

# Exhibit A1

## Dutch PAROLE Lexicon Documentation

### Contents Specification

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### Introduction

The documentation for the Dutch PAROLE lexicon consists of two separate documents. The document **Background Information** contains linguistic information, and motivations for design and contents; the present document, **Contents Specification** contains detailed overviews of the exact contents of the lexicon, number of entries per part of speech, features, functions, etcetera. It serves as an addition to the general documentation which accompanies the set of PAROLE lexicons (PAROLE Reports; GENELEX (1993, 1994)). The other languages for which lexicons have been developed are: Catalan, Danish, English, Finnish, French, German, Greek, Italian, Portugese, Spanish and Swedish. The PAROLE lexicon is delivered as a file in SGML-format compliant with the PAROLE DTD for the lexicon.

Section 1 specifies the Dutch PAROLE lexicon contents in a tabular way, presenting overviews of entry numbers per part of speech and subtype, syntactic categories, features, functions, etc. A numerical summary is presented in section 2. Appendix A presents an overview of syntactic patterns. Terminology is explained in the glossary of Appendix B. Appendix C presents a conceptual graph of the relations between the (SGML) objects in the lexicon.

### 1 Lexicon Contents

The entry list of the lexicon consists of about 20,200 entries distributed over 13 parts of speech (POS). The entries have been described along the dimensions of morphosyntax and syntax. Morphosyntactic information consists of various lexical properties, like gender, number, case, person, inflection, etc. Syntactic descriptions consist of typical complementation patterns associated with the various lemmata.

## 1.1 Morphological layer

Category	Subcategory	Number of ENTRIES
ADJECTIVE	QUALI	3,298
ADPOSITION	PREPOSITION	80
ADVERB	GENERAL	456
ADVERB	PRONOMINAL	98
ARTICLE	DEFINITE	2
ARTICLE	INDEFINITE	1
CONJUNCTION	COORDINATIVE	18
CONJUNCTION	SUBORDINATIVE	52
DETERMINER	DEMONSTRATIVE	15
DETERMINER	POSSESSIVE	7
DETERMINER	INTERROGATIVE	2
DETERMINER	RELATIVE	3
DETERMINER	INDEFINITE	32
INTERJECTION	WITHOUTSC	235
NOUN	COMMON	12,279
NUMERAL	CARDINAL	63
NUMERAL	ORDINAL	14
PRONOUN	DEMONSTRATIVE	15
PRONOUN	INTERROGATIVE	3
PRONOUN	EXCLAMATIVE	1
PRONOUN	RECIPROCAL	1
PRONOUN	REFLEXIVE	9
PRONOUN	PERSONAL	18
PRONOUN	RELATIVE	7
PRONOUN	INDEFINITE	31
RESIDUAL	ABBREVIATION	114
RESIDUAL	ACRONYM	72

UNIQUE	INFMARK	1
VERB	MAIN	3,221
VERB	AUX	46
VERB	COPULA	7

## 1.2 Syntactic layer

Syntactic complements belong to either one of the basic parts of speech, or to one of the phrasal categories of the following table.

CATEGORY	COMPLEMENT TYPES
Clause	Infinitival clause, subordinate clause, interrogative clause.
NG	Nominal group, i.e. a noun phrase without initial article, determiner, or numeral.
NP	Noun phrase.
PP	Prepositional phrase.
VP	Verb phrase.

The following syntactic feature values can occur with complements:

FEATURE	USAGE
SSINFINITIVE	Infinitival clauses.
SSINTERROGATIVE	Interrogative clauses.
SUBORDONNEE	Subordinate clauses.
SUBJECTCONTROL	Subject control by verbs.
INDIRECTOBJECTCONTROL	Indirect object control by verbs.
OBJECTCONTROL	Direct object control by verbs.

The following table lists the syntactic functions per part of speech, which express the relation of the complement with respect to the head (entry) of the construction. The COMPL function is used in PAROLE for a complement that cannot be mapped onto the traditional set of complement functions (a default complement function).

