

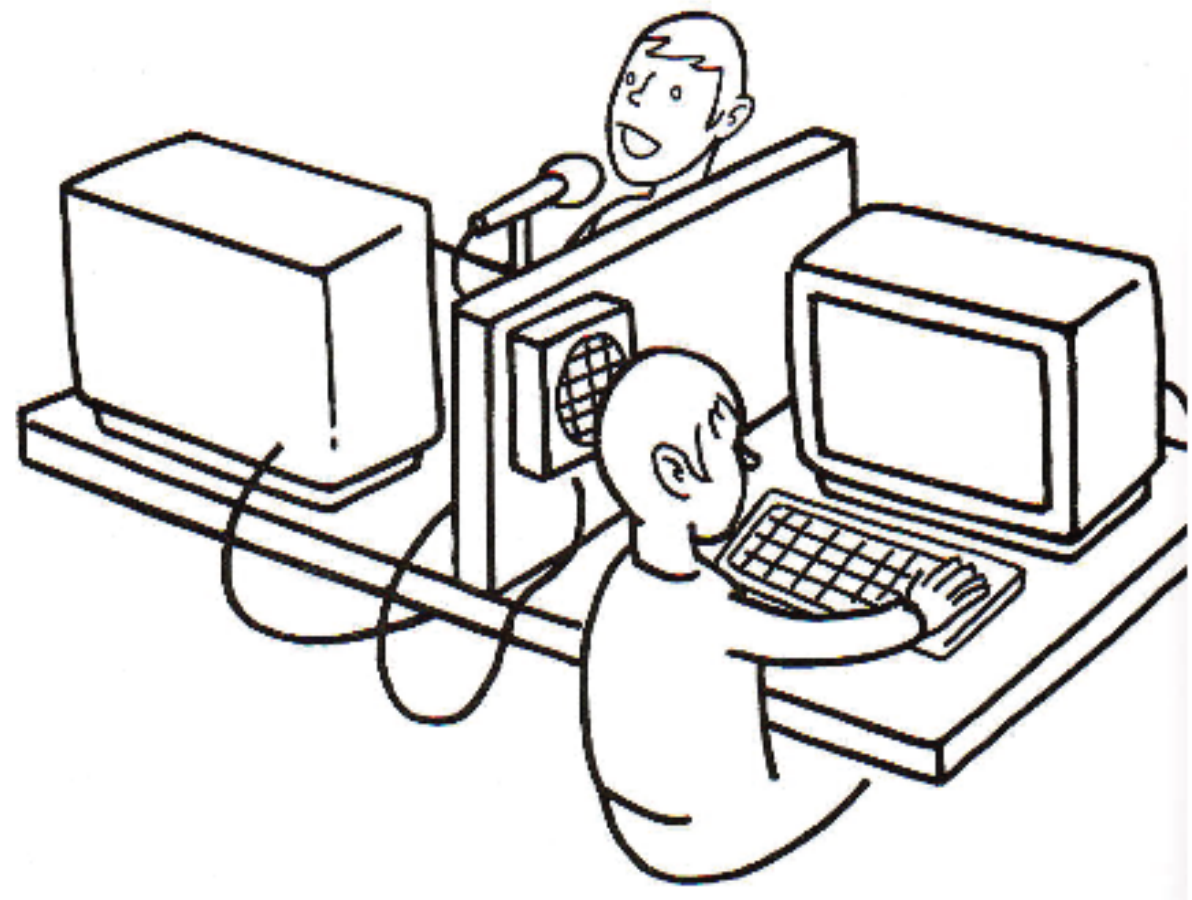
WebWOZ

A Wizard of Oz Prototyping Framework

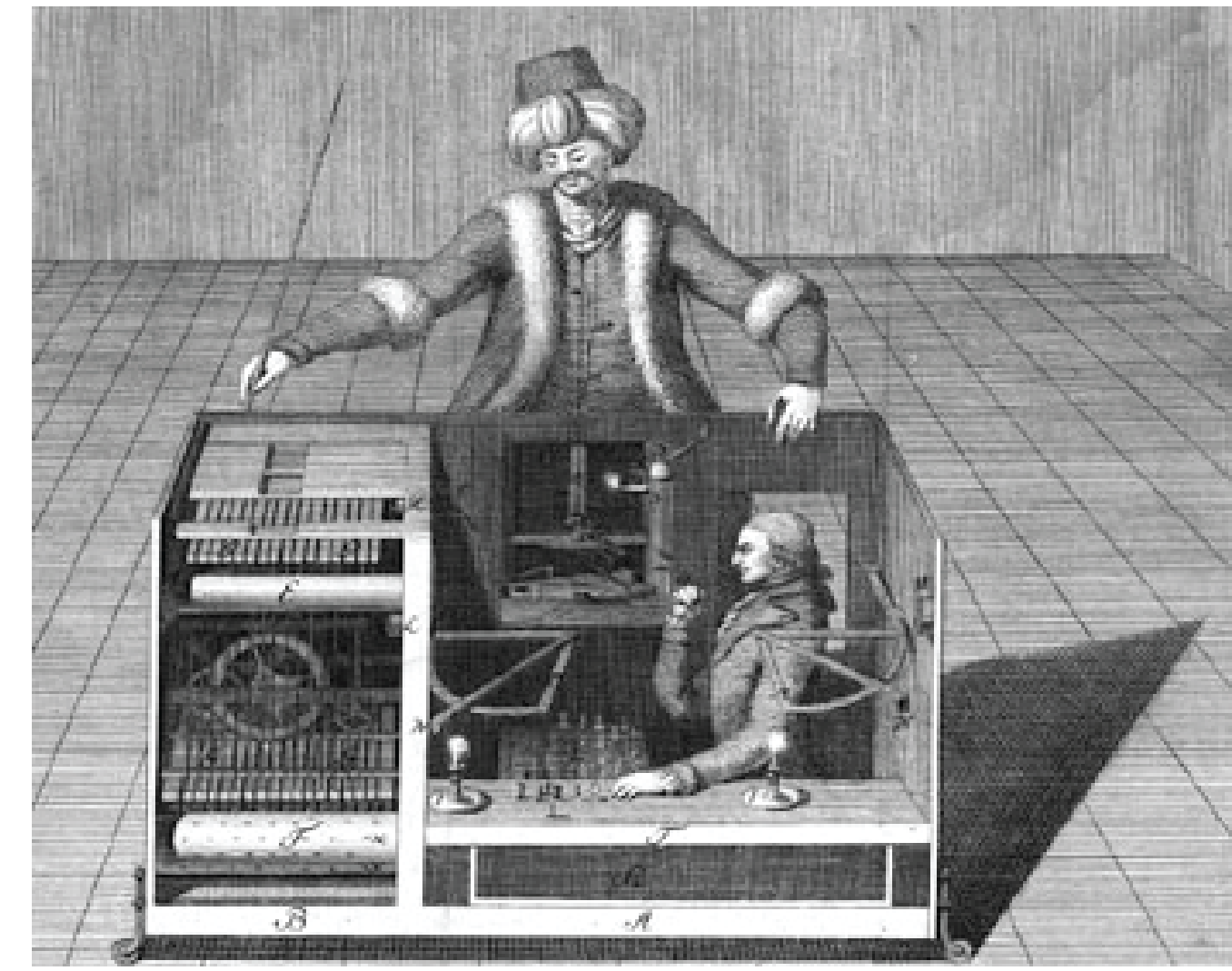
Aim

...to create a prototyping framework for **Wizard of Oz** experiments that allows for a flexible integration of **Language Technology Components** in mono- and multilingual settings.

