

	SUPAR (UD)							
	Experiment 1		Experiment 2		Experiment 3		Average	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Ancient Greek (Perseus)	81.82	77.41	82.08	77.66	81.65	77.05	81.74	77.37
Ancient Greek (PROIEL)	88.00	84.48	87.85	84.32	88.18	84.60	88.01	84.47
Bulgarian (BTB)	93.91	90.38	93.98	90.49	94.16	90.54	94.02	90.47
Catalan (AnCorà)	94.36	92.65	94.41	92.66	94.48	92.75	94.42	92.69
Chinese (GSD)	85.13	83.06	85.27	83.28	85.07	83.13	85.16	83.16
English (EWT)	90.75	89.07	90.78	88.99	90.87	89.06	90.80	89.04
Finnish (TDT)	91.11	88.72	91.16	88.66	90.71	88.19	90.99	88.52
Hebrew (HTB)	91.58	89.30	91.51	89.15	91.23	88.79	91.44	89.08
Russian (GSD)	89.39	85.38	89.00	84.95	89.25	85.31	89.21	85.21
Russian (SynTagRus)	94.31	92.97	94.27	92.91	94.26	92.92	94.28	92.93
Tamil (TTB)	76.92	68.68	75.26	66.57	74.87	68.63	75.68	67.96
Uyghur (UDT)	78.10	64.96	78.35	64.93	78.00	64.30	78.15	64.73
Wolof (WTB)	88.83	84.43	88.55	84.05	88.89	84.45	88.76	84.31
Kazakh (KTB)	56.71	36.03	57.89	37.09	59.99	39.58	58.20	37.57
French (GSD)	93.79	91.36	93.77	91.38	93.77	91.21	93.78	91.32
German (GSD)	89.07	84.58	89.05	84.63	89.20	84.75	89.11	84.65
Italian (ISDT)	94.33	92.58	94.03	92.31	94.08	92.41	94.15	92.43
Romanian (RRT)	91.67	86.28	91.97	86.50	91.84	86.47	91.83	86.42
Spanish (AnCorà)	93.64	91.65	93.49	91.45	93.62	91.62	93.58	91.57
Spanish (GSD)	91.89	89.67	91.83	89.47	92.01	89.66	91.91	89.60
Norwegian (Bokmaal)	94.75	93.44	94.90	93.63	94.83	93.41	94.83	93.49
Norwegian (Nynorsk)	94.13	92.75	94.39	93.11	94.38	93.10	94.30	92.99
Dutch (Alpino)	92.54	90.03	92.23	89.69	92.30	89.68	92.36	89.80
Dutch (LassySmall)	90.77	87.76	91.09	87.91	90.97	87.82	90.94	87.83
Czech (PDT)	94.06	91.26	94.10	91.31	94.11	91.32	94.09	91.30
Czech (CAC)	92.91	89.63	92.96	89.45	92.79	89.27	92.89	89.45
Czech (CLTT)	87.81	83.81	87.47	83.31	86.89	82.92	87.39	83.35
Czech (FicTree)	94.08	90.55	93.74	90.13	94.06	90.43	93.96	90.37

