

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, don't have sense for and don't develop the specific human aspects of intuition, creativity and situation involvement. Every man is a genius in his individuality and deserves respect that can't be expressed in quantitative terms.

Keywords: quantitative information; qualitative information; pharmakon; genius

1. Introduction

Information technologies make 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 all the 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 uncovers meanings which can be opened by interpretation only that 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 categorisation.

Qualitative data contain drives, emotions, subjective feelings, understandings and are related to place and time when these vague aspects were perceived. They are indexical – their reference can shift from context to context -, they are fuzzy, the boundaries between them is vague and that is why they don't fit for classification with digitally working software. If we approach them quantitatively, we destroy or at least harm their meaning.

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

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 the one of natural sciences. The objective classification and quantitative analysis of observed entities is not the goal of the endeavour, 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 rather produced than tested.

An example may be language which allows for description and representation of various social situations and gives man the experience of being-in-the-world [2]. Language is complex and ambiguous. In the quantitative approach, language is used 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 are a challenge in the qualitative analysis. The qualitative analysis does not proceed linearly, but goes here and back 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 approach consists in the assumptions made. Quantitative analysis presupposes unanimous world with clear meanings. Paradoxically, the more we use technologies that are based on quantitative analysis and its assumptions, the more we

succumb to the empirical world understanding. The subtle understanding of ambiguities, equivocity becomes lost. People require precise specific categories; their truth is the only possible etc. The world instrumentalized by ICTs is losing its richness and secrecy. Paradoxically, the secrecy returns, because people don't understand the world any more and insist on its univocality. However, this strategy fails without explanation and people become lost and confused. That increases the pressure on ICTs to unify and conjure away the secrets with the result of increased confusion from the world.

All this process is similar to what we know from psychoanalysis where the 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 *differance* [4] which shows the principal impossibility of unambiguity without its combination with ambiguity. Even man's identity is pervaded by its counterpart – the other. Everything that the man perceives is stored as a trace in his mind and can't be integrated or made into the self. On the other hand, it is not completely different as it is a part, even constituent of the self. Signals, signs, 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 which must be further explained. The process can't halt. The second aspect of the process consists in never ending differing of the concepts which prevents any clear relationship between them. The signs are different, but also similar - different from their difference - and no clear relation between them exists. That implies that no stable classification or categorisation 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 harmed. 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 and understands completely new concepts. He is also exemplar and serves as an example to others. He doesn't imitate and is free of every constraint. He deals just with the object of his interest. Genius represents something ambiguous, ungraspable, equivocal. He doesn't respect the order, but creates a new one. He imitates, but so originally that the imitation is cancelled. He is full of aporias, similar to Derrida's difference or *pharmakon*, able to save the world.

ICTs and their operation remove the qualities of geniuses from the world. ICTs can't 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 he will be able to cure people from their effort to destroy ambiguity and will become geniuses. The unity of opposites will be saved.

References

1. Coombes, Hilary. *Research using IT*. Basingstoke: Palgrave. 2001
2. Gadamer, Hans-Georg. *Philosophical Hermeneutics*. California: University of California Press, 1976
3. Swingewood, Alan. *A Short History of Sociological Thought* (2nd edition). Basingstoke: Macmillan. 1991
4. Derrida, Jacques. *Différance*, translated by Alan Bass, *Margins of Philosophy*, Chicago: University of Chicago Press, 1982, pp 3-27.