

The ancient arts of memory improvement

"The main course was just being served in the massive, ancient Greek hall when the expansive ceiling collapsed, crushing every one of the many guests in their seats. Not a single attendee survived, except for the poet Simonides, who had left the room just before the tragedy. In the days that followed, workers who lifted the heavy rubble found that the victims were so horribly disfigured that they were impossible to identify. But Simonides was able to help. By mentally walking alongside the long table, he found he could reconstruct which guest had been sitting in which place. Based on where the bodies lay, he named each one of the deceased."

Michael Spang, Scientific American Mind, Vol 16(2) 2005.

The grim story above was recounted in a book on learning and memory by the Roman rhetorician Cicero four hundred years later. In Cicero's day, the lawyer and politicians of the Roman Empire were able to advance their careers by using such techniques to memorise long, and impressive, speeches. The ancients respected memory greatly. When you consider how they lacked the memory storage systems that we currently have at our fingertips – computers, large collections of books and publications, the Internet, databases – it is easy to see how important it was to develop the faculty of memory in the past. Indeed, before the printing press, culture was transmitted by word of mouth. Important knowledge, such as religious books, were routinely memorised whole.

Basically, the memory tricks of the ancients involve harnessing the power of your imagination in order to remember things. The basic rule here is that in order to remember anything you like, you just use your imagination to link it to some fixed or known structure that you are already familiar with, such as numbers, letters of the alphabet, or the layout

of a physical location.

In a sense, this technique is using your whole brain: the structured left side, and the imaginative, novel and spatial right side. Psychologists now know that facts are more likely to be remembered if they are given meaning. By using your imagination you are giving meaning to the facts you're trying to remember. So, remember that even though I call these techniques "tricks", don't let that fool you into thinking that they are somehow simplistic. In fact they are based on a solid understanding of how the human brain works!

Let's see what specific tricks the ancients devised based on this idea.

The Greeks

The Greeks worshiped memory. Literally: they named a Goddess after it: Mnemosyne. It's from this word that we get the word for the Greek's memory tricks: Mnemonics. The ancient Greeks regarded Mnemosyne as the mother of the nine muses: the goddesses who inspire love poetry, epic poetry, hymns, dance, comedy, tragedy, music, history and astronomy. In other words, the Greeks respected memory greatly and saw it as the wellspring of creativity and culture. The Greek senators would use these techniques in order to learn vast swathes of information that they could reproduce at will in their speeches, rising to positions of power.

The link system

The link system is very simple and is best used to memorise short lists of items, such as a shopping list. You simply link the items to be remembered into a vivid and dynamic story.

Let's take an example. Imagine you had to remember the following list of items: A piece of chalk, an umbrella, a pair of scissors and a plastic duck. What you must do is construct an imaginary story in your mind that links an image of each of

these items. For example: Imagine standing at the top of a chalk cliff, you open up an umbrella and use it as a parachute to glide down to the beach at the bottom of the cliff. On the beach is a crab who tries to nip at your toes with claws that are actually made of scissors. Your attention is only drawn away when you see a giant yellow plastic duck floating past on the sea. A variation on this is to link your list to numbers. First of all you need to make each number into an image. I suggest the following system of images that tend to look like each number, but you can use what works best for you.

- 0 = A hula hoop
- 1 = A pen/pencil
- 2 = A swan
- 3 = A flying bird (tilt your head to the right!)
- 4 = A pair of legs with one foot off the ground
- 5 = A pregnant woman
- 6 = A monocle
- 7 = A boomerang
- 8 = A snowman
- 9 = A tadpole
- 10 = A knife and plate

You then use the numbers, in order, as images to connect to your list.

The Romans

The room system

Probably the greatest memory trick devised by the Romans was the Room system. This system is based on the fact that we have a very good memory for the layout of places we are very familiar with. Its based on the way that Simonides, in the story at the beginning of this chapter, was able to remember the guests at the banquet because of their positions around the table.

Choose a place that you can visualise well in your mind and that you are very familiar with its layout. This could be your house, your school, workplace or the local shopping mall. Alternatively you can imagine a room or place that doesn't exist! Just make sure that you have the layout of this location very clear in your mind. Now, mentally walk through this location and place the items to be remembered at various points. If possible, use your imagination to link them to that position. Then, in order to strengthen the memory, simply imagine walking around this location as often as you can. The beauty of this technique is that you can do it anywhere.