PART OF	complement	USED FOR
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<b>SPEECH</b>	<b>FUNCTION</b>	
ADJECTIVE	ACOMP	General complement of an adjective.
ADPOSITION	PREPDEPENDENT	General complement of an adposition.
ADVERB	ADVCOMP	General complement of an adverb.
ARTICLE	COMPL	General complement of an article.
CONJUNCTION	CONJDEPENDENT	General complement of a conjunction.
DETERMINER	COMPL	General complement of a determiner.
INTERJECTION	None (in Dutch, interjections do not display subcategorisation behavior).	—
NOUN	NOFCOMP	A PP complement introduced by 'van'/of, expressing a genitive- or accusative-like role.
	NPREPCOMP	A PP complement not introduced by 'van'/of.
	NAPPOSITION	A complement in apposition structures consisting of two juxtaposed items: the lemma and the complement (in

		this order).
	NCLAUSCOMP	A clausal complement.
	NATTRIBUTIVE	A complement in attributive structures consisting of two juxtaposed items: the complement and the lemma (in this order).
	NDETERMINATIVE	ARTICLE complement for nouns (and the implied other complement types).
NUMERAL	COMPL	General complement of a numeral.
PRONOUN	COMPL	General complement of a pronoun.
RESIDUAL	COMPL	General complement of a residual.
UNIQUE MEMBERSHIP	COMPL	General complement of the 'unique membership' category.
VERB	SUBJECT	Subject complement.
	OBJECT	Direct object complement.
	INDIRECTOBJECT	Indirect object complement.
	PREPOBJ	

		Prepositional object.
	OBLIQUE	Infinitival clause complement of auxiliary verb.
	ADVERBIAL	Adverbial complement
	SUBJPRED	Predicative subject complement.
	OBJPRED	Predicative (direct) object complement.
	REALSUBJ	If the construction contains an extraposed subject, then the real subject is assigned this function.
	COMPL	General complement of a verb.

## 2 Numerical characteristics

The key numeric aspects of the syntactic lexicon layer are described in the following table. The numbers have been produced with the AlethGD (version 2.20) browsing tool which was developed by GSI-Erli for PAROLE partners.

Terminology is explained in Appendix B.

Object type	Number of occurrences
Simple Morphological Units	20,207
Graphical Morphological Units	20,293
Simple Inflection Modes	20,208
CombMF	104

		Categories	16
Syntactic units	24,173		
Descriptions	24,173		
Selfs	13		
IntervConsts	13		
Constructions	1,554		
Positionc	872		
Syntagma_T	357		
Syntagma_NT_C	463		
Lex Features	209		
Closed Synt. Features	277		
Trait_Libre	3		
Functions	37		
Syntagma_T labels	16		
Syntagma_NT labels	10		

## APPENDIX A – Overview of Syntactic Patterns

This appendix contains an overview of the various types of syntactic descriptions, per part of speech. The specified numbers and identifiers may slightly deviate from the actual lexicon contents due to minor last minute revisions. Indices uniquely identifying non-terminal categories start with 0; thus, NP0 is actually the first NP in a construction. The label WITHOUTE indicates a non-terminal category that is not part of the PAROLE ontology of categories (like the result of a pronoun combined with its complements).

ADJECTIVES			
Label	Example	Number of Syntactic Units	Structure
Description660	nieuw	4	AP[nieuw UNIQUE]
DescriptionC100	nul	2459	nul

Description296	gebrand	3	AP[ADV gebrand Clause1]
Description404	gestemd	1	AP[PP0 ADV gestemd]
Description244	eigen	1	AP[NP0 eigen Clause1]
Description630	modern	2	AP[modern ADV]
Description1235	wrevelig	180	AP[ADV wrevelig]
Description160	bijgenaamd	1	AP[NP0 bijgenaamd NP1]
Description158	bijgenaamd	2	AP[N bijgenaamd N]
Description767	onverdeeld	1	AP[DET onverdeeld]
Description757	ontoelaatbaar	378	AP[ontoelaatbaar Clause0]
Description705	ongeacht	1	AP[ongeacht NP0]
Description909	sec	2	AP[NP0 sec]
Description1072	verhoogd	1	AP[PP0 PP1 verhoogd]
Description1162	vreselijk	646	AP[PP0 vreselijk]
Description305	gedegen	18	AP[gedegen PP0]
Description999	uitgesproken	1	AP[uitgesproken CONJ]
Description39	afgedaan	17	AP[CONJ afgedaan]
Description159	bijgenaamd	1	AP[N bijgenaamd NP1]
Description1238	zat	3	AP[PRO zat Clause1]
Description482	groot	1	AP[groot NUM]
Description1054	verder	5	AP[NUM



			verder]
Description243	eigen	3	AP[PRO eigen]
Description146	bewust	1	AP[PRO bewust PP1]
Description500	hoog	3	AP[NG0 hoog]

