word, and then remember the particular word or thought associated with the rhyming word.

The next system to be explained by Marsh is the initial-letter method. This one consists simply of taking the first initial of each word to be remembered and forming a word from the initials. This method is helpful in remembering lists of words, especially if they must be remembered in a particular order.

The picture-frame method is also suggested for learning lists. This time, though, the method is based upon the theory that concrete

images make the most lasting impressions. Marsh used the example of learning the chief exports of Vietnam. In a mental picture frame, the student is to imagine a picture in which all of the exports appear. If he constructs the picture carefully and vividly enough, the composite image is supposed to last for months or even years.

The final method of memorizing is the verbatim method. Marsh stated that there are occasions which require precise style and fluent delivery. On such occasions, only verbatim memorization is acceptable. If this happens to be the case, the student is given six steps to follow in memorizing his speech verbatim:

- (1) Read the entire speech or passage over several times in its entirety to understand its meaning and to acquire a feeling of its rhythm and movement;
- (2) memorize the sequence of ideas within each division of the speech (the habit-peg method is useful here);
- (3) read each unit of the speech (exordium, narration, and so forth) individually several times until you can recite it in a perfect performance, then add another unit;
- (4) concentrate your effort on troublesome portions until they are manageable;
- (5) reread the entire speech and attempt to recite it;...
- (6) continue the recitation until you can present two or three consecutive perfect performances.<sup>1</sup>

Marsh cautioned, however, that the greatest danger in memorizing a speech word for word is that too little time will be left between the completion of its composition and its performance. It is stressed that such memory work must be done over spaced periods of time in relatively short practice periods of between twenty and forty minutes.<sup>2</sup>

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<sup>1</sup>Ibid., p. 300.

<sup>2</sup>Ibid., p. 301.

Marsh recognized the fact that memory lapses occur even for the most skilled speakers. They are most likely to occur, he noted, when the speaker is not concentrating on the thought behind the words. However, if a memory lapse does occur, the student was given advice for recovering gracefully.

The first method for recovering from a lapse of memory is to repeat the last word spoken, or to go beyond that and begin a sentence with the last word spoken. This begins a digression over the material the speaker has just covered and will most likely lead him back to what he was going to say.

Another method is to ask a question of the audience. For example, the speaker can ask if he is being heard clearly in the back of the room and then comment on the acoustics.<sup>1</sup> It is rather natural then to say, "Now let's see—where was I?" The speaker has gained not only a few seconds to recover his thoughts, but luckily a helpful answer from someone in the audience,

It is also suggested that at times a brief summary of points already developed will put the speaker back on the track. If all else fails, though, Marsh believed in honestly admitting the failure in memory instead of trying to hide it with a dramatic pause.

In his section entitled "Models," Marsh included a witty selection by Mark Twain, entitled "How to Make History Dates Stick," which provided a method of systematizing historical periods. Marsh felt this essay would prove helpful to any student of speech. The system Twain explained is simply another version of the places and images

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<sup>1</sup>Ibid.

system taught by the classicists. To remember his speeches, Twain said he used to draw pictures to remind him of the sequences of his thoughts. He said that as soon as the pictures were drawn, he could tear them up and throw them away, for his mind's eye could still see them perfectly. He supposedly used this system with minor variations to help his own children remember history dates.

In summary, it can be seen that Marsh devoted a lengthy chapter to the subject of memory, because he believed in its importance in relation to the speech situation. Jane Blankenship also devoted a chapter to memory but hers was not so detailed as was Marsh's. In essence, she wrote her chapter on the importance of memory in relation to invention, arrangement, detail, style, and delivery, including very few suggestions for how to memorize.

Marsh believed that memory definitely deserves to be a canon of rhetoric. He first discussed memory as a source of persuasion, saying that it not only adds to the ethos of the speaker, but also, if properly used, memory control can be established over the listener's memory as well. Marsh included information on the nature of memory for this very reason. He felt that the speaker should have a full understanding of the subject, not only to control his own memory, but also to control the listener's memory. Among the principles of memory explained, Marsh included discussions dealing with meaningful material, rhythmic patterns, rhyming patterns, associations, recitations, distributed exposures, and repetitions.

Unlike Miss Blankenship, Marsh then gave several useful memory methods intended to aid the student in memorizing various types of material. They were the habit-peg method, the number-rhyme method,



the initial-letter method, the picture-frame method and the verbatim method. If the student still suffered from lapses of memory, Marsh gave suggestions for recovering from these embarrassing moments. And, finally, he included in his chapter on memory a witty essay by Mark Twain which actually is based upon the places and images memory system mentioned in Chapter II.

Of the three texts which mention the technical aspects of memory, all three of them attempted to explain memory traces. Gray and Wise drew a distinction between the prenatal memory traces and memory traces acquired through experience. The prenatal traces appear to be connected with normal functions like taking food and digesting and with basic emotions. After birth, actual experience makes more memory traces. Gray and Wise described a memory trace as a neural pathway over which nerve currents pass.<sup>1</sup> In his book, Alfred Smith has included an article by W. Ross Ashby<sup>2</sup> which discusses the brain and new ways of understanding how it works. In this article, Ashby also gives an explanation of memory traces. He explains that memory is probably carried on the ultramicroscopic or even on the molecular structures of the brain. Many scientists believe, he said, that memory traces are "...very small in size, scattered profusely over the cortex, and far too numerous to be arranged and controlled individually."<sup>3</sup>

Ashby went on to explain that what this means in the cortex

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<sup>1</sup>Gray and Wise, p. 229.

