TACTILE SYSTEM RILA

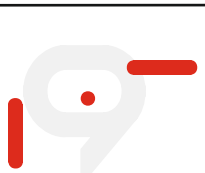
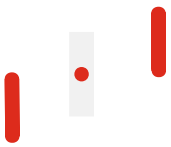
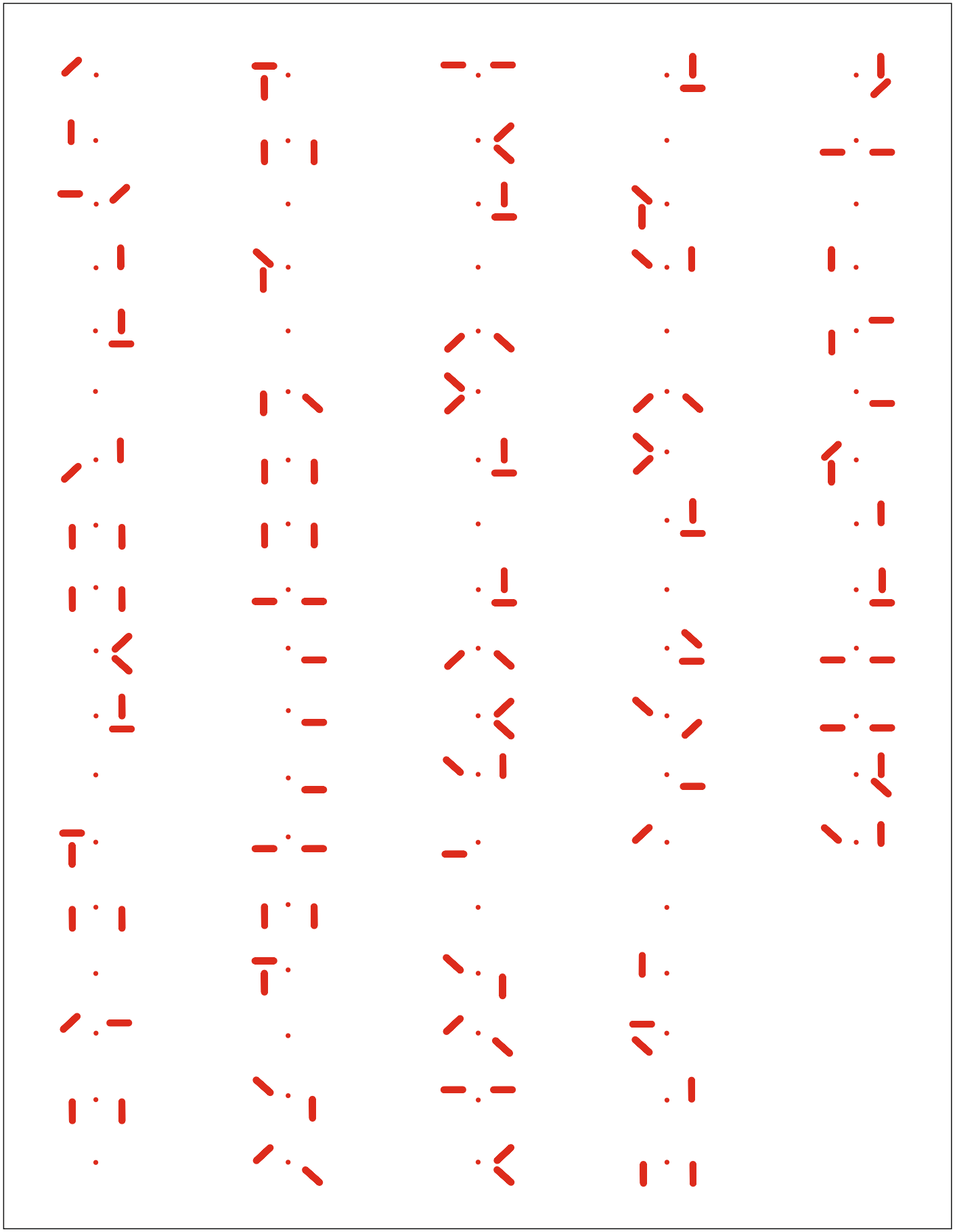
The Tactile System Rila (TSR) is an advanced version of the “Tactile Rila Sign System”, designed to be easier to learn and more convenient to use by hand and by technical means. It contains 66 tactile codes, separated by alphabetical and functional purpose. The alphabet tactile codes are 50 and represent a discreet version of the signs from the Rila sign system. Through this connectivity between the two systems, there are opportunities to present different language and other types of information. The functional tactile codes are 16 and serve to effectively increase the number of alphabet tactile codes and functions using technical devices. In linguistic representation by it are recorded: capital letters, as separate and primary in bigrams, trigrams, and quadragrams; rarely used letters in small and large size; digits and commonly used non-alphabetic characters and others. In general, the tactile codes are variations of straight line images with angles multiples of 45 degrees and disposed in a single of 4 positions, forming a rectangular shape. The center of the rectangle is the center of the tactile code. It is marked with a point and along with the straight lines is formed as a tactile sensitive surface. The tactile alphabetical codes are made up of two straight lines, having locations and angles defined by a method for discrete display of the signs from the Rila sign system. The functional tactile codes are made up of a straight line and represent combinations of 4 possible positions and 4 possible angular representations.

The recording performed by the TSR represents a vertical sequence of alphabetical and functional tactile codes allocated to one or several columns. It can also be displayed through a tactile display, as singly and consistently displaying all the codes. The reading of the record can be done with one finger or two fingers on one hand, thus the tactile code is divided into left and right part and the point is depicted in both parts. There is also a third way analogous to two-finger reading and having two tactile displays placed on tactilely sensitive places on both hands respectively. The introduction of tactile record in computer devices, can be done using a special keyboard, glove and pencil. The glove device uses a specific finger communication method, and the pencil device - method for handwritten display of the tactile codes.

The advantages of TSR are: use of one graphical figure for the formation of the tactile codes; defined and relatively large number of the tactile codes; presence of functional tactile codes; representation of all alphabetic characters and certain combinations of letters (bigrams, trigrams, and quadragrams) with a corresponding tactile code; presentation of different language and other types of information; easy inclusion of other non-alphabetic information in the language; using different ways of reading and means of introduction; ability to simultaneously conduct the introduction and reading; easily memorized codes, by a corresponding graphic sign; easy visual representation of the used alphabet with easy-to-remember signs and handwriting input of the tactile codes.

Tactile system “Rila”

Table of the tactile codes

	00	10	20	30	40	
00						00
01						01
02						02
03						03
04						04
05						05
06						06
07						07
08						08
09						09
	00	10	20	30	40	

“We choose to go to the moon...not because are easy, but because they are hard.” John F. Kennedy