

"NEW THINGS AND OLD"

Benedict Thornett, O.P.

"Great is the power of memory, exceeding great, my God—an inner chamber large and boundless! Who has plumbed the depths thereof? Yet is it a power of mine, and appertains to my nature. . . . A great admiration rises upon me, astonishment seizes me. And men go forth to wonder at the heights of mountains, the huge waves of the sea, the broad flow of rivers, the extent of the oceans and the course of the stars—and omit to wonder at themselves."

St. Augustine: Confessions 10, 8-15.

MAGIC

RECENT YEARS have seen several new books on memory improvement. When their publishers advertise: "You, too, can have a super-duper memory. Just clip our coupon and send for———", an average reaction is: "Is it a fake or is it magic?" The truth of the matter is that it is neither. Upon analysis such methods and systems turn out to be nothing more or less than imaginative developments of age old principles known to St. Thomas and Aristotle. And while it is true that native powers of memory, like other endowments, differ from person to person, there is no one with a poor memory who could not enjoy substantial returns from a little instruction and practice.

DEFINITION

Memory's job is recognizing something past as past. It announces that we have seen or heard or understood something before. Its adverbial equivalent is *again*. Three steps are always involved: intake of information, its storage during a time lapse and its recall and recognition as past. To illustrate the difference

between imagining and remembering Aristotle talks about a painting of an animal. Suppose today that two people look at a painting of a horse. One says: "What a beautiful painting of a horse." The other says: "What a beautiful painting of Man O' War." The first sees only the painted horse. The second sees it as the image of a real horse. In the same way memory adds a new element to imagination. If you are asked to picture a rose or a cigarette, the image of both these objects is easily brought before the mind, unattached to any temporal element. This is merely imagining. But if you are further requested to picture the last rose you saw, or the last cigarette you smoked, immediately a temporal element is introduced and you are remembering.

CAUSE OF RECALL

When we apprehend several things in succession, a sequence is set up in the soul, so that when we recall them they tend to return in the order of their first occurrence. An exciting play in a ball game might involve seven or eight temporally distinct parts. When reviewed later the parts will come back in order. The time sequence is only one of several types that may be set up. By following a sequence, something momentarily lost from memory may be sought and found. The starter in a series is like the beginning of a blazed trail. If you are at the beginning and if the blaze is good enough, you can find the cabin in the forest. Such a search was called by St. Thomas and Aristotle reminiscence, a term that hasn't quite the same meaning today. Perhaps recollection or conscious recall or simply recall would be a better rendering.

KINDS OF SEQUENCES

There are, as we said, several types of sequences depending on whether the starting point is a known time or a known thing. For example, on Saturday one may recall what he did on Wednesday by saying: "Let's see, Sunday I did this, Monday I did this, Tuesday I did this, until, following established sequences, he arrives at the answer. Or he could have worked back from Saturday.

If the starting point is a remembered thing, the procedure may be by reason of similarity (of faces, a golf swing, etc.) or contrariety (Hiss to Chambers) or closeness. Closeness may be of place (Library of Congress across from the Capitol), time ("I had just finished the dishes when the lights went out"), kinship

(father-son), some social bond (members of a club, band, team, firm), etc. The philosophical explanation is that our reaction to similar things is the same, our reactions to contraries are simultaneous, while in the case of close things, since in each of them something of the other is considered, when the one is apprehended the part left outside, if small, subsequently occurs to us.

MNEMONIC UNIVERSALS

Aristotle says that the starting point of a recall should be something universal, not the universal spoken of in logic, i.e. something predicated of several things as animal is predicated of ant, elephant, snake, etc., but something which customarily reminds us of several things. For example "channel" might remind one of the English channel or by sound-similarity of the perfume Chanel No. 5. The English Channel might recall the R.A.F. or Dover's chalk cliffs; chalk might recall powder or flour; flour a cake, etc. Chanel No. 5 might recall by contrast Limburger cheese. Limburger might recall crackers or Charles Lindbergh. Lindbergh might recall his plane, the Spirit of St. Louis and then the city or the king, or the English channel again or the kidnapping of Lindbergh's son. Here "channel" is a kind of universal with regard to all the rest. By recourse to "channel" a person thus minded can recall any of them.

ASSOCIATION

The most basic factor in developing a good memory is association. Association is connecting or tying a new bit of knowledge to something we already know. When a man introduced to another named Gillette asks: "Oh, any relation to the razor Gillettes?" he will probably remember the man's name because he has associated it with something familiar. Associations are often formed without our averting to what is going on, or we can form them consciously. Actually, association is just the present day name for the sequences spoken of by St. Thomas and Aristotle. While their approach seems to suggest a longer series, it includes as well the single-step sequence that the word association brings to mind. A sequence is just a series of associations.

