CC-NLG 2017

The INLG 2017 Workshop on

Computational Creativity in Natural Language Generation

Proceedings of the Workshop

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Introduction

Welcome to the second edition of the Workshop on Computational Creativity in Natural Language Generation (CC-NLG), collocated with INLG 2017, the International Conference on Natural Language Generation. As a follow-up of CC-NLG 2016, this workshop builds upon the dynamic of bringing together researchers dealing with text generation from a computational creativity perspective, and researchers in natural language generation with an interest in creative aspects.

These two communities have been working separately for many years, as the focus in each one of them has been different: creativity research tends to be less focused on technical issues in natural language generation, and more on issues related to cognition, aesthetics, and novelty; while NLG research tends to focus on technical and theoretical aspects of processes, the informativeness of textual content, and readability of output. However, recent progress in both fields is reducing many of these differences – with creativity projects moving more towards robust implementation, and NLG research including stylistics, variation and literary genres such as poetry or narrative. We believe they are now approaching the point where they can mutually benefit from ongoing work. By encouraging members of both communities to discuss work in related topics with each other, we hope to move towards better joint understanding of the problems involved.

These proceedings include a total of five papers, three focused on poetry generation and two on story generation.

Hugo Gonçalo Oliveira, Ben Burtenshaw, Mike Kestemont, Tom De Smedt

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Florian Kunneman, Radboud University, Nijmegen

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Invited Talk

A Feast for the Senses in 140 Characters or Less
Making Generation More Personal, Affective and Perceptually Grounded

By Tony Veale, School of Computer Science, University College Dublin, Ireland.

Shakespeare wrote that a rose by any other name would smell just as sweet, but would this alternate name be just as effective as a metaphor? Perhaps, though any figurative uses would surely depend on the exact makeup of the new name. Were we to instead refer to a rose as a "goreweed," a "prickbleed," a "bloodwort" or a "turdblossom" we would surely have to find new metaphorical uses for this familiar flower. Our metaphors do more than evoke lexical semantics in the mind of a reader, and the very best can tap into our memories and perceptual faculties to create a feast for the senses, one that is as rich in colour, texture and aroma as it is in semantic meaning. So when we bend our machines to the interpretation and generation of novel metaphors, we must ensure they are as adept with the multi-modal connotations of words as they are with their denotative semantics. In this work I explore the mutual grounding of linguistic metaphors in non-linguistic multi-modal stimuli – such as colours and abstract generative art – and vice versa: I show how non-representational visual stimuli can serve to bind together the various elements of a complex linguistic metaphor, to squeeze more meaning and connotation from the words than an utterance alone can manage. In each case these elements are further grounded in the social and the personal, insofar as the machine-crafted metaphors are generated to reflect the real-time behavioral traits of real people – the metaphor's intended audience – on social media. I demonstrate the various strands of this work using real Twitter "bots" such as @MetaphorMagnet, @BestOfBotWorlds and @BotOnBotAction. These bots are autonomous AI systems that are designed to interact with real people on Twitter and to showcase the applicability of machine-generated (but human-targeted and human-centered) metaphors in social media. I aim to show how they can offer an ideal vehicle for exploring the related themes of symbolic grounding, affective meaning and multi-modal creativity in language generation.