

Table 1: Historical figures with impact scores

historical figure	positive / negative impact
Albert Einstein	0.523 / 0.477
Isaac Newton	0.700 / 0.300
Al Capone	0.304 / 0.696
Marilyn Monroe	0.602 / 0.398
Joseph Stalin	0.448 / 0.552
Billy the Kid	0.601 / 0.399
Charles Manson	0.371 / 0.629

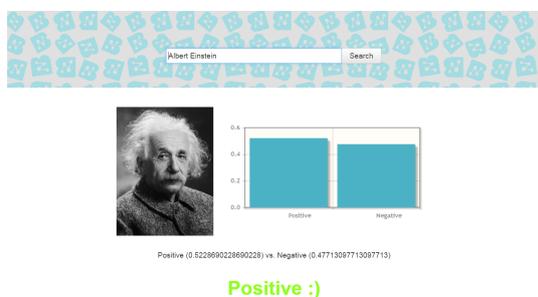
3 Implementation and results

The described process has been automated by using Java along with *BabelNet* API for querying the semantic network. To select the synset for given query, following parameters were used:

- Language = EN
- BabelPOS = NOUN
- BabelSenseSource = WIKIDATA

For testing purposes, a few historical figures has been selected and assessed with given algorithm. The scores are presented in *Table 1*.

For given set of names it can be said that following approach can be used to assess historical figures. People like Albert Einstein, Isaac Newton, Marilyn Monroe can be considered as ones having positive impact, on the other hand individuals like Al Capone, Joseph Stalin and Charles Manson are associated with crimes and negative impact on human history. An interesting case comes wit Billy the Kid, who was the notorious gunslinger and should be associated with criminal activities. As it turned out, the entity selected by *BabelNet* referred to movie carrying the same title Billy the Kid.



Described algorithm has been also encapsulated into one-page web application⁵ based on Java EE

⁵<https://bhs.opi.org.pl/bhs-web/>

technology. The source for this application containing *BabelNet* querying methods and sentiment calculations is available on GitHub⁶

4 Conclusions and further work

It has been shown that the problem of assessing historical figures can be dealt with by using *BabelNet* and simple sentiment analysis system based only on dictionaries. Although there were no gold-standard sets to compare with, by checking dozens of most popular historical figures, we can assume that such method can be developed further. One of the key ingredient to this method would be to use disambiguating mechanism in order to select the exact synset carrying glosses related to historical figure in question.

References

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⁶<https://github.com/dotjabber/babelnet-historical-sentiment>