WYSIWYM

… with wider coverage

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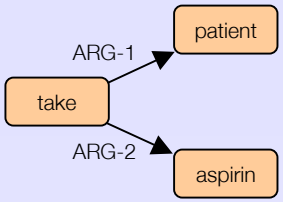
WYSIWYM (What you see is what you meant) is a user-interface method which uses **Natural Language Generation** technology to support the creation and maintenance of complex conceptual and semantic representations.

It has applications in areas such as controlled language authoring, multilingual document management and complex query construction in advanced question-answering systems.

Earlier versions of WYSIWYM systems employed an atomic view of underlying concepts in which

take(patient,aspirin)

might be represented as shown here.



This works well for simpler conceptually-oriented applications, but does not scale-up to the complexity required for realistic authoring scenarios, where linguistic variation and fluency are required.

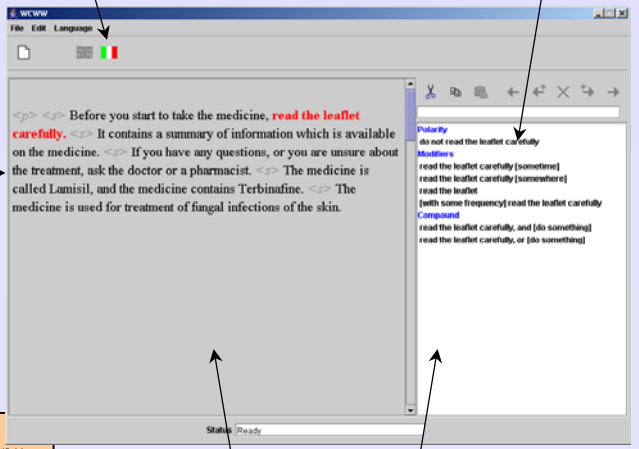
Such systems need to distinguish between, for example, *Take an aspirin, The patient should take an aspirin, The patient must not take an aspirin, Did the patient take an aspirin.* A simplistic atom-based approach would require thousands of different concepts (one for each variant) and would quickly become impractical to construct or use.

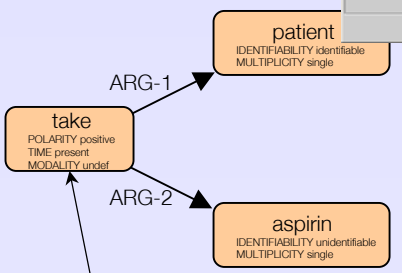
Wide coverage WYSIWYM (WCWW) extends the notion of WYSIWYM editing to support complex conceptual types, with a new **configuration** operation which alters their internal structure to capture such fine variation.

The standard benefits of WYSIWYM editing – multilingual potential, 'automatic' interface localisation, controlled language, no risk of misinterpretation – also apply to WCWW

The reconfiguration menu manipulates the internal structure of a node (here the 'READ' node). As usual with WYSIWYM, natural language is used to display the different options available

Constructing fluent texts is straightforward. Select a span of text to be reconfigured or expanded and the options appear in the configuration pane. Explicit tags are also added to the text to make it easy to select larger-scale text segments (sentences, paragraphs etc.)





A WCWW interface has two panes, one displaying the text or query under construction, the other displaying expansion or reconfiguration options for the currently highlighted span.

The underlying representation is still a network, but nodes have internal structure corresponding to variations in linguistic expression

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