<sup>2</sup>W. Ross Ashby, "The Application of Cybernetics to Psychiatry," Journal of Mental Science, 100, (1954), 114-124 cited by Alfred G. Smith, pp. 378-380.

<sup>3</sup>Ibid., p. 379.

is that it is possible to have each trace exist in a certain place in the brain and yet not have all of the traces localized in a mass in one particular part of the cortex.<sup>1</sup>

Sereno and Mortensen's book was also a collection of articles. In one of the articles, E. H. Adrian explained the memory system of the brain in terms of a vast number of files of different importance and accessibility, and the signals which call up the memories as keys which open the files:

We suppose, perhaps on rather slender evidence, that this increased activity is signaled back to the central controlling regions, and that they react to it by opening up the channels for this particular line of information. Most of the cerebral apparatus will then be brought to bear on it, and information about other events will be neglected or suppressed.<sup>2</sup>

In connection with their discussion of memory traces, Gray and Wise stated that:

All education, whether it is gained in schools or through other experience, consists in acquiring memory traces. This is the process ordinarily called learning. The neural focus of learning is wherever neural impulses travel a pathway repeatedly and leave a memory trace.<sup>3</sup>

They added that forgetting involved the fading of memory traces due to lack of use of the neural pathways. Repetition, they said, may be used to revive a fading trace. "Learning, originally measured by the number of repetitions necessary to fix the trace, may later be

<sup>1</sup>Ibid., p. 380.

<sup>2</sup>E. H. Adrian, "The Human Receiving System," The Languages of Science, Granada Lectures of the British Association for the Advancement of Science (New York: Basic Books, Inc., Publishers, 1963), pp. 100-114 cited by Sereno and Mortensen, p. 173.

<sup>3</sup>Gray and Wise, p. 230.

measured by the time necessary to revive it after it has failed."<sup>1</sup>

As a sidenote, E. H. Adrian mentioned in his article that strong emotions seem to have something to do with the memory. He stated that ordinarily attention is given to those stimuli which make sudden interruptions and messages bring exciting news. However, he added:

The more lasting effects are produced by the complex messages which arouse association with a strong emotional coloring—fear or anger or pleasure. We are still a long way from understanding how memories are stored in the brain and how an incoming message excites our memory system.<sup>2</sup>

Also included in Sereno and Mortensen's book is an article by Magdalen D. Vernon, entitled "Perception, Attention, and Consciousness,"<sup>3</sup> which added another interesting particle of information on memory. She mentioned the fact that some people seem to remember that which they do not consciously perceive. She called this "incidental memory."

So it can be seen that each of the three texts discussed here tried to explain the nature of memory traces. While their explanations differed widely, they did not disagree. It seemed that each author was simply adding something different to the subject, which illustrates the fact that there is not very much definitely known about how the memory functions.

Although Gray and Wise made mention of the fact that memory is closely associated with the learning process, they did not deal

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<sup>1</sup>Ibid.

<sup>2</sup>E. H. Adrian cited by Sereno and Mortensen, p. 172.

<sup>3</sup>Magdalen D. Vernon, "Perception, Attention, and Consciousness," Advancement of Science, 1960, 111-123 cited by Sereno and Mortensen, p. 145.

with any of the experimental findings which Marsh covered so extensively which have to do with how to improve the memory. The only principle echoed here is that repetitions fix memory traces and also revive them when they fade.

Texts Including Indirect Mention of Memory

The second category of books surveyed did not deal with the subject of memory as such. On the other hand, while they did not label it memory, these books contained random principles of the topic as it has been discussed. Some of them even incorporated modern experimental data on memory itself. This category accounted for the greatest majority of books surveyed—nineteen. These were:

Thoburn V. Barker, The Speech: Its Structure and Composition<sup>1</sup>

Bryant and Wallace, Oral Communication: A Short Course<sup>2</sup>

Herbert L. Carson, Steps in Successful Speaking<sup>3</sup>

Lionel Crocker, Rhetorical Analysis of Speeches<sup>4</sup>

Dean and Bryson, Effective Communication<sup>5</sup>

Gray and Braden, Public Speaking: Principles and Practice<sup>6</sup>

Hellman and Staudacher, Fundamentals of Speech: A Group Speaking Approach<sup>7</sup>

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<sup>1</sup>(New York: Van Nostrand Reinhold Company, 1968).

<sup>2</sup>(3rd ed.; New York: Appleton-Century-Crofts, 1962).

<sup>3</sup>(New York: Van Nostrand Reinhold Company, 1967).

<sup>4</sup>(Boston: Allyn and Bacon, Inc. 1967).

<sup>5</sup>(2nd ed.; New Jersey: Prentice-Hall, 1959).

<sup>6</sup>(2nd ed.; New York: Harper and Row, Publishers, 1967).

<sup>7</sup>(New York: Random House, 1969).