	SyntacticPointer (UD)							
	Experiment 1		Experiment 2		Experiment 3		Average	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Evaluation values removing cycles								
Ancient Greek (Perseus)	79.72	75.06	80.14	75.66	80.14	75.44	80.00	75.39
Ancient Greek (PROIEL)	86.89	83.13	86.26	83.26	86.90	83.18	86.68	83.19
Bulgarian (BTB)	93.40	89.66	93.65	89.84	93.70	89.90	93.58	89.80
Catalan (AnCorà)	94.09	92.21	94.11	92.23	94.07	92.24	94.09	92.23
Chinese (GSD)	85.04	82.59	84.63	82.04	84.37	82.04	84.68	82.34
English (EWT)	90.64	88.84	90.58	88.77	90.91	89.11	90.71	88.91
Finnish (TDT)	89.92	87.29	89.98	87.31	89.89	87.16	89.93	87.25
Hebrew (HTB)	91.09	88.31	91.03	88.50	91.08	88.55	91.07	88.45
Russian (GSD)	88.01	83.80	88.18	83.84	88.12	83.74	88.10	83.79
Russian (SynTagRus)	94.06	92.61	93.97	92.52	94.02	92.56	94.02	92.56
Tamil (TTB)	74.06	63.95	75.36	64.96	74.41	64.20	74.61	64.37
Uyghur (UDT)	77.61	63.58	77.09	63.48	76.95	63.01	77.22	63.36
Wolof (WTB)	87.61	82.37	87.01	81.97	86.61	81.78	87.08	82.04
Kazakh (KTB)	52.40	28.56	53.12	28.02	55.31	28.71	53.61	28.43
French (GSD)	93.16	90.55	93.60	91.20	93.49	91.07	93.42	90.94
German (GSD)	89.14	84.62	88.74	84.26	88.77	84.28	88.88	84.39
Italian (ISDT)	93.99	92.24	93.81	92.05	94.04	92.17	93.95	92.15
Romanian (RRT)	91.16	85.47	91.14	85.67	91.01	85.47	91.10	85.54
Spanish (AnCorà)	93.11	90.97	92.98	90.76	93.12	91.01	93.07	90.91
Spanish (GSD)	91.71	89.28	91.64	89.39	91.42	89.15	91.59	89.27
Norwegian (Bokmaal)	94.76	93.40	94.69	93.30	94.70	93.25	94.72	93.32
Norwegian (Nynorsk)	94.21	92.90	94.37	93.04	94.30	93.00	94.31	92.98
Dutch (Alpino)	92.03	89.17	91.96	89.21	92.01	89.29	92.00	89.22
Dutch (LassySmall)	90.52	87.22	90.74	87.51	90.88	87.70	90.71	87.48
Czech (PDT)	93.70	90.74	93.73	90.76	93.71	90.73	93.71	90.74
Czech (CAC)	92.55	89.00	92.47	88.97	92.56	89.16	92.53	89.04
Czech (CLTT)	84.32	78.90	85.00	80.16	83.67	78.60	84.33	79.22
Czech (FicTree)	93.71	89.53	94.00	90.21	94.05	90.13	93.92	89.96

	DepToLabel (UD)							
	Experiment 1		Experiment 2		Experiment 3		Average	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Ancient Greek (Perseus)	74.32	68.60	74.34	68.58	73.94	68.20	74.20	68.46
Ancient Greek (PROIEL)	84.24	79.46	83.61	79.07	84.46	79.79	84.10	79.44
Bulgarian (BTB)	90.91	86.92	90.99	87.13	91.21	87.36	91.04	87.14
Catalan (AnCorà)	90.74	87.81	91.40	88.84	90.93	88.15	91.02	88.27
Chinese (GSD)	80.27	77.15	80.96	78.05	77.35	74.14	79.53	76.45
English (EWT)	88.97	86.91	89.34	87.20	89.13	87.07	89.15	87.06
Finnish (TDT)	85.98	83.00	85.97	83.12	85.85	82.89	85.93	83.00
Hebrew (HTB)	89.09	86.18	89.17	86.24	89.09	86.30	89.12	86.24
Russian (GSD)	85.23	80.78	85.30	81.05	85.26	80.88	85.26	80.90

