ExpReal: A Multilingual Expressive Realiser

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Introduction

We present ExpReal, a templating language and realiser capable of generating text dynamically. It allows authors to write text that automatically changes based on the context in which it is being used.

- Three languages: English, French and Dutch.
- Consistent templating syntax across all three
- Final realisation using SimpleNLG-NL
- Useful for generating utterances in interactive narratives

Context-based

Variables in templates are resolved based on the context, for example: who is speaking and who is listening?

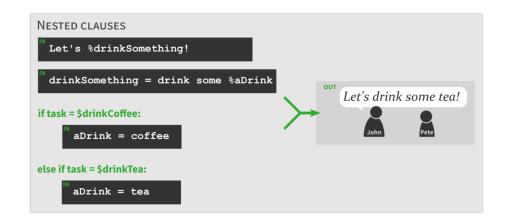
That allows for the use of nicknames and automatically generated anaphoric referring expressions.

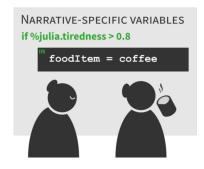
Semi-controlled

When writing templates, authors have to have a certain amount of control over the content that will be generated. Writing templates that include features like conditions and variables allows authors to express their messages in ways that are useful for the text generation system.

Use cases

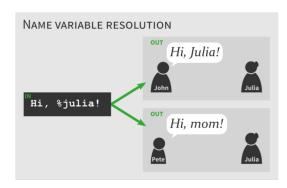
ExpReal is aimed at text generation in (serious) games and simulations. One of its current uses is in POSTHCARD, a simulation of Alzheimer patients with dynamic scenarios to train caregivers. All utterances of both virtual agents as well as the menu options are being generated dynamically using ExpReal.

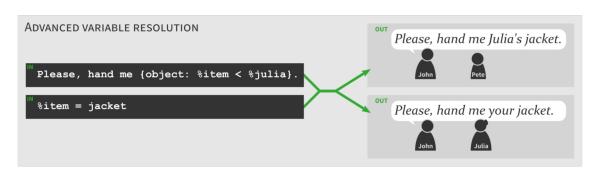




Templates can be picked based on the emotional or physical state of the (virtual) characters.

For example, an angry agent will use more agressive language than a happy one.





ExpReal is currently being used in two different projects and is released under the Apache 2.0 license and is available

github.com/rfdj/ExpReal





POSTHCARD