- Robert B. Huber, Influencing Through Argument<sup>1</sup>
- Dominick LaRusso, Basic Skills of Oral Communication<sup>2</sup>
- Lomas and Richardson, Speech: Idea and Delivery<sup>3</sup>
- McCall and Cohen, Fundamentals of Speech: The Theory and Practice of Oral Communication<sup>4</sup>
- Ralph A. Micken, Speaking for Results: A Guide for Business and Professional Speakers<sup>5</sup>
- Wayne C. Minnick, The Art of Persuasion<sup>6</sup>
- Norvelle, Smith, and Larson, Speaking Effectively<sup>7</sup>
- Keith R. St. Onge, Creative Speech<sup>8</sup>
- Robert T. Oliver, Effective Speech for Democratic Living<sup>9</sup>
- Samovar and Mills, Oral Communication: Message and Response<sup>10</sup>
- Smith and Canty, Method and Means of Public Speaking<sup>11</sup>
- Zelko and Dance, Business and Professional Speech Communication<sup>12</sup>

<sup>1</sup>(New York: David McKay Company, Inc., 1969).

<sup>2</sup>(Dubuque, Iowa: William C. Brown Company, 1967).

<sup>3</sup>(2nd ed.; Boston: Houghton Mifflin Company, 1963).

<sup>4</sup>(New York: Macmillan Company, 1963).

<sup>5</sup>(2nd ed.; Boston: Houghton Mifflin Company, 1958).

<sup>6</sup>(2nd ed.; Boston: Houghton Mifflin Company, 1968).

<sup>7</sup>(New York: Holt, Rinehart and Winston, Inc., 1957).

<sup>8</sup>(Belmont, Calif.: Wadsworth Publishing Company, Inc., 1964).

<sup>9</sup>(New Jersey: Prentice-Hall, 1959).

<sup>10</sup>(Dubuque, Iowa: William C. Brown Company, 1968).

<sup>11</sup>(New York: The Bobbs-Merrill Company, Inc., 1962).

<sup>12</sup>(New York: Holt, Rinehart and Winston, Inc., 1965).

Because there were so many, the writer did not attempt to deal with them individually. For the purposes of this category, a survey was taken of these books to determine their general coverage of the principles of memory.

The most obvious point this group of books had in common in relation to this study was that none of them credit memory with importance in the speech process as the other sources cited up to this point have.<sup>1</sup> Most of these books equate memory with verbatim memorization. In fact, fifteen of the nineteen in this category warn against memorizing the speech word for word. Instead, they advocate the extemporaneous method. The other four books do not mention the topic at all.

At the same time, all fifteen books mentioned above recommended the use of a speech outline. They did not, however, say that the outline is supposed to help in remembering the speech. This is, nevertheless, one of the results of using an outline. The other four books make no mention of outlines.

Most of the principles of memory in classical rhetoric were explained in connection with teaching the student how to practice. This category of books contained eight books which gave some instruction on how to practice. For example, Micken, and Bryant and Wallace recommended practicing the speech in "wholes" and by thought units. LaRusso stressed that practice should be purposeful. This suggestion put one in mind of the experimental finding cited by Marsh

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<sup>1</sup>It should be noted that although Bryant and Wallace do not deal with memory in their book included in this survey, they do give the subject significant coverage in their Fundamentals of Public Speaking mentioned in the review of literature in Chapter I of this paper.

that meaningfulness of material facilitates the learning process.

Zelko and Dance give experimental evidence of their own as they quote Berelson and Steiner<sup>1</sup> for some advice about practice:

1. It is better to practice in numerous short sessions rather than in a very few long sessions.
2. It is better to practice the whole speech rather than its sections.
3. Learning immediately followed by sleep has greater retention than learning followed by activity.

The first point listed reflected the distributed exposure finding explained by Marsh. Two other books in this category made similar suggestions. The second point is a restatement of the idea of practicing the whole speech at once. The third point supported the time interval of one night mentioned earlier in this study.

Four of the books surveyed in this category advocated practicing aloud. Three books recommended writing the speech out and then practicing from the same tablet on which the speech was written. Three others, however, specifically warned the student not to do so.

One book in this category, LaRusso's Basic Skills in Oral Communication, included mention of recitation, repetition, and rhythm in rehearsals to insure learning. Marsh included these principles in his data of experimental findings on memory. As was shown earlier in this Chapter, Marsh and Blankenship extended the canon of memory to include the memory of the listener as well as the speaker. Ways recommended in appealing to the memory of the listener included

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<sup>1</sup>Bernard Berelson and Gary Steiner, Human Behavior: An Inventory of Scientific Findings (New York: Harcourt, Brace and World, Inc., 1964), Chapter 2, passim.

<sup>2</sup>Ibid., p. 93

repetition and restatement in structuring the speech, figures of speech to make the style vivid and clear, and the use of concrete and vivid images to make lasting impressions on the minds of the listeners. Ten of the books surveyed in this category recommended the use of repetition and restatement for the purpose of "reinforcing ideas" but, still, they did not always mention them in connection with the word "memory." One of the books suggested the use of figures of speech, especially metaphors, for the purpose of helping the audience remember the thought. Three of the books highly recommended the use of visual aids, recognizing the effect of visual stimulus upon the mind. Ideas are remembered better when associated with mental images, which the visual aids produce.

