EFFICIENT GOVERNING HUMANISTIC SYSTEMS BY FUZZY INSTRUCTIONS

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A real-life complex system is called humanistic, if its elements are human beings free to make decisions. The humanistic system is ruled by a block of control which generates a sequence of instructions and offers them to the individuals for execution. The instructions may be precise or fuzzy. Every precise instruction how-to-act limits the freedom of decision choice of the individuals. As usual, the freedom limitations induce negative responses, i.e. undesirable with respect to some criteria of functioning of the system. The accumulation of negative responses generated by human beings may lead to disturbances in the functioning of the system as a whole.

Every fuzzy instruction accepted by an individual generates a fuzzy set defined to be the meaning of this instruction for the individual. The fuzzy instruction do not limit the freedom of decision choice of individuals by reducing the variaty of available alternatives. On the contrary, the fuzziness gives a possibility to construct a new larger set of alternatives by combining different fuzzy sets.

An efficient and democratic governing humanistic systems must be FUZZY. This statement is proved formally and justified in this paper by a detailed analysis of the basic social advantages of the fuzzy governing. Different examples are considered.