

CS 4395.001

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Summary of:

Catchphrase: Automatic Detection of Cultural References

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Catchphrase is all about *snowclones*, a type of regular expression that is customizable to replace a key chunk of a phrase with another, usually as a pop-culture reference or an internet meme. Snowclones are an integral part of current culture, an example being the meme of the phrase from “The Lord of the Rings”, “One does not simply walk into Morder”, which in its snowclone form could be seen as “One does not simply ***” where the asterisks would be replaced with whatever suits the cultural reference. An example can be seen below.



[1]

The main purpose of the article is showcasing the work the authors did to create a program that could identify snowclones and their origin, with a focus on being able to aid non-native english speakers identify pop-culture references. The authors were reasonably

successful, and published both a pop-culture reference data set as well as an internet browser extension to highlight tagged snowclones.

The authors started their work by seeing how well non-native speakers from Israel could identify the origin of a snowclone from a set of 20 notable movie quotes . From a selection of 22 volunteers, mostly between the ages of 25-35 years old, most people correctly identified the origin of about half the quotes. After creating their browser extension, the authors then surveyed 10 volunteers (about the same demographics as last survey) on being able to identify a snowclone in text as well as its origin. The results showed that without the extension the volunteers were only able to identify about 38.7% of the snowclones, and the origin of them at about 61.2% accuracy. With the aid of the extension, the volunteers were able to identify 68.7% of snowclones, with the origin identified at 98.1% accuracy.

The work done by the authors is self-described as just a stepping stone in the realm of identifying pop-culture references, and researching how they develop and spread across culture. In the future, they hope to be able to use this work in conversational AI, and even generating pop-culture references.

Although the PhD student has only received 1 citation on Google Scholar so far (and the professor received 2044 citations), this work shows amazing progress in NLP tools to aid humans communicate more effectively with one another, notably non-native speakers. I believe this work is incredibly important, as one of the largest barriers between non-native speakers and native speakers is the use of pop-culture references and slang phrases that have separate meanings from their literal sense. As someone who has tried to learn quite a few languages in the past, I believe this area of research, if expanded, could make long strides in allowing humans of all cultures to communicate together with less confusion.

Citations:

[1] Kosmodog1981. (n.d.). *One does not simply*. Imgflip. Retrieved November 14, 2022, from <https://imgflip.com/i/1xes3o>

Paper: Sweed, Nir, and Dafna Shahaf. "Catchphrase: Automatic Detection of Cultural References." arXiv preprint arXiv:2106.04830 (2021).