The books in this category then all contained some reflection of the concepts of memory. Those principles of memory included most often in this collection of books were recommendations for outlining (fifteen books surveyed); and recommendations for using repetition, restatement, and figures of speech in order to aid the memory of the listener (ten books surveyed). Eight books surveyed included suggestions for practicing, but these varied in nature, such as practicing aloud, practicing over extended periods of time, memorizing in wholes or in thought units, and making practice sessions meaningful.

#### Texts Including No Mention of Memory

The third category of this survey dealt with those texts which did not mention the subject of memory to any noticeable extent.

Included in this group are:

Monroe C. Beardsley, Modes of Argument<sup>1</sup>

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<sup>1</sup>(New York: The Bobbs-Merrill Company, Inc., 1967).



Gary Cronkhite, Persuasion: Speech and Behavioral Change<sup>1</sup>

C. K. Ogden, Opposition: A Linguistic and Psychological Analysis<sup>2</sup>

Oliver, Arnold, and White, Speech Preparation Sourcebook<sup>3</sup>

Redding and Sanborn, Business and Industrial Communication:  
A Source Book<sup>4</sup>

Herbert A. Wichelns, The Rhetorical Idiom<sup>5</sup>

The reason that the above books did not mention memory was that most of them did not deal with speech preparation as such. Instead, most of them were meant to be either supplementary texts or more advanced texts on some phase of speech theory.

### Summary

#### Results of the Survey

In surveying the concepts of memory in thirty modern speech texts, three categories have been explored: (1) texts including a specific coverage of memory; (2) texts including an indirect mention of memory; and (3) texts including no mention of memory.

In the first category only five books, or 16 2/3 percent of the texts surveyed, which dealt with memory principles indirectly; that is they did not make specific mention of memory, but did include principles of memory in discussing other subjects such as preparation and delivery.

<sup>1</sup>(New York: The Bobbs-Merrill Company, Inc., 1966).

<sup>2</sup>(Bloomington, Indiana: Indiana University Press, 1967).

<sup>3</sup>(Boston: Allyn and Bacon Company, Inc., 1966).

<sup>4</sup>(New York: Harper and Row, Publishers, Inc., 1964).

<sup>5</sup>(ed. by Donald C. Bryant (New York: Russell and Russell, 1958)).

The third category represented 20 percent (or six) of the books surveyed. This group of texts included no mention of memory due to the fact that they did not deal with speechmaking as such, but were either designed to be sourcebooks or advanced texts of a technical nature.

### Modern Concepts of Memory

At this point it was possible to glean from the survey certain conclusions about the modern concepts of memory. They were as follows:

1. Writers giving memory full treatment in their texts tend to view it as the storehouse of one's total experiences.

2. Writers giving memory very little attention tend to view the subject as nothing more than the verbatim method of delivery.

3. The nature of memory is believed to be based upon the theory of memory traces, which are neural pathways over which nerve current passes.

4. Modern memory includes the capacities to recognize, to recall, and to relearn material through the processes of impression, association, or repetition.

5. Memory has come to be regarded by some modern authors as a source of persuasion.

6. Memory now involves not only the speaker's retention, but also includes the listener's retention as well.

7. The most notable modern concepts of memory can be upon the experimental findings listed below:

- a. Meaningful material is more easily learned than non-meaningful material.
- b. Frequent repetition or overlearning aids memory.
- c. Clear patterns of various kinds aid memory.
- d. Associations supply common ground between objects which helps the memory call up the object to be remembered.
- e. Recitation as a direct preparation for a later performance aids memory.

- f. Distributed exposures or learning over an extended period of time in relatively short sessions improves memory.
  - g. Sleep following learning seems to aid memory more as opposed to learning followed by activity.
  - h. Memorizing a list progresses more rapidly from the beginning than from any other point.
  - i. Memory and opinions. Strong opinions either for or against a certain position in a communication tend to aid the memory.
  - j. Avoidance-avoidance conflict (one in which the listener is confronted with two equally undesirable choices) increases memory for short periods of time.
  - k. Retention curve. Memory decays gradually after the initial learning situation and continues decaying until the information is completely forgotten. Unless reinforced in some way, this process generally takes from seven to fourteen days.
  - l. Incidental memory is the phenomenon of remembering that which was not consciously perceived.
  - m. Learning in wholes. Memory is benefited by learning in wholes rather than by parts.
8. Outlining the speech aids to the memory.
  9. Some modern writers recommend writing the speech out to aid the memory.
  10. Vivid, concrete, and striking images make lasting impressions.
  11. Some modern writers warn against writing the speech as a dangerous practice.
  12. Practicing the speech aloud is recommended.
  13. Repetition, restatement, and figures of speech are considered forms of support for the purpose of reinforcing ideas, thereby aiding the memory of the listener.
  14. Most of the modern writers recommend the extemporaneous method of delivery for most speechmaking.

It has been the purpose of this Chapter then to determine the modern concepts of memory. This has been done through a random survey of speech textbooks.