ADPOSITIONS			
Label	Example	Number of Syntactic Units	Structure
Description109	tussen	1	PP[tussen NP0 CONJ]
Description117	van	1	PP[ADV van ADP ADV]
Description124	versus	1	PP[V versus V]
Description71	op	2	PP[op DET NUM]
Description94	te	1	PP[te N]
Description118	van	1	PP[A van N]
Description93	sub	10	PP[sub NUM]
Description0	aan	1	PP[V aan ART V]
Description1	aan	3	PP[ADP aan NP1]
Description102	ter	1	PP[ter NG0]
Description114	van	1	PP[van NUM ADP NUM]
Description100	tegenover	1	PP[ADV tegenover ADV]
Description77	over	3	PP[over ART NUM]
Description45	met	1	PP[ADV met NP1]
Description49	met	1	PP[met ADV NP1]
Description108	tussen	1	PP[tussen NUM CONJ]
Description48	met	2	PP[NP0 met Clause1]
Description105	tot	4	PP[tot ADV]

Description98	tegen	6	PP[NP0 tegen NP1]
Description79	per	1	PP[NUM N per NP2]
Description2	aan	1	PP[aan ART V]
Description130	voor	1	PP[A N voor N]
Description28	door	6	PP[door Clause0]
Description72	op	1	PP[op DET A]
Description111	uit	65	PP[uit NP0]
Description104	tot	2	PP[PP0 tot NP1]
Description127	via	1	PP[PP0 via NP1 PP2]
Description96	tegen	13	PP[tegen NUM N]
Description8	ad	1	PP[ad N NUM]
Description115	van	1	PP[van NP0 PP1]
Description106	tot	2	PP[PP0 tot]
Description126	versus	1	PP[A versus A]

ADVERBS			
Label	Example	Number of Syntactic Units	Structure
DescriptionC100	nul	228	nul
Description112	dato	2	WITHOUTE[datu NUM]
Description49	bis	2	WITHOUTE[NUM bis]
Description500	zo	5	WITHOUTE[zo PRO]
Description488	zeer	2	WITHOUTE[zeer DET NG1]
Description182	gisteren	17	WITHOUTE[NP0 ADP gisteren]
Description197	heden	3	WITHOUTE[PP0 ADP heden]
Description274	merendeels	1	WITHOUTE[NG0]

			merendeels]
Description409	vanochtend	40	WITHOUTE[ADP vanochtend]
Description506	zover	1	WITHOUTE[ADP zover A]
Description490	zeer	1	WITHOUTE[ADV ADV zeer]
Description121	driemaal	1	WITHOUTE[driemaal ADV ADV]
Description242	hoe	1	WITHOUTE[hoe A NP1 ADV]
Description463	waarmee	21	WITHOUTE[NP0 waarmee Clause1]
Description0	aaneen	21	WITHOUTE[ADV aaneen]
Description19	alias	1	WITHOUTE[NP0 alias NP1]
Description43	bijvoorbeeld	18	WITHOUTE[bijvoorbeeld Clause0]
Description176	genoeg	1	WITHOUTE[A genoeg Clause1]
Description360	slechts	24	WITHOUTE[slechts NP0]
Description379	thuis	66	WITHOUTE[NP0 thuis]
Description507	zover	1	WITHOUTE[ADP zover CONJ]
Description366	te	1	WITHOUTE[NP0 te A]
Description146	erin	23	WITHOUTE[PP0 erin]
Description410	vanochtend	48	WITHOUTE[vanochtend PP0]
Description364	straks	107	WITHOUTE[straks A]
Description309	net	2	WITHOUTE[net CONJ ADV]
Description510	zozeer	2	WITHOUTE[ADV zozeer CONJ]
Description372	tenminste	1	WITHOUTE[tenminste NUM NG1]
Description508	zover	2	WITHOUTE[zover A CONJ]

