

## The Application of Intentional Subjective Properties and Mediated Communication Tools to Software Agents in Online Disputes Resolution Environments

*Renzo Gobbin*

### Abstract

This paper examines the use of subjective properties in modeling an architecture for cooperative agents using Agent Communication Language (ACL) that is used as a mediating tool for cooperative communication activities between and within software agents. The explaining and modeling agent internalization and externalization of ACL messages is investigated and related to Vygotsky's developmental learning theories such as Mediated Activity Theory. A novel agent architecture ALMA (Agent Language Mediated Activity) based objective properties within an agent communication activity framework will be presented. The relevance of software agents subjective properties in modeling applications such as e-Law Online Dispute Resolution for e-business contractual arrangements using natural communication patterns will be discussed.

Full Text: [PDF](#)