## Spontaneity and Structure in Stand-up Comedy: Fake it till you make it

## Vanessa Pope

Queen Mary University of London

## Abstract:

Two types of data are typically used in the study of human speech and communication: in-the-wild conversations or speech generated in a lab. With both data types there is a trade-off between controlling an interlocutor's communicative intent and the naturalness of their interaction or environment. In this research, I use a computer-based methodology to generate findings from a third type of speech data that is both controlled and ecologically valid: repeated live performances of stand-up comedy.

Stand-up comedians repeat material with seeming spontaneity across performances, designing their speech to sound conversational. In this work, exactly matching sequences are located in performance transcripts that contain all sounds uttered on stage, including apparent errors, to discriminate between truly spontaneous utterances and those that are rehearsed.

Subsequence matching is applied to multiple performances from two solo performers. Five performances from an established touring show are compared to one another and to their source text. Another set of five performances from a stand-up comedy show in development is then analysed: two performances from its early stages and three from its full-fledged performance six months later. First, findings from the two datasets are compared to discuss the comedians' use laughter, structure and disfluencies. Second, the analysis of the two shows in development are contrasted with the profile of established performances.

Stand-up comedians deviate from their own script, if they have a script at all, but do not do so at random. The analysis shows that some transcript material is consistently re-used while other sections are more flexible. For example, a comedian breaks a sequence to elicit more laughter from an unusually quiet audience before resuming their prepared material. The reliable differences between source text and transcript, such as the introduction of filled pauses, show how solo performers make a text their own, calling into question lab-based speech generation where researchers present performers with a text and remove disfluencies in the recorded speech.

## Biosketch:

Vanessa Pope is a dramaturg and PhD student in Media and Arts Technology at Queen Mary University of London, following a BSc in Psychology at McGill University and an MA in Theatre Directing from the

University of East Anglia. Drawing inspiration from quantitative analysis of music performance, Vanessa's research focuses on the systematic and computational analysis of the actor's craft. This includes areas such as actor movement for virtual reality and the structure of speech in stand-up comedy.

Vanessa has presented her work at venues including CHI 2017, the ACM conference on Human Factors in Computing Systems, the Laughter Workshop, the European Research Music Conference, and the London Hopper Colloquium, where she was awarded second prize in the spotlight competition. Vanessa was recognised for Outstanding Contribution to the Media and Arts Technology Programme for organising the 2017 interdisciplinary workshop, Intersections, and coordinating, Widen The Net: Collaborating Between Digital and Performance, a research get-together to encourage dialogue between researchers in MAT and the School of Drama.

Between directing cabaret performances, Vanessa was dramaturg for Sundowning, a 360-degree short film currently in post-production.