Pragmatics in the Usability discipline

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Abstract- **The usability discipline is the new and growing area both of the information sciences and ICT technologies, namely for the interactive use of the professional e-services: the e-business, the e-government, etc. The pragmatics, as a subfield of linguistics studies the nature of the human interaction, the nature, situations of the human communication. The usability discipline has not yet realized its importance.**

Using the e-services we have to comprehend without misunderstanding and waste of our time the communicational situation between us and the e-service. Does the service wait for me, or I have to wait for it? What consequences the recent message has for the whole communication: does it refuse the last step only, or does it refuse the entire dialogue by now, or does it simply information, without any consequences?

Result of our research suggests that the pragmatics would be one of the fundamental paradigms of the usability.

This paper analyzes some situations, peculiar to e-services, showing the wrong and the suggested solutions, and constructs an axiomatic approach for the pragmatics in the HCI.

I. INTRODUCTION

Keywords: e-service, e-government, HCI, usability, object permanency principle, pragmatics, software technology, Internet, ontology

Terminology: *Portal*: 'electronic content', 'e-content', 'electronic service', 'e-service', 'portal', 'internet service' are equal in our approach. We use the *portal* terminology for all of them.

Usability is the new and growing area of the ICT technology, namely of the information building for interactive use.

In [2] we fixed our scope, introducing the antagonistic notion pair of *popularity* and *professionality*. The [2] also gives an axiomatic approach of the Object Permanency Principle, suggested to be complied with in the HCI design.

The pragmatics is much more difficult to deal with: the OPP can be derived by investigating the real physical word around us, while the principles of the pragmatics are based mainly on our culture, on our convention of the communication. Dealing with the pragmatics, we try to comply ourselves with our modern technical society, within it to the professional world as it was assigned in [2].

Therefore, our results can rather be counted as human requirements for the e-services, than the final axioms derived from the physical world.

The book [1] describes the mechanisms of the human-human communication from the point of view of the psychology, and abstracts an axiomatic system, which can be counted as the mathematical basis of the matter. In this paper we study the human-computer communications, give an axiomatic system for it, analogous to that in [1], from the point of view of information sciences, namely the Human Computer Interaction discipline.

The basis of our approach is that the behavior of the e-service in the HCI mustn't essentially differ from that of the human being in the human-human interaction.

II. OUR SCOPE: COMMUNICATION VS. OPERATION

III. AFFAIRS AND CHARACTERS. THE MAIN DUALITY OF THE COMMUNICATION

IV. AXIOMS

V. EXAMPLES

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