MuDis

Multimodal Dialogue System for Intuitive Human Robot Interaction

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Towards a Multimodal Cognitive Dialogue

Learns

Understands

Answers questions to proof understanding

Visualizes system belief

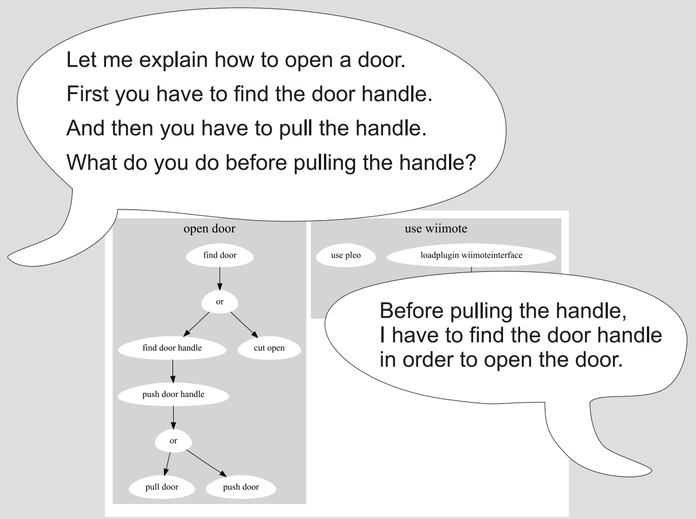
Rudimentary transfer of gained knowledge

Connects to external gesture recognizers e.g. Wiimote

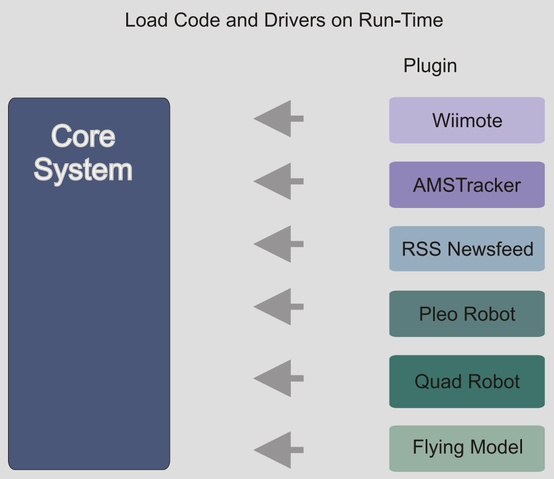
Dialogue

Explain simple procedures, conditions and objects.

Answers simple questions concerning structure and conditions.



Interface External Systems with a Plugin-Technique



Basic Features

Query Knowledge Base - for easier use, persistance and faster adaption:

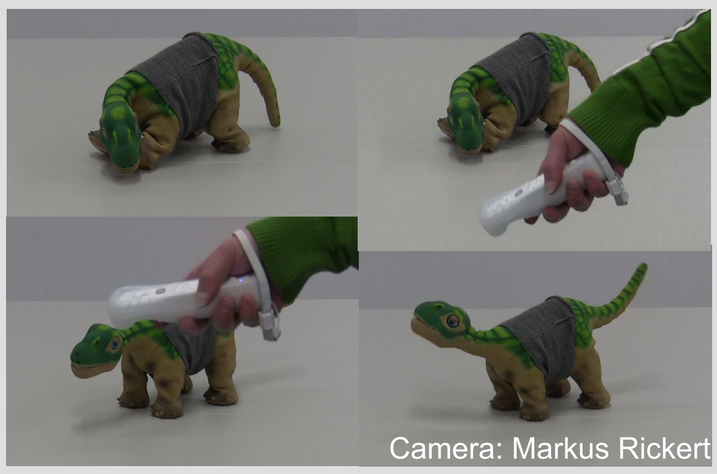
- Load descriptions and scripts on run-time from database.
- Parses simple command scripts.

Use text and speech to control system and other networked components:

- Uses natural language (or gestures,...) to interact.
- Dialogue component: extensible grammar and vocabulary.
- Speech recognition: full dictation grammar and vocabulary.
- Optional use of command language for faster and direct access.

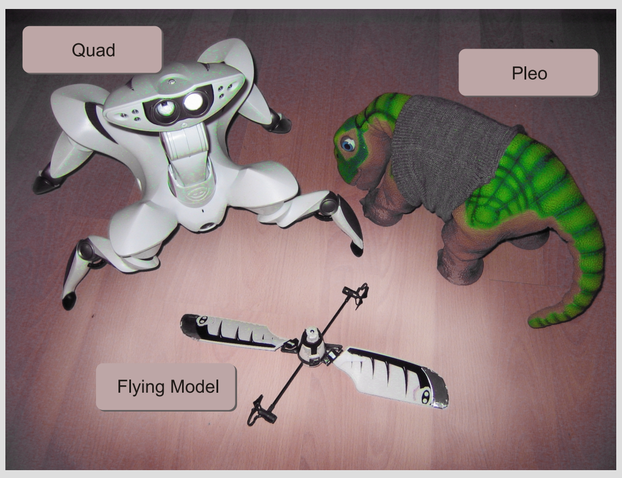
Application Example

Pass Speech and Gesture Commands to a Ugobe Pleo



Application

Control other objects:



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