BRAIN IMAGING – ONE STEP CLOSER TO MIND READING

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Abstract: The new research methodology of brain imaging has aim to make link between vast complexity of human perceptual, emotional and cognitive processes on one hand, and the human brain on the other side. Numeral brain imaging techniques are nowadays accessible: Computerized Tomography, Positron Emission Tomography, Magnetoencephalography, Magnetic Resonance Imaging etc. The technique most frequently used in order to detect "brain in action" is functional magnetic resonance imaging (fMRI). fMRI detects a hemodynamic response, the reaction of the vascular system, to the enlarged necessity for oxygen of neurons in a activated area. The technique has many potential practical applications including reading of brain states, brain–computer interfaces, communicating with locked-in patients, lie detection, etc. In this paper some of the advances of application of fMRI in mind reading and their potential implication have been discussed.

Keywords: brain, neuroimaging, fMRI, mind reading