Chapter 4
Informationism, Information and Its Neuronal Theories

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ABSTRACT

In this chapter an epistemology, based in the information, as the paradigm, that rules our lives, is stated - Informationism -. Information, or perhaps the message, reaches the brain as tiny impulses - quanta or useful information -, hitting and activating the neurones; as a consequence becoming quanta of useful information which produce knowledge, science and wisdom. Some definitions of information are quoted, as well as its connotations and peculiarities. The physical, psychic and pragmatic, etc. connotations of information are studied, including its energetic aspect; within a Cosmovision of it. Some neuronal theories are also studied.

INTRODUCTION

A transmutation process is taking place in these historical times of changes in social structures, which affects all human manifestations. Considered as a whole, as an essential element, information is also affected by the transmutations that are currently taking place. The concept of information is changed and widened. For instance, Lutz Herrschaft (2000) states, in 1996, that information is an attribute, a quality from the object, an added value. Some are warned about its incoherence and the mirage it can turn out to be. However, underlying information there is a whole process typical of living beings, to adapt their existential passing to the environment in which they live; also to adapt the environment to their natural living condition. Among human beings, this process acquires very special connotations; it is an ontological process involving intelligence. Therefore intelligence, as a human faculty, plays an essential role, directly affecting information.

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Considered both as a natural phenomenon and as a dynamic and evolutionary process (Curras, 1998), information acquires a new dimension, going from the being to the environment and from the environment to the being. It is therefore an unavoidable means for the integrating process which builds up society. Alexander I. Mikhailov (1982) pointed out that society exists because information does. Without information there would be no link between individuals. These individuals are, on the other hand, doomed in fact to coexist, in an unlimited unity of universal destiny, thus articulating society (Curras, 2008).

The number of studies about information, its nature, its idiosyncrasy, its intrinsic values, its applications and economic repercussions, is increasing lately. These studies have always been carried out taking into account the essential characteristic of information, which provides its reason for being: its usefulness. Authors such as Norbert Henrichs (1997), Rafael Capurro (2000), Peter Ingwersen (1996), Jiri Cejpek (1998), J. Zeiman (1994), D. Katuscák (1998), and the author of this article (Curras, 2008), have mainly based their information theory on how to make information attainable for whomever it is necessary. There is research on means and methods, either manual or computerized, to make the data present in documents accessible and useful. In all this is shown the fact that information is considered as a process; a process involving a theoretical and industrial evolution. Most of the bibliography found refers to information from this point of view. However, information includes a phenomenological connotation which has an impact on the development of individuals and on their scientific and social actions as well.

Historic Evolution

It is refer to its evolution with time, in order to place it within a historical context and be able to consider its evolution throughout the years. In the last 60 to 70 years, great changes have been observed regarding “information” as an entity of general and particular usefulness; changes in which there has been a major shift towards computerization. Information is considered to be the first link in any human activity, and even the basis to formulate an “Information Society”. Bear in mind that information, as an essential element to the development of human beings, is inherent to them (McCrank, 2001) and their coexistence on Planet Earth in an associated way of life. Information society has therefore always existed; since the beginning of times. Babylonians and Egyptians, as well as later Greeks and Romans, already knew how important an adequate spreading of ideas (information) is to the development of their corresponding civilizations; holding back information sometimes, in order to manipulate their people at will. Likewise, information was considered a crucial link in wars.

Not wanting to go too far back in time, and to mention only some relevant authors, we notice Plato (427-347 BC) (Capurro, 2000) who included information in his Poetica, as part of philosophy. Poetica entails a connotation of usefulness - note of the author: first written reference on the usefulness of information that has ever been found -. Poetica also refers to its pedagogical aspect. Around the same period of time, as far as Aristotle (384-322 BC) (Capurro, 2000) is concerned, the soul and intelligence can be formed through information; thus granting it an ontological nuance: “life comes from life”. He also states that the concept of “information” comes from in-form which is equivalent to give-form - “morphe” in Greek means form; con-form. This derivation of the concept passed on later to the Roman world: “Information is and is not, but it allows it to be” (Titus Lucretius Carus, s. I b.C, “La Naturaleza” (Lucrecio, 2003)). From Roman it has been taken for Romance languages like Castilian (Spanish).

The influence of Greek philosophy can be seen on Saint Augustine (354-430 AD) (Cappuro, 2000), and later on Saint Tomas D’Aquino (1225-1275 AD)(Cappuro, 2000). They both emphasize