

Unfamiliar Analysis of Orhan Pamuk's Kara Kitap

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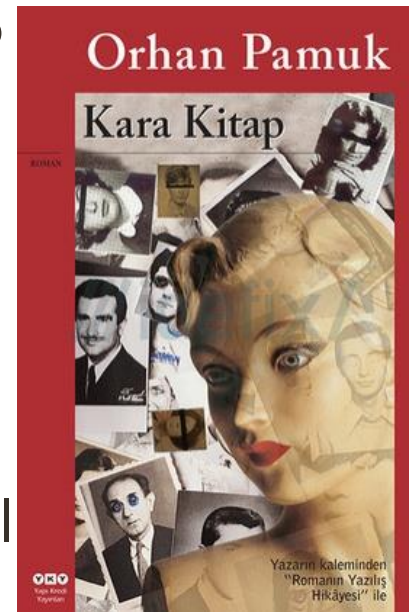
Introduction & Motivation

- Born in 1952
- Recipient of the 2006 Nobel Prize in Literature
- Kara Kitap written in 1990
(one of the most famous book)
- Understanding writing style of him



Problem Definition

- Two main characters : Celal and Galip
- Galip : husband of Rya, brother of Celal
- Celal : columnist in Milliyet
- Rya & Celal left
- Galip admired Celal
- Celal & Rya murdered by fan of Celal
- Galip returns law career & continue writing



Problem Definition

- Two main section;
 - 19 subsection : Celal's
 - 17 subsection : Galip's
- Analysis of writing style of Orhan Pamuk
 - Using newspaper column data

Importance

- Identifying writing style of Orhan Pamuk
 - By comparing two different characters
- Applicable to other author verification problems

Literature Review

- Support Vector Machine [1]
 - For n training sample : $O(n^2)$
- Bayesian Classification [2]
 - Learning network structure and conditional probabilities has exponential cost

Methodology

- Feature Selection
 - Length of sentences, length of words, part of speech tagging
- Classification
 - Entropy based method : Kullback-Leibler Divergence (KLD) [3]
 - Compare Celal & Galip with another writer

Expected Result

- Orhan Pamuk kept his writing style
 - Small entropy value between Galip & Celal
 - High entropy value between Orhan Pamuk and other author

References

- [1] - Koppel, Moshe, and Jonathan Schler. "Authorship verification as a one-class classification problem." Proceedings of the twenty-first international conference on Machine learning. ACM, 2004.
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- [3] - Manevitz, Larry M., and Malik Yousef. "One-class SVMs for document classification." the Journal of machine Learning research 2 (2002): 139-154.