## CHAPTER IV

### SUMMARY AND CONCLUSIONS

#### Summary

It has been the purpose of this study to discover, through a thorough examination and comparison of the classical and modern concepts of the rhetorical canon of memory, areas for further study and research on the subject of memory. The study was focused by formulating four questions to be answered in the course of the investigation:

1. What constitutes the classical canon of memory in rhetoric?
2. What constitutes the modern concepts of memory in rhetoric?
3. What are the similarities between the classical and modern concepts of memory in rhetoric?
4. What are the differences between the classical and modern concepts of memory in rhetoric?

The answers to these questions were to furnish background for further study and research on the subject of memory.

#### The Classical Canon of Memory

1. Memory was considered of utmost importance in rhetoric. In fact, the invention of writing was considered a threat to memory and all knowledge.
2. Classical rhetors differentiated between natural and artificial memory.

- a. Natural memory was an innate function representing the continued retention of experience. It could not be improved.
  - b. Artificial memory was the part of the memory which could be improved by practice and technique. It had to do with the process of recollection.
3. Artificial memory devices were invented and taught to aid the artificial memory. The system prevalent in classical rhetoric was the places and images system supposedly invented by Simonides of Ceos and made popular by Hippias of Elis. This system was based upon the following theories:
- a. Associations. Simultaneously formed ideas reproduce one another.
  - b. Meaningful material. Vivid images were recommended because they are more meaningful than vague images.
4. The places and images system was recommended for the learning of both the subject matter and words of a speech. However, the system was recommended for memorizing the words only to provide an exercise for the memory. Memorizing words by this system was not suggested in actual speechmaking.
5. Quintilian's suggestions for practice were also intended to aid the artificial memory as a substitute for the artificial memory devices. His suggestions were:
- a. Practice was considered the most powerful aid to the memory.
  - b. Division and artistic structure or dividing the speech into major parts to be memorized part by part.
  - c. Writing the speech out and learning it from the same tablet upon which it was written.
  - d. Practice speech in a subdued voice.
  - e. Read and reread a little at a time.
  - f. The interval of one night strengthens the memory.
6. In general, classical rhetors advocated the verbatim memorization method of delivery. One exception is Quintilian, who said that if given enough time he would prefer the memorized method, but if not, the extemporaneous method was best. In fact, he recognized the mastery of the extemporaneous method as the orator's highest reward for his labors.

### The Modern Concepts of Memory

1. Writers giving memory full treatment in their texts tend to view it as the storehouse of one's total experiences.
2. Writers giving memory very little attention tend to view the subject as nothing more than the verbatim method of delivery.
3. The nature of memory is believed to be based upon the theory of memory traces, which are neural pathways over which nerve current passes.
4. Modern memory includes the capacities to recognize, to recall, and to relearn material through the processes of impression, association, or repetition.
5. Memory has come to be regarded by some modern authors as a source of persuasion.
6. Memory now involves not only the speaker's retention, but also includes the listener's retention as well.
7. The most notable modern concepts of memory can be traced to the experimental findings listed below:
  - a. Meaningful material is more easily learned than non-meaningful material.
  - b. Frequent repetition or overlearning aids memory.
  - c. Clear patterns of various kinds aid memory.
  - d. Associations supply common ground between objects which helps the memory call up the object to be remembered.
  - e. Recitation as a direct preparation for a later performance aids memory.
  - f. Distributed exposures or learning over an extended period of time in relatively short sessions improves memory.
  - g. Sleep following learning seems to aid memory more as opposed to learning followed by activity.
  - h. Memorizing a list progresses more rapidly from the beginning than from any other point.
  - i. Memory and opinions. Strong opinions either for or against a certain position in a communication tend to aid the memory.

- j. Avoidance-avoidance conflict (one in which the listener is confronted with two equally undesirable choices) increases memory for short periods of time.
  - k. Retention curve. Memory decays gradually after the initial learning situation and continues decaying until the information is completely forgotten. Unless reinforced in some way, this process generally takes from seven to fourteen days.
  - l. Incidental memory is the phenomenon of remembering that which was not consciously perceived.
  - m. Learning in wholes. Memory is benefited by learning in wholes rather than by parts.
8. Outlining the speech aids to the memory.
  9. Vivid, concrete, and striking images make lasting impressions.
  10. Some modern writers recommend writing the speech out to aid the memory.
  11. Some modern writers warn against writing the speech as a dangerous practice.
  12. Practicing the speech aloud is recommended.
  13. Repetition, restatement, and figures of speech are considered forms of support for the purpose of reinforcing ideas, thereby aiding the memory of the listener.
  14. Most of the modern writers recommend the extemporaneous method of delivery for most speechmaking.

#### Similarities Between the Classical and Modern Concepts of Memory

It can be seen from Chapter II of this paper that Plato and Aristotle dealt mainly with the nature and theory of memory as opposed to artificial memory systems. In the survey of modern texts, several similarities were found between the theories of Plato and Aristotle on memory and the findings of experimental research cited by Marsh, Gray and Wise, A. G. Smith, and Sereno and Mortensen. In explaining his own memory system in Timaeus quoted in Chapter II, page 20, Plato mentioned four principles of memory which also have

been recommended by books in this survey: (1) imagery, (2) repetition, (3) rehearsal, and (4) time interval or distributed exposure.

Aristotle's laws of association have been echoed by Marsh's experimental findings and by Blankenship's chapter on memory.

