Neural Transfer of Linguistic Style

The disentanglement of style and content comes relatively easy to us humans. We can look at a painting and describe the contents as “there is a house”, and describe the style as “this looks like it has been painted by Picasso”. This is an inherently difficult task for machines, since it requires deep knowledge of visual perception. Amazingly, the separation of style and content in images using Deep Learning has been quite successful\(^1\).

However, in less visual domains, such as music and written text, progress is slower. In this thesis we are interested in further exploring disentanglement between style and content in written text. Different authors of different epochs wrote differently. Experts can certainly distinguish between texts written by Shakespeare and H.P. Lovecraft. Once a certain degree of separation has been achieved, we can explore linguistic style transfer. We have already done research in this direction, but are open to new ideas. If this sounds interesting to you, do not hesitate to contact us.

**Requirements:** Knowledge in Machine and Deep Learning. Some practical experience with implementation of ML/DL algorithms would be helpful. Interest in linguistics.

**Interested? Please contact us for more details!**

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\(^1\)https://arxiv.org/abs/1508.06576