# Actors (Automated Content Analysis)

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#### **KEYWORDS**

actors, agenda setting, framing, dictionary approach, part-of-speech tagging, syntactic parsing

#### **BRIEF DESCRIPTION**

Actors in coverage might be individuals, groups, or organizations, which are discussed, described, or quoted in the news.

The datasets referred to in the table are described in the following paragraph:

Benoit and Matuso (2020) uses fictional sentences (N = 5) to demonstrate how named entities and noun phrases can be identified automatically. Lind and Meltzer (2020) demonstrate the use of organic dictionaries to identify actors in German newspaper articles (2013-2017, N = 348,785). Puschmann (2019) uses four data sets to demonstrate how sentiment/tone may be analyzed by the computer. Using tweets (2016, N = 18,826), German newspaper articles (2011-2016, N = 377), Swiss newspaper articles (2007-2012, N = 21,280), and debate transcripts (1970-2017, N = 7,897), he extracts nouns and named entities from text. Lastly, Wiedemann and Niekler (2017) extract proper nouns from State of the Union speeches (1790-2017, N = 233).

#### FIELD OF APPLICATION/THEORETICAL FOUNDATION

Related to theories of "<u>Agenda Setting</u>" and "<u>Fra-</u> ming", analyses might want to know how much weight is given to a specific actor, how these actors are evaluated and what perspectives and frames they might bring into the discussion how prominently.

## REFERENCES/COMBINATION WITH OTHER METHODS OF DATA COLLECTION

Oftentimes, studies use both manual and automated content analysis to identify actors in text. This might be a useful tool to extend the lists of actors that can be found as well as to validate automated analyses. For example, Lind and Meltzer (2020) combine manual coding and dictionaries to identify the salience of women in the news.

#### REFERENCES

- Benoit, K., & Matuso, A. (2020). A Guide to Using spacyr. Retrieved from https:// cran.r-project.org/web/packages/spacyr/vignettes/using\_spacyr.html
- Lind, F., & Meltzer, C. E. (2020). Now you see me, now you don't: Applying automated content analysis to track migrant women's salience in German news. Feminist Media Studies, 1–18.
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- Wiedemann, G., Niekler, A. (2017). Handson: a five day text mining course for humanists and social scientists in R. Proceedings of the 1st Workshop Teaching NLP for Digital Humanities (Teach4DH@ GSCL 2017), Berlin. Retrieved from https:// tm4ss.github.io/docs/index.html



### Table 1. Measurement of "Actors" using automated content analysis.

Author(s)	Sample	Procedure	Formal validity check with ma- nual coding as benchmark*	Code
Benoit & Matuso (2020)	Fictional sentences	Part-of-Speech tagging; syntac- tic parsing	Not reported	https://cran.r-project. org/web/packages/spa- cyr/vignettes/using_ spacyr.html
Lind & Melt- zer (2020)	Newspapers	Dictionary ap- proach	Reported	https://osf.io/ yqbcj/?view_on- ly=369e2004172b43b- b91a39b536970e50b
Puschmann (2019)	<ul> <li>(a) Tweets</li> <li>(b) German new- spaper articles</li> <li>(c) Swiss newspa- per articles</li> <li>(d) United Nations</li> <li>General Debate</li> <li>Transcripts</li> </ul>	Part-of-Speech tagging; syntac- tic parsing	Not reported	http://inhaltsanalyse- mit-r.de/ner.html
Wiedemann & Niekler (2017)	State of the Union speeches	Part-of-Speech tagging	Not reported	https://tm4ss.github.io/ docs/Tutorial_8_NER_ POS.html

\* Please note that many of the sources listed here are tutorials on how to conducted automated analyses – and therefore not focused on the validation of results. Readers should simply read this column as an indication in terms of which sources they can refer to if they are interested in the validation of results.