Another similarity between the classical and modern views of memory was that both recommended the use of the outline. Whether or not the modern authors were aware of it, the outline serves as a device for remembering. One of Aristotle's laws of association is that ideas in a continuous series reproduce one another most easily in the order in which they were formed. Aristotle explained that things arranged in a fixed order are easier to remember than badly arranged subjects. Outlining is also supported by the finding that clear patterns facilitate the memory.

Quintilian's suggestions for practice and his ideas about extemporaneous speaking furnish most of the other similarities between the two periods of rhetoric concerning memory. He was the only classical writer who acknowledged the importance and desirability of extemporaneous speaking. His advocacy of this method is another link between the classical and modern periods of rhetoric concerning memory. However, his conclusion on the subject was that memory was a very necessary element for speaking extemporaneously. The moderns in general indicated that with this method, mention of memory was irrelevant.

Other similarities mentioned less frequently were practicing aloud (Quintilian recommended practicing in a subdued voice); practicing over extended periods of time (Quintilian suggested that the interval of one night could help the memory as if thoughts needed



time to imprint themselves on the mind); and the importance of meaningful material (Quintilian suggested that writing the speech out combined with concentration of the mind aids the memory. Both the classicists and the moderns recommended the use of vivid, striking, and novel imagery, presumably on the theory that these are more meaningful than vague, ordinary images.

#### Differences Between the Classical and Modern Concepts of Memory

Perhaps the most striking difference between the two periods on the subject of memory was their basic view of the importance of memory. It was shown in Chapter II of this study that although there were many deviations and differences, one point of agreement existed between all the classical writers mentioned, which was that all of them expressed their belief in the importance of memory. On the other hand, the survey taken in this study statistically revealed that only 16  $\frac{2}{3}$  percent of the texts considered memory important enough to devote any real attention to it. Such information indicates that memory has indeed lost its ancient significance in rhetoric. At least, it can be said that the importance of memory in rhetoric has become understated and/or underrated in comparison to the importance of memory.

The reason there are such divergent views on the importance of memory is that classical writers generally advocated verbatim memorization, while the modern authors unanimously recommended extemporaneous speaking. This accounts for another major difference between the two periods.

Another difference involved the teaching of artificial memory systems popular in classical rhetoric. Such systems, although still in existence are not taught in conjunction with speechmaking any more.

the only exception to this rule occurring in the survey was Patrick O. Marsh, who included a section on methods of memorizing in his chapter on memory.

Most of the modern writers no longer suggested writing the speech out as Quintilian did, for this practice does not lend itself to extemporaneous speaking.

Quintilian suggested memorizing the speech part by part, but modern experimental evidence cited by some of the modern writers pointed to the fact that learning in wholes is better than the part by part method.

The modern concepts of memory were additionally different from the classical concepts in that much of the modern thought was based upon scientific investigation which the classicists did not have. For instance, moderns have adopted the theory of memory traces as being the key to the nature of the memory. Also experimental findings concerning the memorizing of lists, memory and opinions, the avoidance-avoidance conflict, the retention curve, and incidental memory all represented new ideas resulting from modern scientific research. In addition, some moderns now consider memory to be a source of persuasion in speechmaking—an idea which was not mentioned by the classical writers. The listener's memory is also now included in the modern concepts of memory. Before, only the speaker's was considered.

#### Conclusions and Suggestions for Further Study

It can be concluded that similarities and differences in memory concepts existed within and between the classical and modern periods. The most outstanding similarity during the classical period of memory was the high importance attached to memory. Other concepts

upon which the majority agreed were the use of vivid imagery, the theory of associations, and the advisability of verbatim memorization.

The major similarities on memory from the modern textbook survey included the theory of memory traces, and the advisability of both extemporaneous delivery and outlining. Experimental findings were seen to underlie most of the modern memory concepts offered in the survey. These concepts included associations, vivid imagery, practicing aloud, and the use of the time interval. In addition, the inclusion of the listener's memory as well as the speaker's was a frequently recurring idea.

Through a comparison of the above characteristics, it can be seen that the most significant similarities between the classical and modern concepts of memory involved the theories of association and vivid imagery. Certainly there were other similarities, as has been noted, but the two listed here represented those suggestions upon which there was the most agreement.

The most outstanding differences of opinion within the classical canon of memory itself centered around two areas: (1) artificial memory devices versus suggestions for practice; and (2) writing versus not writing the speech out. In addition, Quintilian broke tradition with the others by recognizing the importance of extemporaneous speaking and by suggesting the use of an outline for practice purposes.

Within the modern concepts of memory the most significant divergence of opinion involves the importance of memory in speech. The majority of the writers surveyed did not give the subject full coverage. Their view appeared to be narrowed to memory as a verbatim method of

delivery. On the other hand, the minority of writers giving memory extensive treatment were those who cited specific experimental studies and/or displayed an impressive knowledge of the subject.

Another difference within the modern concepts of memory was that some authors seemed to consider memory ability a source of persuasion. Others, either by omission or by very brief mention of the subject, did not.

