

**eng.spiralnoyes**

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## Spiralnoyes



From the dictionary again. The meaning of "spiral":

**Spiral (countable noun) - a spiral is a shape which winds round and round, with each curve above or outside the previous one.**

The key point in case of information is "something which winds round with each curve above". For understanding this approach need to explain one of old data transferring protocols. For example Morse code.

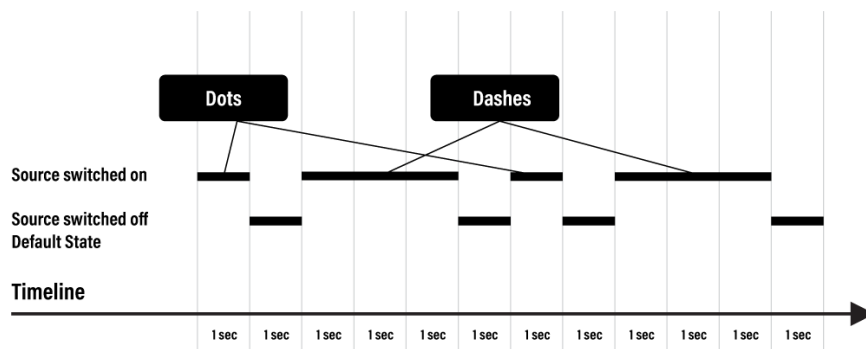
Some historical notice about Morse code from the same dictionary.

Morse code or morse is a code used for sending messages. It represents each letter of the alphabet using short and long sounds or flashes of light, which can be written down as dots and dashes. A telegraph code formerly used internationally for transmitting messages; it was superseded by satellite technology (the Global Marine Distress and Safety System) in 1999. Letters, numbers, etc, are represented by groups of shorter dots and longer dashes, or by groups of the corresponding sounds, dits and dashes, the groups being separated by spaces.

All of this based on the state of source of information - there are only two of them, switched off or switched on. For the case of light mean switching off or on a lamp. For the case of radio signal switching off or on transmitter within beeper.

The key role - the sequence of changing states of source (lamp or transmitter) in context of timeline. Only timeline context is allowing as to recognize the sequence. Based on it we are making first level reference for the Morse code, that contain only 3 points:

- the default state of source - switched off
- the state "switched on" of the source not more then 1 sec - mean dot (yes or 1)
- the state "switched on" of the source 3 times more then dot - mean dash (no or 0)



Thus 3 points is our instrument for building and recognizing sequences that is containing data. The timeline fragment of 1 second is only for example, for the real world the length of the fragment might be different.

In real world we are using letters composed to words composed to sentences in paragraph and other rounds of the spiral. Because the source of information always defining format we are making format that is based on 3 points and making sequences that is describing letters. In other words we are making patterns that will allow us to recognize the letters transmitted from source. One letter - one pattern, where pattern is sequence of dots and dashes. For example ([https://en.wikipedia.org/wiki/Morse\\_code](https://en.wikipedia.org/wiki/Morse_code)):

A: .- or yes-no or 1-0 B: -... or no-yes-yes-yes or 0-1-1-1 C: -. . or no-yes-no-yes or 0-1-0-1 etc For the full of Morse code visit the link in Wikipedia.

In following of letters-to-words schema we are making words based on dash-dots patterns. For example, the text "The example of the text coded by Morse", looks like:

• ..... - - - - - ..... - - - - - ..... - - - - - ..... - - - - - ..... - - - - - .....  
..... - - - - - ..... - - - - - ..... - - - - - ..... - - - - - ..... - - - - - .....  
..... - - - - - ..... - - - - - ..... - - - - - ..... - - - - - ..... - - - - - .....

Where the alphabetical reference improved by "space" - ...

Now the time to talk about spiral in context of Morse code. For the begin we have the source within ability to produce only two states - switched off and switched on. For the timeline we are playing with switcher and producing the sequence of states changing and this whole sequence organized in following of spiral principle:

The source of information is defining the first primitives for the composing of next level. The elements reference from current level is the primitives for the next level.

The states (primitive) producing sequence (element), sequence (primitive) composed to letters (element), letters (primitive) organized into words (element), and etc. There are funny coincidence like we are children for our parents, but we are parents towards our children.

The totally the same approach used in any kind of IT technology.

For the case of internet the spiral might looks like:

the computer component have to states 1 or 0 the states producing sequence the sequence producing numbers the numbers producing letters from code table the letters producing words the sequence of words producing string etc Every round of

spiral might have own additional reference. For example JSON and HTML. Both of them string (the sequence of letters), the sequence of letters might be defined like pattern (HTML tags or JSON notations). For the case of HTML - there are rules of syntax based on XML/XSLT, for the case of JSON - the definition of notations.

For the real world we have the grammar rules, this is the reference for the sequence of letters patterns that we are using like language. For the case of English - one kind of letters list and rules, for the Chinese - another one set of rules and letters/hieroglyphs. But for the human body, doesn't matter of nationality - there are always only the frequency of electro signal through the nerves. And again the sequence of electro signals through the nerves.

Another one example of spiral is the simple number series: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, etc, where spiral round is 10 intervals between number and each 10 intervals it is becoming element from primitives. Basis primitive is 10 first intervals. It's mean the ones became tens, tens became hundreds, hundreds became thousands and etc. Have to be notices - there are no any sense in numbers without intervals between them. We are always using numbers for pattern matching recognition, the global goal - pattern matching. We are only making simpler the process of pattern matching recognition by dividing them on smaller parts where numbers is only, only position schema in chain that is became chain when we are decided do divide income pattern. It might looks like opposite direction moving by the spiral, moving towards the begin.

For the real world we are using 12 intervals, for the computer world we are using 4 (or 8, 12, 16, 32, etc) intervals.

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