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	SuPar		SyntacticPointer		Difference		BiAffine reference value		Left-Right reference value		Error reduction (Syn. vs Su.)	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
(Average of 3 experiments)												
Bulgarian (BTB)	94.02	90.47	93.58	89.80	0.43	0.67	94.42±0.02	90.70±0.04	94.28±0.06	90.66±0.11	6.75	6.57
Catalan (AnCorà)	94.42	92.69	94.09	92.23	0.33	0.46	93.83±0.02	91.96±0.01	94.07±0.06	92.26±0.05	5.53	5.92
Czech (PDT)	94.09	91.30	93.71	90.74	0.37	0.55	93.97±0.02	91.23±0.03	94.19±0.04	91.45±0.05	5.91	5.98
Czech (CAC)	92.89	89.45	92.53	89.04	0.36	0.41	93.97±0.02	91.23±0.03	94.19±0.04	91.45±0.05	4.82	3.71
Czech (CLTT)	87.39	83.35	84.33	79.22	3.06	4.13	93.97±0.02	91.23±0.03	94.19±0.04	91.45±0.05	19.53	19.86
Czech (FicTree)	93.96	90.37	93.92	89.96	0.04	0.41	93.97±0.02	91.23±0.03	94.19±0.04	91.45±0.05	0.66	4.12
Dutch (Alpino)	92.36	89.80	92.00	89.22	0.36	0.58	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	4.46	5.35
Dutch (LassySmall)	90.94	87.83	90.71	87.48	0.23	0.35	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	2.48	2.82
English (EWT)	90.80	89.04	90.71	88.91	0.09	0.13	90.86±0.15	88.92±0.19	90.93±0.11	88.99±0.11	0.97	1.20
French (GSD)	93.78	91.32	93.42	90.94	0.36	0.38	90.97±0.09	88.22±0.12	90.90±0.04	88.14±0.10	5.47	4.16
German (GSD)	89.11	84.65	88.88	84.39	0.22	0.27	87.28±0.07	82.99±0.07	87.06±0.05	82.63±0.01	2.01	1.71
Italian (ISDT)	94.15	92.43	93.95	92.15	0.20	0.28	94.08±0.04	92.24±0.06	94.28±0.06	92.48±0.02	3.30	3.57
Norwegian (Bokmaal)	94.83	93.49	94.72	93.32	0.11	0.18	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	2.08	2.64
Norwegian (Nynorsk)	94.30	92.99	94.31	92.96	-0.01	0.01	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-0.12	0.09
Romanian (RRT)	91.83	86.42	91.10	85.54	0.72	0.88	91.44±0.11	85.80±0.14	91.58±0.08	86.00±0.07	8.13	6.08
Russian (SynTagRus)	94.28	92.93	94.02	92.56	0.26	0.37	94.43±0.01	93.08±0.03	94.71±0.07	93.38±0.09	4.40	4.98
Spanish (AnCorà)	93.58	91.57	93.07	90.91	0.51	0.66	93.09±0.05	91.11±0.03	93.23±0.03	91.28±0.02	7.41	7.26
Spanish (GSD)	91.91	89.60	91.59	89.27	0.32	0.33	93.09±0.05	91.11±0.03	93.23±0.03	91.28±0.02	3.80	3.05
Average	92.70	89.98	92.26	89.37	0.44	0.61					4.87	4.95
											5.72	5.77

	DepToLabel		SyntacticPointer		Difference		BiAffine reference value		Left-Right reference value		Error reduction (Syn. vs D2L.)	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
(Average of 3 experiments)												
Bulgarian (BTB)	91.04	87.14	93.58	89.80	-2.55	-2.66	94.42±0.02	90.70±0.04	94.28±0.06	90.66±0.11	-39.69	-26.11
Catalan (AnCorà)	91.02	88.27	94.09	92.23	-3.07	-3.96	93.83±0.02	91.96±0.01	94.07±0.06	92.26±0.05	-51.89	-50.94
Czech (PDT)	91.73	89.44	93.71	90.74	-1.98	-1.30	93.97±0.02	91.23±0.03	94.19±0.04	91.45±0.05	-31.55	-14.08
Czech (CAC)	89.59	87.07	92.53	89.04	-2.93	-1.97	93.97±0.02	91.23±0.03	94.19±0.04	91.45±0.05	-39.25	-17.98
Czech (CLTT)	81.89	78.12	84.33	79.22	-2.44	-1.10	93.97±0.02	91.23±0.03	94.19±0.04	91.45±0.05	-15.59	-5.31
Czech (FicTree)	91.65	88.66	93.92	89.96	-2.27	-1.29	93.97±0.02	91.23±0.03	94.19±0.04	91.45±0.05	-37.34	-12.88
Dutch (Alpino)	91.24	88.04	92.00	89.22	-0.76	-1.19	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	-9.50	-11.01
Dutch (LassySmall)	85.46	81.43	90.71	87.48	-5.26	-6.04	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	-56.60	-48.26
English (EWT)	89.15	87.06	90.71	88.91	-1.56	-1.85	90.86±0.15	88.92±0.19	90.93±0.11	88.99±0.11	-16.83	-16.65
French (GSD)	93.42	91.86	93.42	90.94	0.00	0.92	90.97±0.09	88.22±0.12	90.90±0.04	88.14±0.10	0.05	10.12
German (GSD)	92.02	85.21	88.88	84.39	0.14	0.82	87.28±0.07	82.99±0.07	87.06±0.05	82.63±0.01	1.26	5.27
Italian (ISDT)	89.01	90.06	93.95	92.15	-1.94	-2.10	94.08±0.04	92.24±0.06	94.28±0.06	92.48±0.02	-31.99	-26.72
Norwegian (Bokmaal)	92.61	90.76	94.72	93.32	-2.10	-2.56	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-39.81	-38.25
Norwegian (Nynorsk)	91.46	89.10	94.31	92.98	-2.85	-3.88	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-50.00	-55.27
Romanian (RRT)	88.55	84.14	91.10	85.54	-2.55	-1.39	91.44±0.11	85.80±0.14	91.58±0.08	86.00±0.07	-28.66	-9.63
Russian (SynTagRus)	91.21	89.14	94.02	92.56	-2.81	-3.42	94.34±0.03	93.08±0.03	94.71±0.07	93.38±0.09	-46.91	-46.03
Spanish (AnCorà)	90.94	88.32	93.07	90.91	-2.13	-2.60	93.09±0.05	91.11±0.03	93.23±0.03	91.28±0.02	-30.69	-28.58
Spanish (GSD)	89.57	86.93	91.59	89.27	-2.02	-2.34	93.09±0.05	91.11±0.03	93.23±0.03	91.28±0.02	-24.06	-21.81
Average	90.09	87.26	92.26	89.37	-2.17	-2.11					-30.50	-23.01
											-28.04	-19.82