The major differences then between the views of the two rhetorical periods focus upon the views of the importance of memory. The classical writers all agreed upon memory's vital function in the speech process, thereby attaching to it a great deal of significance. The survey showed that most of the modern authors in speech do not treat the subject extensively, which indicates memory is no longer considered of great importance in rhetoric. Artificial memory devices, generally associated with the classical canon of memory, were found to be no longer taught in modern speech texts, with one exception. Writing the speech is no longer recommended by modern authors in speech as it once was by Quintilian, for this method for practice does not lend itself well to extemporaneous delivery. Finally, the classicists generally recommended the verbatim method of delivery which directly opposes the extemporaneous method recommended by the modern authors surveyed.

In addition to the similarities and differences discussed here it is also important to recall from the survey that several new concepts of memory have developed since the classical time, owing largely to experimental investigation. Such additional concepts were the theory of memory traces, the retention curve, incidental memory, the

avoidance-avoidance conflict, and memory and strong opinions.

Therefore, with the foregoing comparisons in mind, it can be seen that this study supports the following hypothesis: that significant changes have occurred between the classical and modern treatments of the rhetorical concepts of memory. It will be the purpose of the final portion of this study, then, to offer suggestions for further study based upon the information gathered in this study.

It was concluded that studies could be made to:

1. determine the effectiveness of artificial memory devices.
2. ascertain what experimental findings are applicable to the speech situation.
3. test such findings in actual speech situations.
4. learn what the modern concepts of memory have in common with the modern concepts of listening.
5. determine if modern learning theory has anything in common with the modern concepts of memory.
6. determine how many of the current authors of speech texts are really familiar with current experimental findings on memory.
7. determine the relationship of memory to persuasion.
8. determine the effects of memory training upon speech students.

Thus, a survey of the classical and modern concepts of memory was made in an effort to determine the similarities and differences between the two rhetorical periods concerning memory. These changes served as the basis upon which suggestions have been made for further study on the subject of memory in relation to the speech situation.

If the suggestions offered herein are of even the slightest help to some student or lead him to further study of this subject area, then the purpose of this study will be more than fulfilled.

**APPENDIX A**

706 W. Healey St.  
Champaign, Ill. 61820  
July 13, 1968

Miss Kathleen O. McKee  
Department of Speech  
Eastern Illinois University  
Charleston, Ill.

Dear Miss McKee:

I apologize for my delay in writing you, but I was again unexpectedly called out of town on business this week. I have read both your papers with interest and I feel they truly merit the praise given them by Prof. Garner and McClarren. I would certainly join Prof. McClarren in urging you to continue your studies in this direction. Your thesis topic seems to me to make a great deal of sense, though I think you will find that when you get into the early modern period the material is going to become almost overwhelming. You are probably right in seeing the classical writers, especially Quintilian, behind such remarks as there are on memory in contemporary texts, but I suspect that the contemporary treatment of this canon, or lack of treatment, is really a reaction to the excessive concern with the artificial memory (mnemonics) in the 16th - 19th centuries. The situation in rhetoric coincides with that in modern educational theory where memorization is strongly discouraged. There is an element of *Zeitgeist* at work here. What intrigues me now, however, is that some computer engineers are starting to construct artificial memory systems along the lines of the ancient mnemonics!

I am afraid that I am not a very good guide to the canon of memory since I have never given any serious study to this topic. In any case so far as the classical material is concerned there is really not much to work with. You can find a survey of the evidence in the article "Mnemonik" in Pauly-Wissowa, Real-Encyclopädie der classischen Wissenschaft, vol. 15, column 2264 f. But as you are already aware, the only substantial document is the discussion in the *Rhet. ad Herennium*. I think you have understood this material correctly; at least, I found no mistakes in your discussion. However, I would suggest a more penetrating discussion of the differences between the *ad Her.* and Cicero on the one hand and Quintilian on the other. Quintilian does not really have too much faith in the elaborate mnemonics that Cicero and the author of the *ad Herennium* believe in, and he clearly is going his own way in giving practical advice. You will find very useful here a recent book by Frances A. Yates, The Art of (London 1966). Miss Yates is primarily concerned with renaissance treatises on memory, but she gives a survey of the classical and medieval material together with bibliographical references. But oddly enough in her chapter on "The Art of Memory in Greece" she either overlooks or ignores the largest surviving discussion of memory in Greek, that in Longinus' *Art of Rhetoric* (cf. the *Real-Encyclopädie*, vol. 13, col. 1411-1413). Since this work has never been translated into any language, you are out of luck if you cannot read Greek; however, this does not really matter since for your purposes it is the Latin tradition which is fundamental and late Greek documents like Longinus' are largely irrelevant.



As Miss Yates remarks, the whole subject of memory in classical rhetoric has been curiously neglected. The man who knows most about it, Prof. Harry Caplan of Cornell University, has, I believe, never published anything on this topic, but you might well write him and ask for his advice. Since I assume you don't know Greek or Latin, you cannot really go much further in this direction though I think a good solid dissertation can still be written here. It may well be that Miss Yates' discussion will be an adequate foundation for your own work. What I would suggest is that you try to make an accurate and comprehensive assessment of the actual influence of the classical tradition on contemporary rhetorics as you started to do in your paper for Dr. Garner. You should also extend this investigation back in time to earlier works since writers of textbooks tend to perpetuate what they themselves learned from their teachers. I think it would be important to discover at what point the "artificial memory" was rejected as the principal component of the canon of memory since it is my impression from your citations that the fundamental difference between the classical and the modern approach lies in the attitude toward mnemonics. There are of course similarities, especially with Quintilian, but are these coincidental or the result of direct or indirect influence? There is also some classical material on extemporaneous speaking which may or may not be relevant; see the remarks on Alcidamas in George Kennedy's Art of Persuasion in Greece. It looks to me that contemporary textbook writers don't really know what they are writing about in their treatment of memory. Here you would be very wise to examine work in psychology as you say. I think the moment is right for a reformulation of the canon of memory. A combined historical and psychological approach to the subject such as you propose is the soundest method and ought to produce highly informative, and I hope, influential results. I wish you the best of luck in your undertaking.