If no association between two things readily suggests itself, then think about the different aspects and details of each. It might help to run through the following list of possible connections.

1. Synonym: man, fellow, guy, chap, gentleman;
2. Homonym: beer—bier, gavel—gravel, custard—Custer.
3. Universal-particular: vehicle—truck, car, wagon, motorcycle, bike, scooter, sled;
4. Whole-part: car—tire, windshield wiper;
5. Cause-effect:
 - a. end: shelter—house
 - b. maker: carpenter and hammer—house
 - c. materials: wood—house;
6. Similarity: as above;
7. Contrast: as above;
8. Closeness: as above;
9. Matching pairs: ham and eggs, picture—wall;
10. Substitution: monkey—lamp by picturing him with bulbs in ears and chain from mouth;
11. Subject and proper quality: lead—heavy, steel—hard;
12. Accidental associations: they just happen to go together due to some contingent occurrence that could have been otherwise:
 - a. objective: due to some historical fact: Steve Brodie—Brooklyn Bridge;
 - b. subjective: due to some personal incident: the place where a man and his wife first met (incident he calls it!).

APPLICATIONS

The applications of this idea of association are many and varied. A simple example is foreign language vocabulary. Of course Romance-language words are easily learned through their English descendants, provided of course we are familiar with the descendant. A Latin word with no helpful descendant is *galea*: helmet. A few seconds' concentration on the two words might bring to mind a ten-gallon hat. If this is noted, when seen again *galea* will evoke the image of a ten-gallon hat.

STORIES AND INITIAL WORDS

Associations can be used to link the items of a list. Simply connect the first item to the second, the second to the third, etc. As a refinement a story may be made of the words in the list or substitutes for them, adding a mere framework—as spare as possible—of insignificant, small and abstract words. The action and logic of the story will keep the chain flowing smoothly. An instance would be a list of the past Chief Justices of the Supreme Court: Jay, Rutledge, Ellsworth, Marshall, Taney, Chase, Waite, Fuller, White, Taft, Hughes, Stone, Vinson. First put the names in a column and beside them dash off as many loose homonyms as you can recall, e.g. Jay: joy, jade, jail, blue jay; Rutledge: rat,

rut, rudder, root. When enough ammunition has been stacked the fun begins. The point is to come up with a fairly convincing story or at least fabricate some footnotes to explain away the one you have managed to come up with. Here is a story for the Justices.

The jail door rattled shut on the robber of the *Wells-Fargo*. The marshal of Charlestown had chased him, then waited for the full moon, until it showed a white tuft above the huge stone wall of the vineyard.

An alternative, check, or help to solidify a list like this is the use of initial words, i.e. words composed of the first letters of the items. It is the reverse of what the Nucoa oleomargarine advertisers have done with their product's name: N-U-C-O-A—"the new ubiquitous comestible over all." They had to stretch it a bit, but the slogan is catchy. Usually the list initials can be broken into groups of two, three or four letters and a meaningful and easily pictured phrase or sentence composed of words containing the groups.

The same system can be used for memorizing a talk. Once it is written, familiarize yourself with it by reading it over several times to get the gist. Next, break the thoughts into groups and find each word, a key word, that will epitomize each paragraph. Link these as shown above. When the points are recalled, the details will come to mind and fall into place. And, oh yes, lest that important first point be lost, link it to some salient fact about a prominent person you know will be in the audience.

These methods can be simplified and varied to suit the materials to be memorized and the individual's capabilities and turn of mind. Association is a highly personal thing. The patterns of one's personal thoughts, familiar enough to oneself, constitute a context that outsiders would find difficult, if not impossible, to fathom. Further, the facility and intuition gained from practice will streamline the procedure.

POINTERS

In his book *On Memory and Reminiscence* Aristotle derives from his discussions several rules for remembering.

1. PUT IN ORDER THE THINGS YOU WANT TO RETAIN.

Well ordered things are easiest to recall, e.g. mathematical theorems where each step concludes from its predecessor. Order is defined as any disposition according to before and after rela-

tive to some first thing. For example, the players on the New York Yankees baseball team might be arranged according to the batting lineup or by fielding positions or in the alphabetical order of their names or by batting averages or ages or heights, etc., etc. There are all sorts of orders. Cicero suggested imagining certain ordered places where the images of the things we want to remember are distributed in order. Lining up the items can save a lot of time.