Description497	zo	1	WITHOUTE[zo A CONJ A]
Description502	zoal	1	WITHOUTE[PRO ADV zoal]
Description250	hooguit	2	WITHOUTE[ADP hooguit NUM N]
Description445	voorop	1	WITHOUTE[ADP NP1 voorop]
Description99	daartussen	24	WITHOUTE[ADP daartussen NP1]
Description431	volop	2	WITHOUTE[volop NG0]
Description127	eergisteren	2	WITHOUTE[eergisteren ADP]
Description452	waar	1	WITHOUTE[ADV waar Clause1]
Description277	minstens	1	WITHOUTE[ADP minstens NUM NG2]
Description511	zozeer	1	WITHOUTE[ADV zozeer PP1]
Description262	liever	1	WITHOUTE[PRO liever CONJ]
Description173	eventjes	20	WITHOUTE[eventjes ADV]
Description122	driemaal	5	WITHOUTE[driemaal ADV A]
Description496	zo	2	WITHOUTE[zo A ADV]
Description324	omhoog	2	WITHOUTE[NUM N omhoog]
Description365	te	1	WITHOUTE[te A Clause1]
Description334	ongeveer	7	WITHOUTE[ongeveer NUM N]
Description493	zelden	1	WITHOUTE[A zelden]
Description266	medio	1	WITHOUTE[ADP medio NUM]
Description498	zo	1	WITHOUTE[zo A CONJ ADV]
Description306	net	1	WITHOUTE[net CONJ NP1]

Description501	zo	1	WITHOUTE[zo A CONJ NP2]
Description374	tevens	3	WITHOUTE[tevens CONJ]
Description267	medio	2	WITHOUTE[ADP medio NG1]
Description53	bovenal	9	WITHOUTE[CONJ bovenal]
Description308	net	1	WITHOUTE[net CONJ PP1]
Description198	heden	1	WITHOUTE[ADP ADP heden A]
Description450	vrijwel	2	WITHOUTE[vrijwel DET N]
Description384	tussendoor	1	WITHOUTE[ADP ADV tussendoor NP2]

ARTICLES			
Label	Example	Number of Syntactic Units	Structure
Description11	het	4	NP[het RES]
Description13	het	4	NP[het V]
Description10	het	4	NP[het N]
Description11	het	4	NP[het DET:POSSESSIVE]
Description2	de	4	NP[de NUM]
Description111	De	4	NP[de DET:POSSESSIVE]
Description0	de	4	NP[de A]

CONJUNCTIONS			
Label	Example	Number of Syntactic Units	Structure
Description17	behalve	1	WITHOUTE[PRO behalve NP1]
Description37	dus	1	WITHOUTE[PP0 dus ADV PP2]
Description59	hoewel	1	WITHOUTE[hoewel ADV PP1]
Description74	nadat	1	WITHOUTE[NP0 nadat Clause1]
Description47	en	7	WITHOUTE[NP0 en NP1]
Description57	hoewel	1	WITHOUTE[A hoewel ADV A]
Description122	want	50	WITHOUTE[want Clause0]
Description53	evenals	6	WITHOUTE[evenals NP0]
Description29	doch	5	WITHOUTE[PP0 doch PP1]
Description63	ingeval	5	WITHOUTE[ingeval PP0]
Description61	indien	1	WITHOUTE[indien A]
Description92	of	2	WITHOUTE[PRO of PRO]
Description5	als	1	WITHOUTE[als Clause0 CONJ]
Description30	doch	1	WITHOUTE[V doch ADV V]
Description81	of	2	WITHOUTE[ADP of ADP]
Description138	zowel	1	WITHOUTE[zowel A CONJ]
Description90	of	2	WITHOUTE[VP0 of VP1]
Description16	behalve	1	WITHOUTE[PRO

			behalve A]
Description14	annex	1	WITHOUTE[NP0 annex NG1]
Description55	hetzij	1	WITHOUTE[hetzij CONJ CONJ]
Description83	of	2	WITHOUTE[RES of RES]
Description86	of	4	WITHOUTE[ADV of ADV]
Description6	als	1	WITHOUTE[A als NG1]
Description72	naargelang	3	WITHOUTE[ADV naargelang Clause1]
Description70	naargelang	1	WITHOUTE[ADV naargelang NP1]
Description85	of	2	WITHOUTE[DET of DET]
Description126	zoals	1	WITHOUTE[zoals ADV]
Description71	naargelang	1	WITHOUTE[ADV naargelang PP1]
Description44	en	2	WITHOUTE[N en N]
Description136	zowel	1	WITHOUTE[zowel ADP CONJ]
Description77	noch	1	WITHOUTE[noch V CONJ]
Description84	of	8	WITHOUTE[Clause0 of Clause1]
Description88	of	2	WITHOUTE[NUM of NUM]
Description82	of	9	WITHOUTE[A of A]
Description79	noch	2	WITHOUTE[noch NP0 CONJ]
Description56	hetzij	2	WITHOUTE[hetzij CONJ]
Description4	als	1	WITHOUTE[NG0 als NG1]
Description139	zowel	2	WITHOUTE[zowel PP0 CONJ]