Russian (SynTagRus)	91.27	89.34	91.34	89.04	91.02	89.04	91.21	89.14
Tamil (TTB)	75.22	65.48	73.00	64.69	74.51	65.08	74.24	65.08
Uyghur (UDT)	78.03	63.58	77.93	63.49	77.92	63.97	77.96	63.68
Wolof (WTB)	83.16	78.53	82.77	78.30	83.46	79.03	83.13	78.62
Kazakh (KTB)	53.21	29.36	55.05	30.38	50.46	26.61	52.91	28.78
French (GSD)	93.63	92.20	92.93	91.24	93.69	92.13	93.42	91.86
German (GSD)	89.09	85.34	88.95	84.99	89.03	85.30	89.02	85.21
Italian (ISDT)	92.33	90.32	91.85	89.96	91.85	89.89	92.01	90.06
Romanian (RRT)	88.10	83.55	88.72	84.41	88.84	84.47	88.55	84.14
Spanish (AnCor)	90.99	88.38	90.85	88.06	90.99	88.51	90.94	88.32
Spanish (GSD)	89.32	86.61	89.43	86.78	89.95	87.41	89.57	86.93
Norwegian (Bokmaal)	92.63	90.77	92.67	90.84	92.54	90.67	92.61	90.76
Norwegian (Nynorsk)	92.77	90.73	91.22	88.85	90.39	87.72	91.46	89.10
Dutch (Alpino)	91.20	88.12	91.04	87.85	91.48	88.14	91.24	88.04
Dutch (LassySmall)	85.15	81.07	85.65	81.56	85.57	81.67	85.46	81.43
Czech (PDT)	91.31	88.92	91.98	89.76	91.90	89.64	91.73	89.44
Czech (CAC)	89.37	86.98	89.53	86.85	89.88	87.39	89.59	87.07
Czech (CLTT)	82.07	78.46	81.69	78.07	81.90	77.82	81.89	78.12
Czech (FicTree)	91.64	88.57	91.58	88.58	91.73	88.84	91.65	88.66

SUPAR (UD)						
	Experiment 1		Experiment 2		Experiment 3	
	UAS	LAS	UAS	LAS	UAS	LAS
Coptic (Scriptorium)	91.19	88.63	91.63	89.14	91.24	88.86
Indonesian (GSD)	87.15	82.78	87.09	82.73	86.90	82.70
Old Church Slavonic (PROIEL)	87.65	83.51	87.93	83.68	87.75	83.59
Polish (PDB)	94.09	89.40	94.12	89.45	94.10	89.35
Sanskrit (Vedic)	72.40	59.68	72.92	60.73	72.64	60.43

SyntacticPointer (UD)						
Evaluation values removing cycles	Experiment 1		Experiment 2		Experiment 3	
	UAS	LAS	UAS	LAS	UAS	LAS
Coptic (Scriptorium)	90.02	87.09	90.01	87.27	90.78	87.85
Indonesian (GSD)	86.52	81.83	86.60	81.96	86.47	81.93
Old Church Slavonic (PROIEL)	87.91	83.76	87.76	83.23	87.57	83.04
Polish (PDB)	93.60	88.48	93.48	88.24	93.55	88.31
Sanskrit (Vedic)	69.83	57.23	69.93	57.00	69.16	56.83

