

Technologies, ICTs and Ambiguity [†]

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Abstract: The expansion of computers draws our attention to quantitative aspects of information at the expense of its qualitative aspects. We thus lose, do not have sense for, and do not develop the specific human aspects of intuition, creativity, and situation involvement. Every person is a genius in his individuality, which cannot be expressed in quantitative terms and deserves respect.

Keywords: naturalism; quantitative information; qualitative information; pharmakon; genius

1. Introduction

Information technologies create the impression that information is unanimous and unambiguous. Because they work with clearly defined information and process it with algorithmized processes only, they make us think that all information is clear-cut.

Technological developments, in general, help in routine and monotone tasks. However, especially when dealing with qualitative data, the use of technologies changes their nature.

2. Quantitative and Qualitative Information

ICTs are based on positivistic science. Anything qualitative includes meanings that can be opened by interpretation only which consists in the interaction between the interpreter and the object of interpretation. Quantitative analysis on the other hand consists in various types of quantitative aggregation, comparison or categorization. It should be noted in passing that numbers can also be interpreted, but this is not quantitative, but rather qualitative analysis.

Qualitative data contain drives, emotions, subjective feelings, understandings, and are related to the places and times when these vague aspects were perceived. They are indexical—their reference can shift from context to context—they are fuzzy, the boundaries between them are vague and that is why they do not fit for classification with computers. If we approach them quantitatively, we destroy (or at least harm) their meaning.

Quantitative analysis and technologies based on this perspective assumes that the world is composed of objects that can be numbered, counted, measured, and then processed using mathematical methods to achieve true understanding. Their paradigms are natural sciences [1].

A qualitative point of view, or qualitative approach, sees the social world as a continuous interaction between the world and its interpreter. The external world is seen in many perspectives, not just as one of the natural sciences. The objective classification and quantitative analysis of observed entities is not the goal of the endeavor, instead the meaning is the guiding principle. The qualitative approach allows for greater sensitivity towards ambiguities and subtle shades of interpretative meaning of reality. It recognizes that the world is rich and complex. Theory is produced rather than tested.

An example may be language, which allows for the description and representation of various social situations and gives people the experience of being-in-the-world [2]. Language is complex and ambiguous. In the quantitative approach, language is used



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uncritically without investigating its constitution, operation, influence on thinking, context, intention, etc. Language is not questioned or considered a problem. Language is a tool similar to a computer program that can predictably and reliably do its job.

The heterogeneity of qualitative data is a challenge in qualitative analysis. Qualitative analysis does not proceed linearly, but moves back and forth, searching for the best approximation and concord with the world [3].

3. Relationship between Quantitative and Qualitative Information

The basic and fundamental difference between the qualitative and quantitative approaches consists in the assumptions made. Quantitative analysis presupposes a unanimous objective world with clear meanings. Paradoxically, the more we use technologies that are based on quantitative analysis and its assumptions, the more we succumb to an understanding of an empirically objective world. With the subtle understanding of ambiguities, equivocity becomes lost. People require precise and specific categories; their truth is the only one that is possible, etc. However, the world instrumentalized by ICTs is losing its richness and secrecy. Paradoxically, secrecy returns. People attempt to explain the ambiguities of the world quantitatively, they rely on the world's univocality. However, this strategy fails because the equivocity and unclear aspects appear unexpectedly and people become lost and confused. Their advantages over machines consist in their awareness of the lack of clarity. That increases the pressure on ICTs to unify and conjure away secrets with the result of increased confusion from the world.

This process is similar to what we know from psychoanalysis, where suppressed content manifests itself in unconsciousness in an uncontrollable way and provokes consciousness to fight against it.

On the philosophical level, we may point out to J. Derrida and his concept of difference [4] (pp. 3–27), which shows the principal impossibility of unambiguity without its combination with ambiguity. Even the person's identity is pervaded by its counterpart—the other. Everything that a person perceives is stored as a trace in his mind and cannot be integrated or transformed into the self. On the other hand, the otherness is not completely different as it is a part, even constituent, of the self. With signals, signs, and symbols, including words never fully articulate what they mean, we must move to other symbols and symptoms to explicate their meaning and this process is infinite. It is similar to Peirce's infinite semiosis, where the explanation of every sign must be explained and so becomes another sign that must be further explained. The process cannot halt. The second aspect of the process consists in a never-ending differing of concepts, which prevents any clear relationship between them. The signs are different, but are also similar—different from their difference—and no clear relation between them exists. This implies that no eternally stable classification or categorization is possible. Our psyche is always in flux and no identity exists. Even language requires its counterpart, silence, to function properly. Silence is thus a pharmakon of language with all its three meanings of remedy, poison, and scapegoat. It sacrifices itself to help its opposite.

4. Human Qualitative Characteristics

We can point out three aspects that are harmed by unequivocal treatment of information by ICTs. Three human qualities of creativity, intuition, and involvement are affected. All of these are able to deal with the ambiguities of the qualitative world and interpret them productively. However, the more people use ICTs with their quantitative approach, the less they are forced to come to terms with unclear or ambiguous situations; the less they are involved in them, the more they rely on rational ways of dealing with the world rid of intuition and the less they use creativity to solve problems.

All these three engendered features are typical for geniuses. Genius is independent, original, and arrives at and understands completely new concepts. Genii let themselves be inspired by the world around them and creatively deal with it. They are exemplary and serve as examples to others. They do not imitate and are free of every constraint. They deal

just with the object of their interest. Genii represent something ambiguous, ungraspable, and equivocal. They do not respect the order, but create a new one. They imitate, but so originally that the imitation produces a new order. They are full of aporias, similar to Derrida's difference or pharmakon, able to save the world.

ICTs and their operation hide the qualities of geniuses from the world. ICTs cannot imitate them and provides them no space in the world. This rule-governed world afraid of every ambiguity will be surprised to see a genius that can deal with it and even produce it further. The more the world will be governed by the algorithms the more it will be surprised to see a genius not working according to them and the more will the genius be able to cure people from their effort to destroy ambiguity. They will become geniuses. The unity of opposites will be saved.

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