

# Using Natural Language to Manage NPC Dialog

Gary Kacmarcik - Natural Language Processing Group - Microsoft Research - Redmond, WA

**GOAL** How can we improve NPC dialog using NL technologies?  
*or*  
How can we make a wider range of options available to the player without requiring that the game designer script each interaction?

**PROBLEM** NL interfaces (text/speech) have serious issues with robustness.

**OUR APPROACH** Use dynamically generated menus that are sensitive to the current game state.  
Populate these menus by manipulating abstract logical form (LF) representations that are automatically generated by parsing text.  
Attach tokens to LF nodes to associate them with game state.  
As LF subtrees are cut and spliced into new trees, these tokens maintain the semantic associations with the game environment.