DepToLabel (UD)						
	Experiment 1		Experiment 2		Experiment 3	
	UAS	LAS	UAS	LAS	UAS	LAS
Coptic (Scriptorium)	87.82	84.16	86.00	79.91	88.60	85.12
Indonesian (GSD)	84.93	80.64	84.83	80.76	84.82	80.73
Old Church Slavonic (PROIEL)	83.35	77.44	83.06	77.41	83.11	77.15
Polish (PDB)	90.93	87.84	91.38	88.39	91.31	88.39
Sanskrit (Vedic)	68.35	52.88	68.19	52.89	67.99	52.97

SUPAR (UD)						
	Experiment 1		Experiment 2		Experiment 3	
	UAS	LAS	UAS	LAS	UAS	LAS
Arabic (PADT)	88.33	83.48	88.46	83.56	88.49	83.51
Basque (BDT)	88.48	85.32	88.26	85.11	88.19	84.93
Japanese (GSD)	94.41	93.94	94.25	93.76	94.25	93.82
Korean (GSD)	88.65	85.90	88.73	85.97	88.82	85.99
Korean (Kaist)	89.15	87.92	89.18	87.88	89.09	87.76
Turkish (IMST)	74.23	68.00	73.81	67.44	74.61	67.94

SyntacticPointer (UD)						
Evaluation values removing cycles	Experiment 1		Experiment 2		Experiment 3	
	UAS	LAS	UAS	LAS	UAS	LAS
Arabic (PADT)	87.46	82.31	87.44	82.28	87.60	82.55
Basque (BDT)	86.90	83.20	86.84	83.21	86.88	83.15
Japanese (GSD)	94.21	93.59	94.31	93.72	94.18	93.60
Korean (GSD)	87.51	84.22	87.73	84.53	87.70	84.49
Korean (Kaist)	89.34	87.89	89.39	88.00	89.26	87.88
Turkish (IMST)	70.65	63.41	70.49	63.22	70.83	63.55

DepToLabel (UD)						
	Experiment 1		Experiment 2		Experiment 3	
	UAS	LAS	UAS	LAS	UAS	LAS
Arabic (PADT)	83.12	78.41	83.91	79.64	83.56	79.14
Basque (BDT)	83.23	78.51	82.93	78.17	83.21	78.53
Japanese (GSD)	93.65	92.92	94.04	93.23	93.40	92.58

Tamil (TTB)	74.24	65.08	74.61	64.37	-0.37	0.71	58.1	58.8	55.35	-1.44	2.00
Average	82.71	77.21	85.07	79.26	-2.36	-2.05				-23.46	-15.69
										-15.80	-9.89

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(Average of 3 experiments)	SuPar		SyntacticPointer		Difference		BiAffine reference value		Error reduction (Syn. vs. Su.)	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Ancient Greek (Perseus)	81.74	77.37	80.00	75.39	1.74	1.99	75.5	70.4	8.68	8.07
Chinese (GSD)	85.16	83.16	84.68	82.34	0.48	0.81	88.2	85.9	3.11	4.61
English (EWT)	90.80	89.04	90.71	88.91	0.09	0.13	90.8	89.0	0.97	1.20
Finnish (TDT)	90.99	88.52	89.93	87.25	1.06	1.27	90.5	88.6	10.56	9.96
Hebrew (HTB)	91.44	89.08	91.07	88.45	0.37	0.63	90.8	88.6	4.18	5.43
Russian (GSD)	89.21	85.21	88.10	83.79	1.11	1.42	88.9	85.2	9.33	8.76
Tamil (TTB)	75.68	67.96	74.61	64.37	1.07	3.59	76.9	71.0	4.23	10.08
Uyghur (UDT)	78.15	64.73	77.22	63.36	0.93	1.37	75.2	58.9	4.10	3.75
Wolof (WTB)	88.76	84.31	87.08	82.04	1.68	2.27	88.5	84.5	13.00	12.64
Average	85.77	81.04	84.82	79.54	0.95	1.50			6.46	7.17
									6.25	7.32