Wizard of Oz

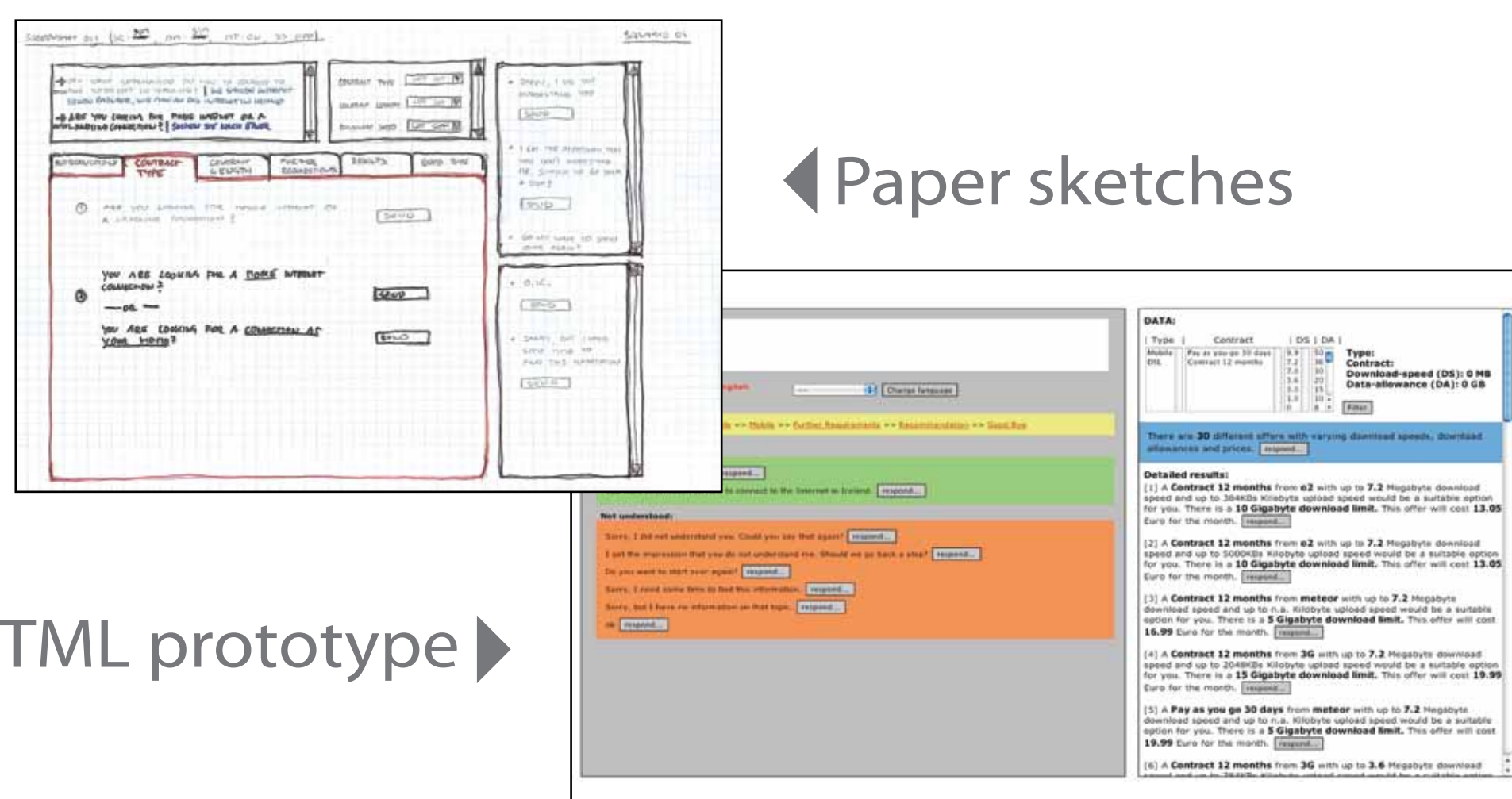


- A **human wizard** mimics a computer system
- First used by Erdman & Neal (1971)
- Mainly used for early stage **prototyping of applications using speech** to explore user experience, test language technology and inform dialogue design.

