

Best config – Preset SE, Normalization, Scope_Expansion
verb rule [subj] and new rule for all other verbs: [objg,obja,objd,objc,obji,s,objp-*,subj]

1	Standard	1.1 Baseline_window4_both	1.2 Baseline_one_rule
F_SE	100	100	100
Precision Shifter	67.22	42.13	38.89
Recall Shifter	60.45	55.97	60.07
F-Score Shifter	63.65	48.08	47.21

Compare different rule configurations for transitive and intransitive verbs

Only 1 verb rule: [objg,obja,objd,objc,obji,s,objp-*]

2	Standard		
F_SE	100		
Precision Shifter	67.29	3.64	
Recall Shifter	53.73	-6.72	
F-Score Shifter	59.75	-3.9	(compared to best config)

Only 1 verb rule: [objg,obja,objd,objc,obji,s,objp-*,subj]

3	Standard		
F_SE	100		
Precision Shifter	64.82	1.17	
Recall Shifter	61.19	0.74	
F-Score Shifter	62.96	-0.69	(compared to best config)

Rule for intrasitive verbs: [subj] and for all others: [obja]

4	Standard		
F_SE	100		
Precision Shifter	75.78	12.13	
Recall Shifter	45.52	-14.93	
F-Score Shifter	56.88	-6.77	(compared to best config)

Only 1 verb rule: [obja]

4.5	Standard		
F_SE	100		
Precision Shifter	78	14.35	
Recall Shifter	43.66	-16.79	
F-Score Shifter	55.98	-7.67	(compared to best config)

Keep best rules, change other parameters

No Scope Expansion

5	Standard		
F_SE	100		
Precision Shifter	69.65	2.43	
Recall Shifter	52.24	-8.21	
F-Score Shifter	59.7	-3.95	(compared to best config)

With orientation lookup

6	Standard		
F_SE	100		
Precision Shifter		-67.22	
Recall Shifter		-60.45	
F-Score Shifter		-63.65	(compared to best config)

No Normalization

7	Standard		
F_SE	100		
Precision Shifter	71.54	4.32	
Recall Shifter	34.7	-25.75	
F-Score Shifter	46.73	-16.92	(compared to best config)

Turn off parts of normalization

No conjunction normalization

7.01	Standard		
F_SE	100		
Precision Shifter		-67.22	
Recall Shifter		-60.45	
F-Score Shifter		-63.65	(compared to best config)

No active-passive normalization

7.02	Standard		
F_SE	100		
Precision Shifter	66.8	-0.42	
Recall Shifter	60.07	-0.38	
F-Score Shifter	63.26	-0.39	(compared to best config)

Lexicon based evaluation

Lexicon_standard: Lexicon, Normalisierung, POS lookup				
8	10.0 Standard	10.1 Baseline_window4_both	10.2 Baseline_one_rule	
F_SE	64.31	64.31	64.31	
Precision Shifter	46.83	25.96	23.22	
Recall Shifter	35.82	35.45	37.69	
F-Score Shifter	40.59	29.97	28.73	

Lexicon_no_POS: Lexicon, Normalization, No POS lookup	
9	11.0 Standard
F_SE	
Precision Shifter	
Recall Shifter	
F-Score Shifter	

POS-lookup yields slight improvement

Lexicon_extended: germanlex_extended, Normalization, POS lookup			
10	12.0 Standard	12.1 Baseline_window	12.2 Baseline_one_rule
F_SE			
Precision Shifter			
Recall Shifter			
F-Score Shifter			

Baseline window evaluation – find the best n

Preset-SE, Normalization, right side of shifter		
N=1	F-Score Shifter:	14.10
N=2	F-Score Shifter:	30.53
N=3	F-Score Shifter:	35.29
N=4	F-Score Shifter:	35.56
N=5	F-Score Shifter:	34.56
N=6	F-Score Shifter:	33.89

Preset-SE, Normalization, left side of shifter		
N=1	F-Score Shifter:	20.83
N=2	F-Score Shifter:	30.20
N=3	F-Score Shifter:	30.06
N=4	F-Score Shifter:	30.86
N=5	F-Score Shifter:	30.57
N=6	F-Score Shifter:	30.07

Both directions		
N=1	F-Score Shifter:	29.19
N=2	F-Score Shifter:	46.15
N=3	F-Score Shifter:	47.46
N=4	F-Score Shifter:	48.08
N=5	F-Score Shifter:	48.06
N=6	F-Score Shifter:	47.82
N=7	F-Score Shifter:	47.51

Baseline rule evaluation with clause

BaselineRule classic –with clause case	
11	Standard
F_SE	
Precision Shifter	
Recall Shifter	
F-Score Shifter	-47.21 (compared to baseline without clause case)

Only negation in shifterLex

Negation only	
12	Standard
F_SE	
Precision Shifter	
Recall Shifter	
F-Score Shifter	