Mark et al.										
	DepToLabel		SyntacticPointer		Difference		BiAffine reference value		Error reduction (Syn. vs D2L.)	
(Average of 3 experiments)	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Ancient Greek (Perseus)	74.20	68.46	80.00	75.39	-5.80	-6.93	75.5	70.4	-29.00	-28.14
Chinese (GSD)	79.53	76.45	84.68	82.34	-5.15	-5.90	88.2	85.9	-33.64	-33.40
English (EWT)	89.15	87.06	90.71	88.91	-1.56	-1.85	90.8	89.0	-16.83	-16.65
Finnish (TDT)	85.93	83.00	89.93	87.25	-4.00	-4.25	90.5	88.6	-39.69	-33.34
Hebrew (HTB)	89.12	86.24	91.07	88.45	-1.95	-2.21	90.8	88.6	-21.83	-19.17
Russian (GSD)	91.21	89.14	88.10	83.79	3.11	5.35	88.9	85.2	26.11	32.99
Tamil (TTB)	74.24	65.08	74.61	64.37	-0.37	0.71	76.9	71.0	-1.44	2.00
Uyghur (UDT)	77.96	63.68	77.22	63.36	0.74	0.32	75.2	58.9	3.26	0.88
Wolof (WTB)	83.13	78.62	87.08	82.04	-3.95	-3.42	88.5	84.5	-30.54	-19.04
Average	82.72	77.53	84.82	79.54	-2.10	-2.02			-15.95	-12.65
									-13.85	-9.87

Schluter et al.												
	SuPar		SyntacticPointer		Difference		BiAffine reference value		Left-Right reference value		Error reduction (Syn. vs Su.)	
(Average of 3 experiments)	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Coptic (Scriptorium)	91.35	88.88	90.27	87.40	1.08	1.47	-	-	-	-	11.13	11.70
Dutch (Alpino)	92.36	89.80	92.00	89.22	0.36	0.58	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	4.46	5.35
Dutch (LassySmall)	90.94	87.83	90.71	87.48	0.23	0.35	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	2.48	2.82
Hebrew (HTB)	91.44	89.08	91.07	88.45	0.37	0.63	90.8	88.6	-	-	4.18	5.43
Indonesian (GSD)	87.05	82.74	86.53	81.91	0.52	0.83	-	-	-	-	3.84	4.59
Italian (ISDT)	94.15	92.43	93.95	92.15	0.20	0.28	94.08±0.04	92.24±0.06	94.28±0.06	92.48±0.02	3.30	3.57
Norwegian (Bokmaal)	94.83	93.49	94.72	93.32	0.11	0.18	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	2.08	2.64
Norwegian (Nynorsk)	94.30	92.99	94.31	92.98	-0.01	0.01	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-0.12	0.09
Old Church Slavonic (PROIEL)	87.78	83.59	87.75	83.34	0.03	0.25	-	-	-	-	0.24	1.50
Polish (PDB)	94.10	89.40	93.54	88.34	0.56	1.06	-	-	-	-	8.67	9.06
Sanskrit (Vedic)	72.65	60.28	69.64	57.02	3.01	3.26	-	-	-	-	9.93	7.58
Average	90.09	86.41	89.50	85.60	0.59	0.81					4.56	4.94
											5.60	5.61

	Schluter et al.											
	DepToLabel		SyntacticPointer		Difference		BiAffine reference value		Left-Right reference value		Error reduction (Syn. vs D2L.)	
(Average of 3 experiments)	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Coptic (Scriptorium)	87.47	83.06	90.27	87.40	-2.80	-4.34	-	-	-	-	-28.74	-34.45
Dutch (Alpino)	91.24	88.04	92.00	89.22	-0.76	-1.19	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	-9.50	-11.01
Dutch (LassySmall)	85.46	81.43	90.71	87.48	-5.26	-6.04	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	-56.60	-48.26
Hebrew (HTB)	89.12	86.24	91.07	88.45	-1.95	-2.21	90.8	88.6	-	-	-21.83	-19.17
Indonesian (GSD)	84.86	80.71	86.53	81.91	-1.67	-1.20	-	-	-	-	-12.40	-6.61
Italian (ISDT)	92.01	90.06	93.95	92.15	-1.94	-2.10	94.08±0.04	92.24±0.06	94.28±0.06	92.48±0.02	-31.99	-26.72
Norwegian (Bokmaal)	92.61	90.76	94.72	93.32	-2.10	-2.56	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-39.81	-38.25
Norwegian (Nynorsk)	91.46	89.10	94.31	92.98	-2.85	-3.88	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-50.00	-55.27
Old Church Slavonic (PROIEL)	83.17	77.33	87.75	83.34	-4.57	-6.01	-	-	-	-	-37.32	-36.08
Polish (PDB)	91.21	88.21	93.54	88.34	-2.34	-0.14	-	-	-	-	-36.19	-1.17
Sanskrit (Vedic)	68.18	52.91	69.64	57.02	-1.46	-4.11	-	-	-	-	-4.82	-9.55
Average	86.98	82.53	89.50	85.60	-2.52	-3.07					-29.93	-26.05
											-23.97	-21.32

