RACE FOR A HIGHER QUALITY OF THE SCIENTIFIC INFORMATION: A 60 YEARS (1957-2017) RETROSPECT OF THE MAIN PERSONAL CONCERNS AND STUDIES I. FIRST (1957-SUMMER 1992) ACTIVITY YEARS

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Abstract. *This work presents a brief review of the main results obtained by author during the years 1957-2017, in the field of Information Science.*

Given being that now the most studied systems are complex, the Information Science is strongly related to the Complexity Theory. Due to the: a) fact that the symmetry of the magnetic field relative to mirroring is different (opposite) to those of the gravitational and electrical fields, respectively, b) microstructure of the spontaneous magnetization domains, the physical systems influenced by the magnetic fields present a higher Complexity degree.

The beginning (start) of author's professional activities was marked by the: a) choice of a magnetic sample (material) and process (the hysteresis one) as topic of the first scientific research from his academic student years (1957), b) choice of the Syntax and Semantic aspects of the continuous X radiation, as topics of his Bachelor Dissertation, c) rejection of the separate study of Physics fields for the final (oral) Bachelor examinations (1960), and the later Physics study (1960-1963) as a whole.

The professional duties compelled later to study also other Physics parts, but the ensemble of the achieved professional activities and results had the aspect of some random (Brownian-like) motions around a straight-line centered on different topics of the Information Science and Complexity Theory. There are reported also the main results and applications of these studies concerning: a) the definition and pointing out of the main features of the Information concept, b) its scientific, technical and didactic applications, c) the nature sciences, certain medical fields and some technical devices of interest for the scientific research.

Key words: Information Science, Complexity Theory, Syntactic Structures

1. Introduction

The obtainment of high quality scientific information needs both the use of some mathemathical procedures for the data processing, as well as of certain physical methods to ensure the necessary experimental data. As it was shown by the Italian writer Leon Battista Alberti (1404-1472), that though the celebrated antique Greek scientist Archimede (285-212 b. Chr.) was very much fond for the Mathematical studies, he emitted his strong cry "*Evrika!*" (i.e. *I have found!*) only after the obtainment of an absolutely outstanding information due to his experimental finding of the strong upward forces acting on the bodies immersed in liquids [1].

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