Description33	dus	1	WITHOUTE[ADV dus NUM]
Description93	of	2	WITHOUTE[V of V]

DETERMINERS			
Label	Example	Number of Syntactic Units	Structure
Description58	welk~2	27	NP[ADP welk~2 NG1]
Description37	meest	7	NP[ART meest NG1]
Description1	alle	1	NP[alle NG0 PP1]
Description28	hoeveel	1	NP[ADP hoeveel]
Description4	allemaal	18	NP[allemaal NG0]
Description0	al	1	NP[al NP0]
Description23	evenveel	3	NP[evenveel NG0 CONJ]
Description8	deze	2	NP[deze NUM]
Description25	genoeg	7	NP[ADV genoeg NG1]

INTERJECTIONS			
Label	Example	Number of Syntactic Units	Structure
DescriptionC100	nul	234	nul



NOUNS			
Label	Example	Number of Syntactic Units	Structure
DescriptionC100	nul	7471	nul
Description1666	echtgenote	2	NP[DET echtgenote N]
Description4719	spreuk	1	NP[DET spreuk NUM]
Description3986	percent	1	NP[percent NUM PP1]
Description2180	graad	3	NP[NUM graad PP1]
Description5189	uitblinker	1	NP[uitblinker ART N]
Description708	best	1	NP[DET best Clause1]
Description2336	hinder	1	NP[DET hinder PP1]
Description221	afbreuk	4	NP[DET afbreuk]
Description4889	stuk~1	1	NP[NUM stuk~1 N]
Description2775	klokslag	1	NP[klokslag NUM N]
Description2890	kwart	4	NP[kwart PP0]
Description4640	snelweg	6	NP[ART snelweg N N]
Description2878	kunst	1	NP[kunst ART Clause1]
Description3248	miljoen	2	NP[ART NUM miljoen N]
Description3253	milligram	13	NP[ART NUM milligram N PP3]
Description2998	lid	2	NP[lid ART PP1]
Description3437	november	12	NP[ART NUM november]

			NUM]
Description3184	mei	12	NP[ADV mei NUM]
Description1114	cash	3	NP[cash N]
Description2731	kerstdag	4	NP[NUM kerstdag]
Description6013	windkracht	3	NP[windkracht NUM]
Description4810	stichting	2	NP[ART N stichting]
Description3211	merknaam	539	NP[ART merknaam N]
Description3146	maximum	1	NP[maximum NG0]
Description3270	miss	2	NP[ART miss N PP2]
Description3922	pagina	16	NP[ART pagina NUM PP2]
Description3215	meter	43	NP[ART NUM meter PP2]
Description2232	gulden	69	NP[ART NUM gulden]
Description3441	nummer	27	NP[ART nummer NUM]
Description1576	donderdagavond	1	NP[ART donderdagavond PP1 NUM]
Description4918	symfonie	1	NP[ART symfonie NG1 PP2]
Description3144	maximum	1	NP[maximum PP0 PP1]
Description3708	opdracht	180	NP[ART opdracht Clause1]
Description3090	machtiging	5	NP[ART machtiging PP1 Clause2]
Description3966	patat	1	NP[NUM patat ADP]

Description1044	brutaliteit	5098	NP[ART brutaliteit PP1]
Description65	aanpassing	58	NP[ART aanpassing PP1 PP2]

NUMERALS			
Label	Example	Number of Syntactic Units	Structure
Description140	zestien	74	NG[ART zestien NG1]
Description105	vijf	11	NG[ADP vijf]
Description155	één	1	NG[één NG0]
Description12	allebei	2	NG[allebei NP0]
Description5	achtduizend	3	NG[achtduizend ART PP1]
Description119	vijftien	54	NG[ART vijftien PP1]
Description156	één	1	NG[één PP0]
Description61	tien	11	NG[ADP DET tien]

