## The STANDUP 2 Interactive Riddle Builder

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# **History**

About 15 years ago, a pioneering PhD project (Binsted 1996) created the JAPE program, which could produce simple *punning riddles* (question-answer jokes relying on wordplay in the answer). Examples of this genre are:<sup>1</sup>

What do you get when you cross a choice with a meal? A pick-nic.

What kind of a rack is funny?

A trip - odd.

Why is a mediocre opportunity different from a certain vessel?

One is a poor shot, the other is a sure pot.

A controlled study (Binsted, Pain, and Ritchie 1997) showed that the computer-generated texts were generally well-formed riddles, and sometimes of an acceptable quality, as judged by children. In the period 2003-2007, the STANDUP project (Manurung et al. 2008) used these ideas, but in a completely re-implemented form (in Java), as the basis of an interactive "language playground" for young children with communication disabilities (Waller et al. 2009).

### The Joking Computer: STANDUP 2

The software to be demonstrated at this conference, is the outcome of the Joking Computer project (2009-2010), funded under a "public engagement" scheme, with the aim of explaining recent academic research to the public. We reengineered the user-interaction facilities for the STANDUP system to make it suitable for use by the general public (particularly children), and to "explain" its workings.

This program shares the following attributes with the original STANDUP 1: there is a bright, child-friendly graphical interface, suitable for touch-screens; the user can ask for generation of a random riddle; the user can ask for generation of riddle by subject matter, or by type of joke; the user can select a riddle to be saved; speech output is optionally available. New facilities in STANDUP 2 include:

- The user can rate jokes on a scale
- The user can ask why a text is offered as a joke, and be shown the relevant linguistic relations in the text.

- The user can "step through" the joke-creation process to get an idea of how the underlying mechanism works.
- The user can email a joke to a friend

#### The software in use

The software has been used by thousands of peoon touch-screen kiosks in science centres ple (e.g. www.satrosphere.net). Installed on portable tablet computers, it has been used in workshops with groups of children, alongside paperand-pencil exercises in joke-creation. A website (www.abdn.ac.uk/jokingcomputer) supports the project's aim of explaining computational humour (and related research) to the general public. It includes a downloadable copy of the Java program and an online PHP version of STANDUP 2, which has proved very popular (over 150,000 visits). The Joking Computer project has attracted a great deal of media attention.

During the project, we have accumulated a mass of data about usage of the system, including ratings of thousands of riddles. We do not have the resources to analyse this data at present, but it is a potential resource for future work.

# Acknowledgements

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### References

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<sup>&</sup>lt;sup>1</sup>These were created by the STANDUP system, not JAPE.