The MikeMechtnon Method

HOW TO MEMORIZE LONG NUMBERS LONG-TERM AND WITH ACCESS TO THE INDIVIDUAL DIGITS

The Major System

In the sequel the major system will be used modulo 100, so that priceless = price = pr = 94.
Our counting always will start with 0 (as opposed to the common way of starting with 1).

The Places and their Owners

The basis of the method is to memorize a set of 100 places so that you can easily and directly know place No. x ($0 \le x \le 99$). It is important to be able to mentally access place No. x without having to run through adjacent places. I always take real houses for the places.
To accomplish this task take a stroll through your neighborhood, looking at buildings which are interesting enough to be remembered long term and which can easily be distinguished from their adjacent houses.
It is a good idea to have five or ten houses in one road, and it is not a very good idea to get them too close together. To swiftly find your house No. x there should be no danger to confound it with other houses. The hundred houses form a district and should have very clear boundaries from adjacent districts.

How to accomplish this task: In ESELS WELT you will find the paragraph 3.2. called *Halbwirkliches: Personen als Hausnummern* (= Halfreal Objects: Persons used as House Numbers):
You need a set of 100 persons whose names range from 00 to 99, like Susan = 00, Stan = 01, etc. Imagine that these persons are the owners of the said houses.
Now it will be easy to know the number of any house if you are in front of it because it is the number associated with its owner. On the other hand, to visualize instantaneously the house for a given number (= a given name of an owner), you still will need some exercise.
This numbering of houses by use of major code and persons solves a problem which puzzled mnemonists for many centuries: How to control mentally their ever more complex routes.
If you need more than 100 places, start afresh in an adjacent but clearly different district, and take the same persons. No problem to imagine Buzan = 90 to own more than one building in Hamburg!
The districts like the houses are numbered beginning with 0, so that house No. 90 = house No. 90 in district No. 0, house No. 190 = house No. 90 in district No. 1, etc. In other words: Do count the houses modulo 100.

So much as to the houses. Their owners are not only a means to name and find places. They will be part of the imaginary scene which we associate to the houses. But I do not imagine the owners to live in the houses. They are just owners and so they will sometimes come to speak with the persons in charge of the houses and look if everything is going well.

The single Aspects

As we take the major system modulo 100, to associate each house with a peg word will lead to a 200 digit number. This will be done systematically.
Let us suppose that
Aspect 0 = the function of the house (e.g. a theatre or a school or a church, etc.)
Aspect 1 = an attribute of the house (e.g. ugly, empty, Italian, etc.)
Aspect 2 = an object or some material characteristic of the house (e.g. a chimney, an elevator, steel, etc.)
Put together aspects 0 – 2 describe the house (e.g. an Italian church with a big chimney, an empty school with an elevator, an ugly theatre made of steel).
Aspect 3 = a person who lives in the house and is responsible for it (here you need a second set of names from 00 to 99)
Aspect 4 = an activity this person is engaged in (e.g. to spit, to sleep, to tremble, etc.)
Aspect 5 = clothing of that person (e.g. a helmet, a t-shirt, a pyjama, etc.)
Put together aspects 3 – 5 describe a person (e.g. Robert asleep, his helmet lies at his side; Mary, wearing a t-shirt, and spitting to the ground, Stan wearing a pyjama, trembling, etc.)

It is up to you to organize things in a different way and going for more than just 6 aspects (= 1,200 digits).

My friend Mike Mechtnon who invented this method in 1990, used 10 aspects. I use 25 aspects but I am not certain if his original approach is not better, after all. The problem is that to imagine 10 aspects can be accomplished on the spot, but to imagine 25 aspects is quite an effort. Certainly the beginner should not start with so many aspects lest he looses control over his own imagination.

I have mastered the matter with 25 aspects for two districts and if I am asked for digit No. x = 2536 of the number π, I proceed as follows.
I divide 2534 by 2. Result: 1266.
Now 1266 = 12 66 = aspect No. 12 in house No. 66 (of district No. 0).
In my system aspect No. 12 = an animal which lives in the house or in its garden or plays a role in that place.
The question: “What animal is present in the house No. 66 of district No. 0?” immediately leads to “Gottesanbeterin (English: mantis) = 71”. This is the double digit No. 1266.
As 1266 is an even number the 2536^{th} digit of π is not 7, but 1.
Note 1: It is not sufficient to remember the image of that animal which in German language has two different names (Gottesanbeterin / Mantis). This image is at best a means to remember the word .
Note 2: You can divide x – 2 = 2534, or you can divide x = 2536 and then subtract 1. The reason for this way of dividing is that the common numbering of the digits begins with 1, whereas we start with 0. If we started with 1, the whole system would complicate.
Mathematically speaking, what we have to compute is (x – 1) div 2.