Korean (GSD)	85.68	82.74	85.54	82.66	85.62	82.93	85.61	82.78
Korean (Kaist)	87.67	85.85	87.22	85.44	87.47	85.59	87.45	85.63
Turkish (IMST)	68.56	61.38	67.78	61.09	67.78	60.84	68.04	61.10

Japanese (GSD)	94.30	93.84	94.23	93.64	0.07	0.20	-	-	-	-	1.21	3.20
Korean (GSD)	88.73	85.95	87.65	84.41	1.09	1.54	-	-	-	-	8.80	9.88
Russian (SynTagRus)	94.28	92.93	94.02	92.56	0.26	0.37	-	-	-	-	4.40	4.98
Swedish (Talbanken)	90.73	88.21	90.29	87.67	0.44	0.54	-	-	-	-	4.53	4.38
Turkish (IMST)	74.22	67.79	70.66	63.39	3.56	4.40	-	-	-	-	12.13	12.02
Average	89.82	87.18	89.04	86.14	0.78	1.04					5.87	6.22
											7.14	7.49

-10.65	-15.10
-27.69	-22.62
-53.67	-53.68
-65.59	-60.39
-23.96	-20.77
-37.04	-34.09
-35.81	-32.70

-1.23	-3.30
-9.64	-10.96
-4.60	-5.24
-4.75	-4.58
-13.81	-13.66
-6.39	-6.77
-8.09	-8.09

Kulmiez et al.												
(Average of 3 experiments)	DepToLabel		SyntacticPointer		Difference		BiAffine reference value		Left-Right reference value		Error reduction (Syn. vs Su.)	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Arabic (PADT)	83.53	79.06	87.50	82.38	-3.97	-3.32	-	-	-	-	-31.76	-18.82
Basque (BDT)	83.12	78.40	86.87	83.19	-3.75	-4.78	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	-28.57	-28.45
Chinese (GSD)	79.53	76.45	84.68	82.34	-5.15	-5.90	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	-33.64	-33.40
English (EWT)	89.15	87.06	90.71	88.91	-1.56	-1.85	90.8	88.6	-	-	-16.83	-16.65
Finnish (TDT)	85.93	83.00	89.93	87.25	-4.00	-4.25	-	-	-	-	-39.69	-33.34
Hebrew (HTB)	89.12	86.24	91.07	88.45	-1.95	-2.21	94.08±0.04	92.24±0.06	94.28±0.06	92.48±0.02	-21.83	-19.17
Hindi (HDTB)	94.69	91.56	95.95	93.51	-1.26	-1.95	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-31.11	-30.05
Italian (ISDT)	92.01	90.06	93.95	92.15	-1.94	-2.10	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-31.99	-26.72
Japanese (GSD)	93.70	92.91	94.23	93.64	-0.54	-0.73	-	-	-	-	-9.31	-11.42
Korean (GSD)	85.61	82.78	87.65	84.41	-2.03	-1.64	-	-	-	-	-16.46	-10.50
Russian (SynTagRus)	91.21	89.14	94.02	92.56	-2.81	-3.42	-	-	-	-	-46.91	-46.03
Swedish (Talbanken)	84.65	81.09	90.29	87.67	-5.64	-6.58	-	-	-	-	-58.08	-53.37
Turkish (IMST)	68.04	61.10	70.66	63.39	-2.62	-2.29	-	-	-	-	-8.92	-6.26
Average	86.18	82.99	89.04	86.14	-2.86	-3.15					-28.85	-25.71
											-26.11	-22.77

Error reduction (D2L. vs Su.)	
UAS	LAS
29.73	21.27
30.73	31.10
27.50	28.49
15.23	15.30
35.97	32.48
21.35	20.64
27.31	25.95
26.74	23.90
9.62	13.12
21.69	18.44
34.93	34.93
39.61	37.65
19.33	17.20
26.13	24.65
26.37	24.64

Error reduction (D2L. vs Syn.)	
UAS	LAS
24.10	15.84
22.22	22.15
25.17	25.04
14.40	14.27
28.41	25.00
17.92	16.09
23.73	23.10
24.24	21.09
8.51	10.25
14.13	9.50
31.93	31.52
36.74	34.80
8.19	5.89
21.52	19.58
20.71	18.54

