



# **Artificial Intelligence and Poetry**

Ruth Aylett and Greg Michaelson (editors)

## **Foreword from the Convention Chairs**

This volume forms the proceedings of one of eight co-located symposia held at the AISB Convention 2013 that took place 3rd-5th April 2013 at the University of Exeter, UK. The convention consisted of these symposia together in four parallel tracks with five plenary talks; all papers other than the plenaries were given as talks within the symposia. This symposium-based format, which has been the standard for AISB conventions for many years, encourages collaboration and discussion among a wide variety of disciplines. Although each symposium is self contained, the convention as a whole represents a diverse array of topics from philosophy, psychology, computer science and cognitive science under the common umbrella of artificial intelligence and the simulation of behaviour.

We would like to thank the symposium organisers and their programme committees for their hard work in publicising their symposium, attracting and reviewing submissions and compiling this volume. Without these interesting, high quality symposia the convention would not be possible.

Dr Ed Keedwell & Prof. Richard Everson  
AISB 2013 Convention Chairs

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## Contents

### *Preface*

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### *The Muses of Poetry - In search of the poetic experience*

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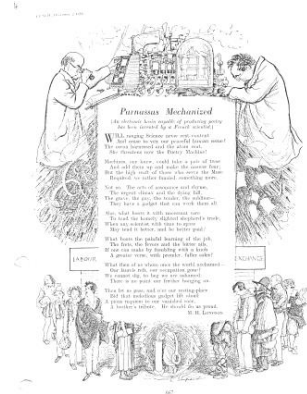
### *Computational Modelling of Poetry Generation*

Pablo Gervás  
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### *Emotional and Multi-agent Systems in Computer-aided Writing and Poetry*

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Poetry exemplifies fundamental aspects of creativity which, in the view of proponents of Lady Lovelace's objection that computers can do nothing original, focus strongly the differences between machines and humans. Poetry also exemplifies hard problems of practical AI, in natural language generation, expressive speech and non-verbal behaviour. This makes it a particularly valuable domain for AI,

Mechanical though non-automated techniques of poetry production long precede computers. Perhaps best known are the 1950s Beat poets' use of cut-ups, following from the 1920s Dadaist approaches of random selection of words.

Almost all subsequent automated poetry generation, while considerably more sophisticated, still relies on guided random selection of words or phrases to populate syntactic structures under different constraints.

Thus, in one of the earliest documented instances, Christopher Strachey's 1951 program generated love letters on the Manchester Mark 1 computer [1], for example:

*LOVE DUCK*

*MY ADORATION HOPES FOR YOUR LUST. YOU ARE MY WINNING  
ARDOUR: MY SWEET INFATUATION: MY ADORABLE FANCY: MY  
WINNING SYMPATHY.*

*YOURS LOVINGLY*

*M. U. C.*

There seems to have been contemporaneous reporting of other experiments in computer generated text. In December 1953, the UK magazine *Punch* ran a (human) poem by M. H. Longson entitled *Parnassus Mechanized* [2] with the caption:

*(An electronic brain capable of producing poetry has been invented by a French scientist)*

The first verse is:

*Will raging Science never rest content*

*And cease to vex our peaceful human scene?  
The ocean harnessed and the atom rent,  
She threatens now the Poetry Machine.*

Above the poem, appear white coated boffins intent on fiendish equipment; below, poets queue at the Labour Exchange. The cartoons were drawn by E.H. Shepard, better known for his *Winnie the Pooh* and *Wind in the Willows* illustrations.

The 1968 exhibition *Cybernetic Serendipity: the computer and the arts*, held at the Institute of Contemporary Arts in London, contained a major section on computer poetry and text. The ten articles in the catalogue [3] suggest considerable international interest in both the processes and aesthetics of automated poetry generation. From the brief accounts of the programs, they all seem to depend on random selection and permutation using templates.

The articles also suggest fruitful collaboration between computer scientists and poets, perhaps reflecting C. P. Snow's optimism that the "two cultures" of science and art could be reconciled in a "third culture" [4]. In this catalogue, the celebrated Scottish poet Edwin Morgan discusses simulated computer poems. He also presents translations of poems in Italian generated by a program from Nanni Balestrini.

Our Symposium, while considerably more modest than the 1968 exhibition, nonetheless shows on-going interest in computers and poetry. 5 papers were submitted of which 3 were selected, by the Programme Committee:

- Ruth Aylett, Heriot-Watt University, co-organiser;
- Simon Colton, Imperial College, London
- Pablo Gervas Universidad Computense de Madrid;
- Kevin Knight, University of Southern California;
- Ian McDonagh, widely published poet;
- Christopher Newall, University of Hull;
- Greg Michaelson, Heriot-Watt University, co-organiser;
- Catherine Pelachaud, CNRS;
- Geraint Wiggins, Queen Mary University, London.

[1] D. Link, *LoveLetters\_1.0. MUC=Resurrection. A Memorial*.

[http://alpha60.de/loveletters/2009\\_zkm/](http://alpha60.de/loveletters/2009_zkm/)

[2] *Punch*, December 2<sup>nd</sup>, 1953, p667.

[3] J. Reichardt (ed), *Cybernetic Serendipity: the computer and the arts*, Studio International, special issue, 1968.

[4] C. P. Snow, *The Two Cultures: and A Second Look*, Mentor, 1963.