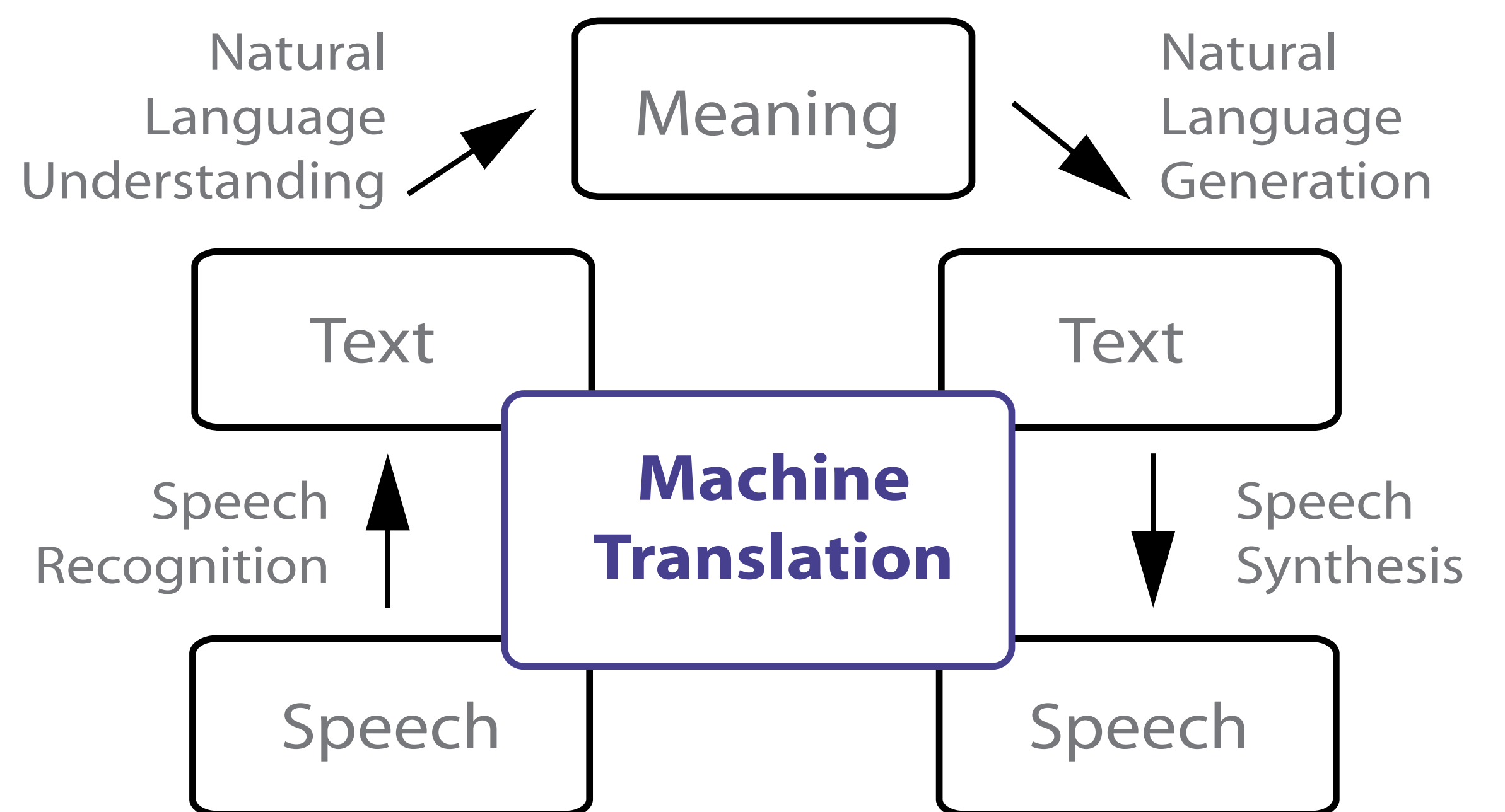


"To Dorothy the Wizard was real, and therefore so were all her experiences." (Buxton, 2007)