PRONOUNS			
Label	Example	Number of Syntactic Units	Structure
DescriptionC8	nul	23	nul
Description49	niemand	10	WITHOUTE[niemand PP0]
Description1	alle	5	WITHOUTE[PRO

			alle]
Description50	niets	4	WITHOUTE[niets A]
Description46	menigeen	26	WITHOUTE[ADP menigeen]
Description88	zoveel	4	WITHOUTE[zoveel CONJ]
Description82	zoiets	4	WITHOUTE[CONJ zoiets]
Description58	veel	10	WITHOUTE[ADV veel]
Description68	welk~2	3	WITHOUTE[welk~2 ADV]
Description47	niemand	18	WITHOUTE[niemand Clause0]
Description64	wat~4	2	WITHOUTE[wat~4 NP0]
Description74	zelf	3	WITHOUTE[NP0 zelf]
RESIDUALS			
Label	Example	Number of Syntactic Units	Structure
DescriptionC3	nul	25	nul
Description186	mln.	6	WITHOUTE[NUM mln. PP1]
Description146	f.~1	19	WITHOUTE[f.~1 NUM]
Description188	mln.	18	WITHOUTE[NUM mln.]
Description190	mm	2	WITHOUTE[NUM mm A]
Description109	a.i.	1	WITHOUTE[NG0 a.i.]
Description43	ENG.	3	WITHOUTE[ADP ENG.]
Description75	NED..	1	WITHOUTE[ADP NED. A]
Description40	EK	2	WITHOUTE[ART

			EK NUM]
Description66	td.	1	WITHOUTE[N Ltd.]
Description69	NAVO	1	WITHOUTE[ART NAVO]
Description228	z.g.	4	WITHOUTE[ART z.g. NG1]
Description202	p.p.	5	WITHOUTE[NP0 p.p.]
Description74	NED.	12	WITHOUTE[NED. NP0]

Description93	TNO	3	WITHOUTE[TNO PP0]
Description77	NED.	1	WITHOUTE[NED. A]
Description178	mg	7	WITHOUTE[NUM mg NG1]
Description142	enz.	1	WITHOUTE[VP0 enz.]
Description1	ABN~1	68	WITHOUTE[ART ABN~1]
Description8	AOW	1	WITHOUTE[ART AOW CONJ]
Description125	dir.	4	WITHOUTE[dir. NG0]
Description152	geb.	3	WITHOUTE[N geb. N]
Description141	enz.	2	WITHOUTE[Clause0 enz.]
Description194	nr.	1	WITHOUTE[N nr. NUM]
Description123	dec.	5	WITHOUTE[NUM dec. NUM]
Description139	enz.	2	WITHOUTE[A enz.]
Description76	NED.	1	WITHOUTE[ADP NED. N]
Description115	blz.	1	WITHOUTE[ADP blz. NUM]

Description113	blz.	1	WITHOUTE[V blz. NUM]
Description80	NED.	1	WITHOUTE[ADP NED. PRO]
Description21	BTW	2	WITHOUTE[ART BTW PP1]
Description32	CHR.~1	1	WITHOUTE[RES CHR.~1]
Description165	kg	1	WITHOUTE[ADP kg NG1]
Description118	ca.	3	WITHOUTE[ca. RES]
Description13	B.V.	24	WITHOUTE[B.V. N]
Description133	e.a.	11	WITHOUTE[N e.a.]
Description218	v.~2	2	WITHOUTE[NP0 v.~2 NUM]

UNIQUE			
Label	Example	Number of Syntactic Units	Structure
Description0	te	1	WITHOUTE[te V V]

VERBS			
Label	Example	Number of Syntactic Units	Structure
Description1361	gebeuren	1	Clause[ADV gebeuren PRO]
Description4827	wemelen	3	Clause[PRO

			wemelen ADV PP2]
Description2182	misdoen	1	Clause[NP0 misdoen NP1 PRO]
Description2952	prenten	2	Clause[NP0 prenten PRO NP2 PP3]
Description2248	neerkomen	1	Clause[PRO neerkomen ADV Clause2]
Description1657	inhouden	49	Clause[NP0 inhouden PRO]
Description1513	herinneren	38	Clause[NP0 herinneren PRO Clause2]
Description169	achten	3	Clause[NP0 achten PRO A Clause3]
Description3069	resten	2	Clause[ADV resten NP1 NP2]
Description3120	rondrijden	5	Clause[ADV rondrijden NP1 PP2]
Description2975	profileren	15	Clause[NP0 profileren PRO CONJ]
Description474	bedoelen	4	Clause[NP0 bedoelen PP1 NP2]
Description1602	immuniseren	6	Clause[NP0 immuniseren NP1 PP2 PP3]
Description4092	vereffenen	1643	Clause[NP0 vereffenen NP1]
Description4568	vinden	12	Clause[NP0 vinden NP1 A]