2. PROFOUNDLY AND INTENTLY APPLY THE MIND.

As mentioned above, reminiscence depends on sequences left in the soul from our impressions of things. These sequences are established more or less readily in different people and have different strengths. For some people one swift consideration can fix a sequence that would take a lesser mind a number of repetitions. But perhaps more important than native endowments is concentration. Things seen or thought superficially and lightly, slip quickly from the mind whereas intense concentration will make the matter stick. The mind has been compared with a magnifying glass used to start a fire from the sunlight. Out of focus the rays will hardly warm, but concentrate the energy on a pinpoint and a puff of smoke will appear almost instantly. Such is the power of concentration and such is the energy-economy it assures.

Very often the reason we cannot recall something is simply because we never saw or heard it clearly in the first place, as happens all too frequently in introductions. The remedy for this is to be interested and energetic enough to observe what you want to retain. Make up your mind that you will remember. Recall the reasons why it is important to remember this thing. The small amount of effort needed to establish the habit of being observant is wisely spent.

One exercise frequently given for sharpening observation is describing things from memory—recalling in detail the features of a person you know, listing the things in your room or the objects in an often passed window display. Put it in writing and check the first attempt the next time you come across the real thing, noting the discrepancies. Later make another list, then check again. Repeat the process until the list is complete. This model exercise should suggest others in a similar vein. In time, observation will become automatic.

Association makes it much easier to concentrate than the brute force method of remembering purely by rote. The human

mind tends to stray from the monotony of mere mechanical repetition. This is not to say that we should pamper our memory. Will power is of vital importance. But the fact remains that associations, if they did nothing else, would, by adding interest, assure concentration. It works both ways—association and concentration help each other. This is what the English teacher has in mind when he tells his students that to make a new word their own, they need only use it in three sentences of their own construction. A new fact, it is said, belongs to you only if you use it, just as we best remember experiences in which we have taken an active personal part. We are especially inclined to remember our own creative inventions. Moreover, devising them satisfies in a small but real way our basic urge to create. The creative factor can transform many a drudge into an entertaining game.

3. MEDITATE OFTEN ALONG THE ORDER ESTABLISHED.

Habits are strengthened by repeated acts. Repetition, the mother of learning, will gradually decrease recall-time and groove the thought channels deeper and deeper. Experimental tests have shown that it is better to space the rehearsals of a piece to be memorized over a period of several days than to try to get it perfectly at one sitting. Most people never recall perfectly after the first try anyway, and this way you can concentrate on the forgotten tough spots. This arrangement also utilizes the subconscious which continues working on the matter in the spaces between rehearsals.

4. START AT THE BEGINNING.

This rule embodies what was said earlier about sequences and starting points. Recall is quickest and best when we begin at the outset of the whole business and follow the established grain, as when we find the title of a song by singing through to the verse containing it. Perry Mason helps his witnesses recall evidence in this way. Often several teeth-gnashing minutes are wasted locating a lost fact that could have been had quickly if only we had asked: "What would be the smart place to start looking?"

5. FIND APPROPRIATE AND UNUSUAL IMAGES FOR THE THINGS TO BE REMEMBERED.

"Human knowledge," says St. Thomas, "is more potent with regard to sensible things" (i.e. things known by the five external senses). Due to the role of matter as a component of man's na-

ture (in an ever intriguing contrast with its partner component, the spiritual soul), all human knowledge derives from the intake of the five external senses which feed the imagination and the other internal senses. The objects of the memory are the same as those of the imagination with the one new twist added—"as past." But the objects of the intellect are only incidentally memorable insofar as they are connected with sensible images. Hence we find ourselves much less capable of remembering things of a subtle and spiritual consideration than gross and sensible things. Cicero says: "Spiritual ideas slip easily from the soul unless they are tied, as it were, to corporeal images."

Things, then, that are abstract and hard to picture are more difficult to associate. To obviate this difficulty the abstract meaning may be replaced by something concrete that will recall the abstraction. The replacement may be a symbol (mule-stubbornness), a vivid particular instance of a universal abstraction (red tape) or merely some loose homonym. The more vivid the picture, the more action and violence involved, the more details filling it in, the more personal you make it, the better it will be. The process is called concretizing. It is all the more valuable as a large number of words describing a situation can be replaced by a fairly simple picture. This sort of thing is part and parcel of our everyday idiom.