Sketching and Prototyping



Language Technology Components

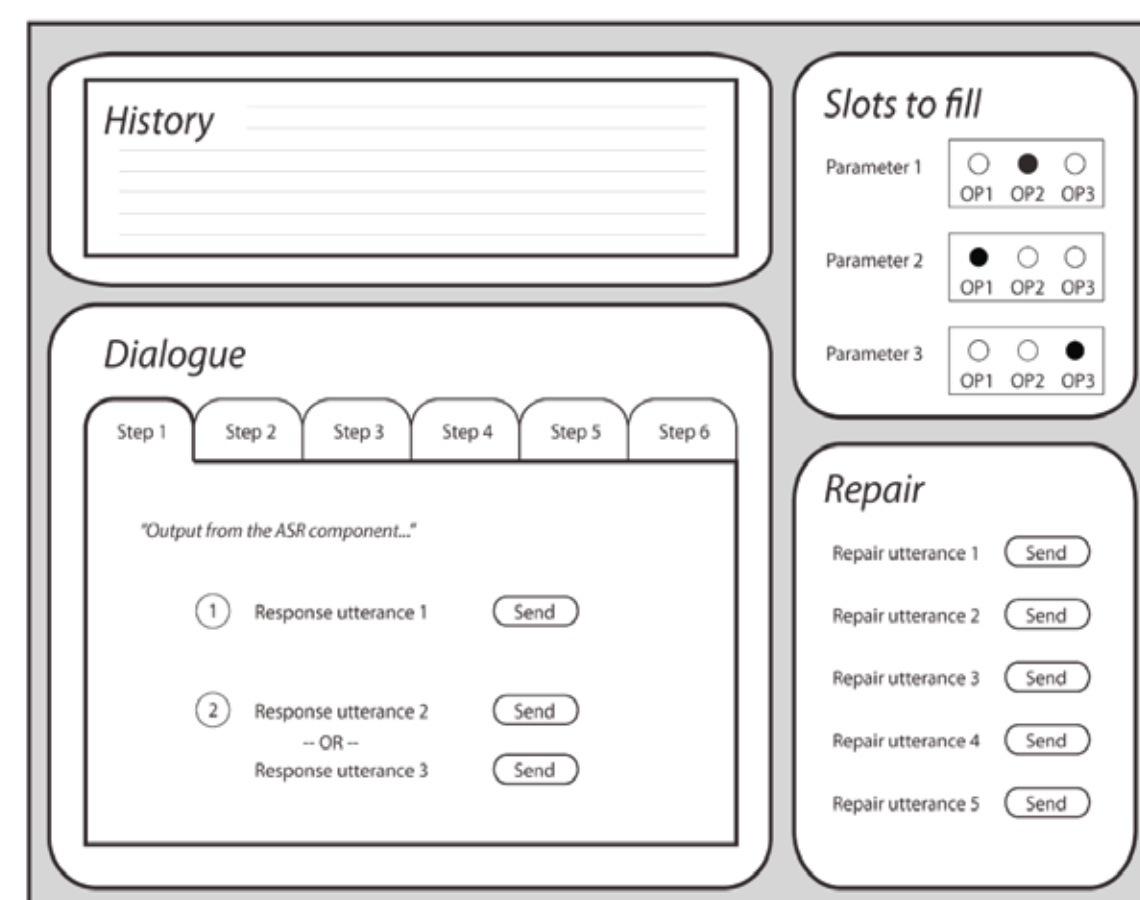


System Architecture

based on a given scenario a Language Technology Component can be **on, corrected, simulated or off**.

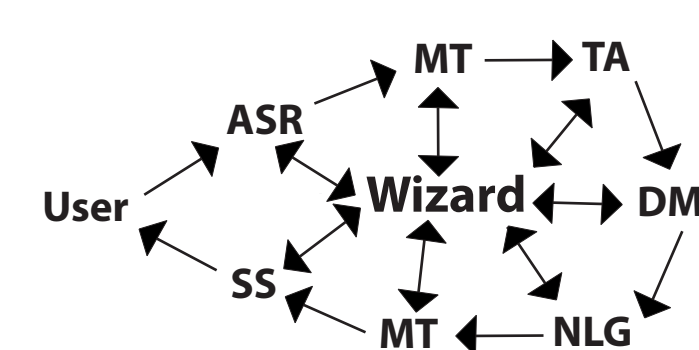
Common Concepts

- Dialogue representation
- Dialogue history
- Repair strategies
- Slots to fill



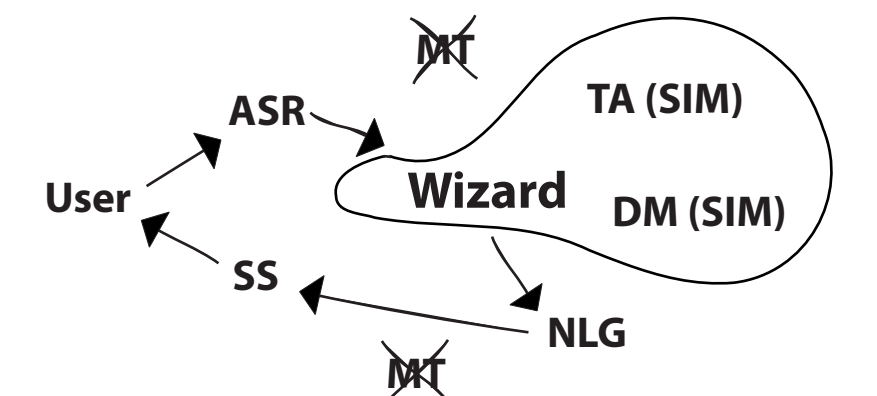
| | ASR | MT | TA | DM | NLG | MT | SS |
|------------|-----|-----|----|-----|-----|-----|-----|
| Scenario 1 | ON | | | SIM | | OFF | ON |
| Scenario 2 | ON | OFF | | SIM | ON | OFF | ON |
| Scenario 3 | | COR | ON | ON | ON | ON | ON |
| Scenario 4 | ON | COR | ON | ON | ON | | SIM |

Abstract System Architecture



DM: Dialogue Management Component
NLG: Natural Language Generation Component
SS: Speech Synthesis Component

System Architecture for Scenario 2



ASR: Automatic Speech Recognition Component
MT: Machine Translation Component
TA: Text Analysis Component