

SOME THOUGHTS OF SCIENCE: “MATRIX” ON SCIENCE.net

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“All men by nature desire to know”. With this sentence, Aristotle opened in 350 B.C.E. his fundamental work “Metaphysics” and pursued: “An indication of this [knowledge - ESK] is the delight we take in our sense; ...” In Latin, the word ‘knowledge’ is ‘scientia’ that gave a birth to science, a sphere of man’s activity toward creating a new knowledge of Nature, man’s process of discovering phenomena and understanding the relationships between them and their nature [1], thus demonstrating the harmony, the unity of Nature, by means of unravelling myriads of painstakingly collected data, extracting information [2] from phenomena, and explaining WHY and HOW do they manifest themselves these given ways. It is actually the mankind’s aspiration, the approach to perceive the truth of the whole, if the latter does exist and achievable, perceptual [3], as the body of empirical knowledge, referred to as the knowledge obtained by means of observations, represented as some information. Annually, science nowadays creates trillions gygabites of information, thus leading to the problem of its evaluation. For instance, on Science.net, Scopus Database includes information from 31,234 reviewed scientific journals.

In this work, I outline some aspects of information in science and its measures, focusing in particular on the ‘matrix’ to evaluate an ‘efficiency’ of a scientific publication that constitutes a science-metrics (наукометрию) [4].

1. G. Heflerich, Humboldt’s Cosmos 25. – N. Y.: Gotham Books, 2005.
2. L. Brillouin, Science and Information Theory. – N. Y.: Academic Press, 1956, p. vii.
3. A. Connes, A. Lichnerowicz and M. P. Schützenberger, Triangle of Thoughts. – Providence: American Mathematical Society, 2001.
4. Л. Я. Жмудь, Зарождение истории науки в Античности. – СПб, Изд. Рус. христ. гум. ин-та, 2002.