I don't think there would be much point in our getting together at this time. I don't have much else to say in general and have no specific comments on your papers other than suggesting a more detailed and sharper discussion of the Ad Herennium and Quintilian. It would be better and more efficient if we could discuss a draft of the material from the classical tradition which you want to incorporate in your dissertation. You should first read Miss Yates' book and the articles she refers to and also the articles in the Real-Encyclopädie der class. Altertumswissenschaft. I think you will then have a clearer perception of just how you want to present the classical material, and we could have a more productive conversation. But if you think you would still like to talk with me later this summer, I will be happy to do so. You have my telephone number and my address; I expect to be in Champaign continuously from about August 15.

Sincerely yours,

John J. Bateman

CORNELL UNIVERSITY  
ITHACA, NEW YORK 14850

DEPARTMENT OF CLASSICS  
Goldwin Smith Hall

August 2, 1968

Dear Miss Makae:

I am sorry to be so tardy in replying to your letter (I arrived in Ithaca from Seattle only last week) — and to have to write that at present I have no copy of the paper, "Allegoria: Trascursione of Eloquence," to send to you. My only MS. of it containing the numerous notes is at present in the hands of the printer (Cornell University Press), and I am at this very time working on the (galley and) page proofs; the paper is one of the rhetorical studies soon to appear (when precisely I do not yet know) in a volume entitled Off Eloquence. If you are in no hurry, and can wait a few months, I may be able sometime before the book appears in print to produce a galley copy from the Press to send to you. Please let me know.

My kind regards to Professor Bateman; and best wishes to you in your work.

Sincerely yours,

BRANDEIS UNIVERSITY  
WALTHAM, MASSACHUSETTS 02154

DEPARTMENT OF CLASSICS

October 27, 1968

Dear Mrs. McKee:

I am more so sorry - in addition to the one batch of galley's which I am now using for corrections of the page-proofs, the only others are in the hands of the two editors of the volume, who are attending to the same task. I fear that we must now wait until the page-proofs have been sent to the printer, and in the hope that we may be permitted to hold on to one batch of galley's; or since the book may (?) be out within a few months, we shall have to wait until it appears. I regret this unavoidable postponement very much.

Miss Frances Yates of the Warburg Institute, London, England, has recently served as a Fellow of the Society of the Humanities at Cornell, writes me that she is now on her way back to London. You have doubtless read her excellent studies of Memoria.

If you have the time I hope you will be so good as to inform me in which issue of Speech Monographs Kenneth Hauser's study of Brooks appears. (Frances was one of my students at Northwestern during the summer of 1935)!

With every best wish,

Cordially yours,

APPENDIX B

## LIST OF MATERIALS USED IN THE STUDY

### Classical Sources

1. Plato Lesser Hippias.
2. \_\_\_\_\_ Phaedrus.
3. \_\_\_\_\_ Philebus.
4. \_\_\_\_\_ Republic.
5. \_\_\_\_\_ Timaeus.
6. Aristotle De anima.
7. \_\_\_\_\_ De Memoria et Reminiscentia.
8. \_\_\_\_\_ Topica.
9. Rhetorica ad Herennium. Translated by Harry Caplan.
10. Marcus Tullius Cicero De Oratore.
11. Quintilian Institutio Oratoria.

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3. Blankenship, Jane. Public Speaking: A Rhetorical Perspective. New Jersey: Prentice-Hall, 1966.
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14. Lomas, Charles W., and Richardson, Ralph. Speech: Idea and Delivery. 2nd ed. Boston: Houghton Mifflin Company, 1963.
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20. Ogden, C. K. Opposition: A Linguistic and Psychological Analysis. Intro. by I. A. Richards. Bloomington, Indiana: Indiana University Press, 1967.
21. Oliver, Robert T. Effective Speech for Democratic Living. New Jersey: Prentice-Hall, 1959.
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23. Redding, W. Charles, and Sanborn, George A. Business and Industrial Communication: A Source Book. New York: Harper and Row, Publishers, 1964.
24. Samovar, Larry A., and Mills, Jack. Oral Communication: Message and Response. Dubuque, Iowa: William C. Brown Company, 1968.
25. Sereno, Kenneth K. and Mortensen, C. David. Foundations of Communication Theory. New York: Harper and Row, Publishers, 1968.
26. Smith, Alfred G. Communication and Culture: Readings in the Codes of Human Interaction. New York: Holt, Rinehart and Wilson, Inc., 1966.
27. Smith, William S., and Canty, Donald J. Method and Means of Public Speaking. Indianapolis-New York: The Bobbs-Merrill Company, Inc., 1962.
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