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(Average of 3 experiments)	SuPar		SyntacticPointer		Difference		BiAffine reference value		Left-Right reference value		Error reduction (Syn. vs Su.)	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Ancient Greek (PROIEL)	88.01	84.47	86.68	83.19	1.33	1.28	-	-	-	-	9.96	7.59
Arabic (PADT)	88.43	83.52	87.50	82.38	0.93	1.14	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	7.41	6.45
Chinese (GSD)	85.16	83.16	84.68	82.34	0.48	0.81	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	3.11	4.61
English (EWT)	90.80	89.04	90.71	88.91	0.09	0.13	90.8	88.6	-	-	0.97	1.20
Finnish (TDT)	90.99	88.52	89.93	87.25	1.06	1.27	-	-	-	-	10.56	9.96
Hebrew (HTB)	91.44	89.08	91.07	88.45	0.37	0.63	94.08±0.04	92.24±0.06	94.28±0.06	92.48±0.02	4.18	5.43
Korean (Kaist)	89.14	87.85	89.33	87.92	-0.19	-0.07	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-1.78	-0.58
Russian (SynTagRus)	94.28	92.93	94.02	92.56	0.26	0.37	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	4.40	4.98
Swedish (Talbanken)	90.73	88.21	90.29	87.67	0.44	0.54	-	-	-	-	4.53	4.38
Average	89.89	87.42	89.36	86.74	0.53	0.68					4.82	4.89
											4.98	5.11

Error reduction (Su. vs D2L.)	
UAS	LAS
-32.58	-32.36
-42.31	-27.02
-37.93	-39.84
-17.97	-18.07
-56.18	-48.10
-27.14	-26.01
-15.53	-18.33
-53.67	-53.68
-65.59	-60.39
-38.77	-35.98
-37.69	-35.04

Error reduction (Su. vs Syn.)	
UAS	LAS
-11.06	-8.22
-8.01	-6.90
-3.21	-4.83
-0.98	-1.22
-11.81	-11.07
-4.36	-5.74
1.75	0.58
-4.60	-5.24
-4.75	-4.58
-5.23	-5.24
-5.24	-5.38

Smith et al.												
(Average of 3 experiments)	DepToLabel		SyntacticPointer		Difference		BiAffine reference value		Left-Right reference value		Error reduction (Syn. vs D2L.)	
	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS	UAS	LAS
Ancient Greek (PROIEL)	84.10	79.44	86.68	83.19	-2.58	-3.75	-	-	-	-	-19.37	-22.31
Arabic (PADT)	83.53	79.06	87.50	82.38	-3.97	-3.32	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	-31.76	-18.82
Chinese (GSD)	79.53	76.45	84.68	82.34	-5.15	-5.90	93.23±0.09	90.67±0.07	93.13±0.07	90.74±0.08	-33.64	-33.40
English (EWT)	89.15	87.06	90.71	88.91	-1.56	-1.85	90.8	88.6	-	-	-16.83	-16.65
Finnish (TDT)	85.93	83.00	89.93	87.25	-4.00	-4.25	-	-	-	-	-39.69	-33.34
Hebrew (HTB)	89.12	86.24	91.07	88.45	-1.95	-2.21	94.08±0.04	92.24±0.06	94.28±0.06	92.48±0.02	-21.83	-19.17
Korean (Kaist)	87.45	85.63	89.33	87.92	-1.88	-2.30	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-17.59	-19.02
Russian (SynTagRus)	91.21	89.14	94.02	92.56	-2.81	-3.42	95.02±0.05	93.75±0.05	95.23±0.06	93.99±0.07	-46.91	-46.03
Swedish (Talbanken)	84.65	81.09	90.29	87.67	-5.64	-6.58	-	-	-	-	-58.08	-53.37
Average	86.07	83.01	89.36	86.74	-3.28	-3.73					-31.74	-29.12
											-30.83	-28.14

Error reduction (D2L. vs Su.)	
UAS	LAS
24.58	24.45
29.73	21.27
27.50	28.49
15.23	15.30
35.97	32.48
21.35	20.64
13.44	15.49
34.93	34.93
39.61	37.65
26.93	25.63
27.37	25.95

Error reduction (D2L. vs Syn.)	
UAS	LAS
16.23	18.24
24.10	15.84
25.17	25.04
14.40	14.27
28.41	25.00
17.92	16.09
14.96	15.98
31.93	31.52
36.74	34.80
23.32	21.86
23.57	21.96