Another example:
What is the 9379th digit of the number π?
(9379 – 1) div 2 = 9378 : 2 = 4689 = 46 89, and 46 mod 25 = 21 lead to aspect No. 21 in house No. 89 (of district No. 1). My aspect No. 21 is some food consumed in that house. The question: "What food is consumed in that house?" leads to: "Schaschlik (English: shashlik) = 66. The 9379th digit is 6.

Now suppose that we had learned 100,000 digits of π by this method, and had to determine the 67,533th digit.
67 div 5 = 13 means "district No. 13".
67532 : 2 = 33766 = 337 66, and 337 mod 25 = 12 lead to the double digit No. 33766 = aspect No. 12 in house No. 66 (of district No. 13). Again we had to look out for an animal to find the answer.
By now you have seen the advantage of mathematical counting (beginning with 0): It makes the mathematical operations div and mod work.

The Aspects taken together

Let us confine ourselves to the six aspects as defined above (generating 600 double digits). What do they generate inside the houses? Well, they have to combine freely, so that the matter looks like this:
An empty theatre with an elevator, run by Michael D. who normally goes around in a pyjama, spitting on the ground; an ugly church made of steele, run by Roswitha who uses to sleep with a helmet; an Italian school with a chimney run by Oliver H. who is always visibly trembling in his t-shirt; etc.
With more aspects the whole complex becomes not necessarily more difficult, but certainly more interesting. The imaginary scenery produced for every single house must have a quality which makes it a living complex easily to be remembered as a whole.
Note that the single elements of the complex have no fixed position. This is what in ESELS WELT I call *Scheinklumpenmethode*.

Places and Aspects

Inside the houses are gathered double digits modulo 100. In house No. 0 (of district No. 0) you find double digits No. 00, 100, 200, …, 2300, 2400, i.e. digits No. 0, 1; 200, 201; …4800, 4801 in our count, i.e. digits No. 1, 2; 201, 202; …4801, 4802 in the common count.
To memorize the number π in its natural order you go from one place to the next and name the double digits of the same aspect, like "What is the animal in house No. 0?", "What is the animal in house No. 1?", "What is the animal in house No. 2?", etc.
25 aspects means 25 sets of 100 peg words each, which makes up for a total of 2,500 peg words. No small amount! But it is not necessary to master mentally this whole bulk of words. It is fully sufficient to just master those pegs which are needed for the case.
On the other hand: If once you master all possible pegs of 25 aspects you can learn a 5,000 digits in one go without any need to look up the pegs from a list. Now, to accomplish this task I imagine 100 places in which all aspects correspond to the house number (in what I call Mike`s memory town, which, in fact, is a memory district of 100 houses), so that the question: "What is the peg word 38 of aspect 12?" is equivalent to: "What animal do we find in house No. 38 (in my memory town)?"etc.

Mastery of the MikeMechtnon Method

Getting old may weaken your ability to recall names. I have already experienced the rather awkward situation of remembering very clearly an American comedian acting as “The mad Professor”, but not recalling his name. I saw the image without being able to correctly name it. To forestall such annoying surprises I helped myself by imagining that JERRY LEWIS is a remote cousin of JERRY (from Tom & Jerry).

If I had mastered the MikeMechtnon method in the proper way I would not have needed to resort to such a measure. But I have to confess that I use the MikeMechtnon method without really mastering it. This is one of the differences between me and Mike, who had his 1,000 words mentally under control whereas I constantly have to look up the appropriate peg words from a list of 2,500 words.

To master the words you have to master Mike`s memory town, which is meant to memorize the number 000102030405060708091011… (= 00 01 02 03 04 05 06 07 08 09 10 11…) by bringing double digits 0, 100, 200, … into house no. 00, double digits 1, 101, 201, … into house no. 01, etc. Thus JERRY LEWIS is part of house no. 64 together not only with JERRY (= 64), but likewise together with CHARLTON HESTON (= 64) and CHURCHILL (= 64), and, if this should be an English place, he would probably find himself in front of a CHURCH (= 64), in short, he has so many associated images around him which all lead to the right number 64 that even in the annoying case that Mike forgot the name “Jerry Lewis” he still would have been able to recall the house to which this nameless figure belongs, so he could take any of the peg words assembled in that place. Even more: He only needed to remember the number 64 of that house! The question which, when applied to Mike`s memory town, with certainty leads to the right answer, is: “In which place did I see this image? With which other persons or objects or actions or attributes have I already seen this image together?”

To conclude:

The MikeMechtnon method is a thorough application of a fundamental principle of mnemonics to the subject matter of long numbers: *Organize the matter in a way that certain questions inevitably lead to definite answers*. Once you master the aspects (i.e. the questions) and the (half imaginary) houses, there you are with a firm grip at the subject matter. And this grip could be a grip which holds fast for very long time because the MikeMechtnon method is a method which to a considerable extent automatically safeguards against the weak recall of old age.