Semantic Hierarchy and Dialogue System

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Abstract: Semantic analysis is one of the difficult tasks, which has to be solved during development of the computerized dialogue system. There is a question how to compose the meaning of user utterance to achieve a meaning form, which is understandable to the dialogue manager. Then a relevant answer to the user can be generated.

The meaning of the user utterance is composed using also a semantic hierarchy in a specific domain. However, this semantic hierarchy includes not only semantic concepts (semantic concepts describe the utterance parts) specific for the selected domain, but also more general concepts, which create the basis of the used semantic hierarchy. The selection of semantic concepts, possible domain independence of these concepts, experiments with usage of general semantic concepts in various domains, the range of utterance parts described with semantic concepts and final description of independent and dependent parts of semantic hierarchies for specific domains are the content of the presented paper.

References

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