Speaking of substituting the concrete for the abstract brings up an allied consideration—bridging, or mediate association. An immediate association is formed by finding one of the many possible connections that will directly link two items. It is like trying to fit together two unattached jigsaw puzzle pieces by turning them and matching their various faces. But it is a different matter if our problem is to connect two pieces which will not match at any angle. In this case we build on to either piece until we see a spot on one assembly that matches a spot on the other. The latter case describes mediate association. Whenever two items are "link resistant," i.e. no direct tie is apparent between them, they can be indirectly linked through a third or middle item that connects (in different connections) with each of the two. To build this type of bridge or adapter, start at one item and recall as many associated things as you can, keeping an eye out for ties to the other. If necessary switch to the other item and build it out. It doesn't take long to find a "mutual friend." Finding the bridge is like finding a middle term to make a syllogism. It takes and makes for quick wits.

The fifth pointer calls not only for images but for unusual images. The unusual makes us stop and wonder and takes a strong hold on our attention. Thus the unusual makes more of an impression on the memory. This is why children, new arrivals in the world, wonder at things as if they were unusual and so retain them firmly. Some modern experts place great emphasis on making the images as ridiculous as possible, ranking this factor among the top memory helps. To obtain the desired effect picture the items out of proportion, exaggerating the number of items, substituting one item where another would normally be used (chandelier in a coal mine), etc.

Here is a final example illustrating several of these pointers for a good image. You met a man at a party. You remember what he looks like and that he is an oil man from Texas but keep forgetting his name—Campbell. You might picture yourself and Mr. Campbell with an extra large Campbell's soup can (the familiar red and white label) attempting with frantic screams to cap one of his huge wells that has just come in with a roaring gusher of cold vegetable soup that smells and tastes delicious—but is drenching the both of you.

CONFIDENCE, MENTAL BLOCKS, ABSENT-MINDEDNESS

One last word might be said about confidence, mental blocks and absent-mindedness. Confidence is absolutely essential to a good memory. The surest way to crush your memory is to keep repeating: "I can't remember, I just can't remember." Keeping a file and taking notes are very useful, but to be forever reaching in your pocket for a pencil and pad is a crutch that merely postpones the issue while neglected mental muscles atrophy. Memory likes to be trusted.

Lack of confidence or fear of forgetting is one cause of mental blocks, as will readily attest the man who walks from the quiz show with the consolation prize under his arm and the answer still on the tip of his tongue. How often do we know a person's name as well as our own, yet forget it when introducing him? Here are a few tips on mental blocks. First, try to think around the blocked object. Think of as many related things as possible and it will often pop into your mind. If this fails the next best thing is to shift your attention elsewhere or go on with the story. If the blocked item doesn't turn up of its own accord,

it probably will when you try again later. Any kind of physical activity will alleviate the anxiety and tension behind a block. Keeping blocks from forming is one reason for gestures. But the best remedy by far is to develop a habit of confidence and banish the fear of forgetting.

Absent-mindedness is a different sort of culprit. With a mental block, the information we want is there—we just can't get it out. But with absent-mindedness you don't remember because you acted mechanically and never noticed what you did. The cure, of course, is to be present mentally when you perform the action, and once again association can help. When you put down your glasses, associate them with the table. When you go out, associate the key and the door, or the key and anything else. The thing that counts is not so much the association as the momentary attention it assures. The same goes for turning off the gas or iron or setting the alarm. To avoid leaving things behind, get in the habit of associating them with the door knob and checking it as you leave.

EASE FOR EFFORT

We have seen that a poor memory can be improved and have heard some of the experts' suggestions on how to go about it. But it is not enough to read and nod in agreement. Improvement will come only through practice—slow at first, then increasingly interesting as facility grows and results become apparent. Any expert pianist or crack typist will testify that flawless and effortless performances come only as the fruit of practice and more practice, patience and perspiration. Such are the demands of a good memory: is it worth the effort?



Notwithstanding what certain thinkers have maintained, we are not born endowed with knowledge or with the memories and dreams of a life already lived. The mind of the child as it comes forth from its mother's womb is a page upon which nothing is written. From hour to hour as it passes on its way from the cradle to the tomb its eyes and other senses, internal and external, transmit the life of the world through their own vital activity and will write upon that page the images and ideas of the things among which it lives. Hence an irresistible instinct for truth and goodness turns "the simple souls that nothing knows" upon the things of sense. All these powers of feeling, all these childish sensations, by which mind and will come gradually to their awakening, need to be educated, trained and carefully guided (Pius XII).