Medieval Memory Masters

If the arts of memory faded from sight with the decline of the Roman empire, they were to rise again across medieval Europe. However, now they took upon the character of the medieval mind and hence can now seem fairly alien to our own way of thinking. In particular, and somewhat harking back to Plato, the memory arts were now closely associated with the divine. Therefore, the line of thought that the medieval practitioners were taking was to uncover natural orders which would enable Human memory to operate in harmony with universal laws. The basic philosophy behind this impulse – to uncover natural laws – is not dissimilar to our modern, scientific way of thinking. However, in practice it manifested during this period in more mystical or even magical ways of thinking.

A good example of this is the memory system developed by Ramon Lull, known as Lullism. Lull was a 13th Century Majorcan who spent his youth working as a troubadour and courtier. After a spiritual experience whilst on top of Mount Randa, Lull believed he had perceived the attributes of God and he set out to develop a sort of elemental cosmology of nature inspired by this experience. At their heart, Lull's arts are based on the nine attributes of God: Goodness, greatness, eternity, power, wisdom, will, virtue, truth and glory. Lull claimed that because these concepts were fundamental to nature, they should

form the natural structure for the study of any subject. Such an interest with paying attention to the names or attributes of God may sound strange to the modern mind, but it was similar to the practices of the mystical branches of both Judaism (the Cabala) and Islam (Sufism) that were contemporary with Lull. Lullism became ever more complex with varied diagrams depicting the inter-relationship of these concepts.

At a practical level, Lull believed in two methods for improving memory. Firstly, medicines, although he does not recommend taking this route. Exactly what medicines he means are now lost to us, as is most of the medieval herbalist tradition. The second method was frequent meditation upon what one wishes to remember. In other words: repetition; a fundamental, if simple, part of building memory. However, tantalisingly there is a lost work by Lull called 'The Book of the Seven Planets' which is said to contain the true method for memory enhancement. Whilst we no longer know exactly what this method consisted of, the emphasis on the number seven seems important. Interestingly, psychologists now know that seven is a fundamental number to our memory system: it's the maximum number of 'bits' of information the average person can hold at once in their short term memory.

The number seven was also important to the 16th Century memory theatre of Giulio Camillo. Camillo (1480-1544) was famous and highly regarded thinker in his time, forgotten not long after his death due to his lack of published materials, and to the fact that his most famous creation, a real theatre of memory, was soon lost forever.

Whilst Camillo's theatre is now lost, and we lack direct drawings or paintings of it, we can piece together what it was like from various accounts. It was built out of wood, and could admit two people. The person(s) would stand on its empty stage and look out across its circular auditorium – where the

seats would be in a normal theatre – a little bit like the design of an ancient Greek or Roman amphitheatre. The person would see seven columns of 'seats', each adorned with an array of images, ornaments and even little boxes. The theatre combined the ancient Greek idea of using places to remember concepts, with the medieval idea of a carefully worked-out cosmology to represent the universe. It was said that by just standing on the stage of Camillo's memory theatre and looking out upon these seven columns of information, one would "be able to discourse on any subject no less fluently than Cicero."

The theatre was first displayed in Venice, and became the talk of Europe. The King of France was said to have become fascinated by it, and it was later displayed at the French court in Paris. Indeed, the King of France was said to be the only person in the world to whom Camillo had divulged the secret of how the theatre really worked. However, soon after Camillo's death it was lost, never to be discovered.

Robert Fludd (1574-1637) was a doctor, astrologer and mystic who also devised a memory theatre system. Fludd was also an adherent to the medieval idea that man was a reflection of the overall order of the universe. He divided memory enhancement into two categories: the round and square arts:

"Memory can only be artificially improved, either by medicaments or by the operation of the fantasy towards ideas in the round art, or through images of corporeal things in the square art."

Fludd believed that the square art – the use of real places in which to imagine one's memory images – was the superior method. He believed that using imaginary places made memory enhancement more difficult, and may even confuse the memory.

It's because of this insistence of the need to use real places that suggests Fludd's designs for a memory theatre were at the

least intended to be constructed for real, or perhaps even were. It's even been suggested that the design of Fludd's theatre reflected of the design of Shakespeare's original Globe theatre in London. Fludd's design incorporated the zodiac, as well as a number of doors and columns to all act as memory loci. The inclusion of images of the heavens was, similarly to Camillo's theatre, an attempt to reflect the grand design of the universe in the Human mind, and therefore to align the memory improvement strategy with the fundamental laws of nature.

In a strange way, the approach to memory and way of thinking adopted by the ancient Greeks is closer and more understandable to us than the more recent medieval memory philosophers, with their complex and mystical theories which are now only partially understood.