Description1972	kunnen~2	2	Clause[ADV kunnen~2 Clause1]
Description2037	lijden	905	Clause[NP0 lijden PP1]
Description1777	intreden	206	Clause[NP0 intreden]
Description4726	vuren	35	Clause[NP0 vuren PP1 PP2]
Description4930	zitten~1	14	Clause[NP0 zitten~1 A]
Description3316	sneeuwen	1	Clause[PRO sneeuwen NG1]
Description2015	lenen	2	Clause[NP0 lenen PRO ADV PP3]
Description4496	verweren	3	Clause[NP0 verweren PRO ADV PP3 PP4]
Description844	bewapenen	36	Clause[NP0 bewapenen PRO ADV]
Description4926	zinnen	1	Clause[PRO zinnen NP1 ADV Clause3]
Description2399	ontbreken	2	Clause[PRO ontbreken NP1 PP2]
Description2506	onweren	2	Clause[PRO onweren]
Description4618	volstaan	11	Clause[PRO volstaan Clause1]
Description729	bspelen	81	Clause[NP0 bspelen NP1 ADV]
Description2579	opgeven	1	Clause[NP0 opgeven PRO]



			CONJ PP3]
Description3628	toelopen	245	Clause[NP0 toelopen ADV]
Description3910	uitsturen	3	Clause[NP0 uitsturen NP1 ADV Clause3]
Description1557	hoeven~2	4	Clause[NP0 hoeven~2 ADV Clause2]
Description2888	permitteren	2	Clause[NP0 permitteren PRO PRO Clause3]
Description1747	installeren	58	Clause[NP0 installeren NP1 CONJ]
Description1930	komen~1	1	Clause[NP0 komen~1 CONJ PP2]
Description2468	ontspinnen	1	Clause[ADV ontspinnen PRO NP2]
Description3034	regenen	6	Clause[PRO regenen ADV]
Description1546	heten~2	1	Clause[NP0 heten~2 N]
Description2365	onderscheiden	2	Clause[NP0 onderscheiden PRO PP2 PP3]
Description3182	schelen	4	Clause[PRO schelen NP1]
Description4594	voelen	5	Clause[NP0 voelen PRO A]
Description50	aankomen	5	Clause[PRO aankomen PP1]
Description1338	frustreren	24	Clause[PRO

			frustreren NP1 Clause2]
Description1958	krijgen~2	1	Clause[NP0 krijgen~2 NP1 V]
Description1166	doordringen~2	1	Clause[PRO doordringen~2 PP1 Clause2]
Description4920	zijn~2	4	Clause[NP0 zijn~2 V]
Description2091	lusten	1	Clause[NP0 lusten ADV NP2]
Description874	bezinken	18	Clause[NP0 bezinken ADV PP2]
Description1752	insteken	109	Clause[NP0 insteken NP1 NP2]
Description4645	voorleggen	2	Clause[NP0 voorleggen NP1 NP2 PP3]
Description1989	laken	704	Clause[NP0 laken NP1 PP2]
Description3670	toezeggen	92	Clause[NP0 toezeggen NP1 Clause2]
Description68	aanmerken	11	Clause[NP0 aanmerken PP1 Clause2]
Description3982	vaststellen	273	Clause[NP0 vaststellen Clause1]
Description3185	schelen	4	Clause[PRO schelen NP1 ADV PP3]
Description4110	vergaan	1	Clause[PRO vergaan NP1 ADV]
Description1134	doen~1	5	Clause[NP0

			doen~1 PRO ADV Clause3]
Description640	benemen	16	Clause[NP0 benemen PRO NP2]
Description3453	stoten	223	Clause[NP0 stoten PRO PP2]
Description782	betonen	3	Clause[NP0 betonen NG1]
Description1226	dreigen~1	9	Clause[ADV dreigen~1 NP1]
Description1133	doen~1	1	Clause[NP0 doen~1 A ADV Clause3]
Description2243	navragen	2	Clause[NP0 navragen Clause1 PP2]
Description1280	eruitzien	35	Clause[NP0 eruitzien CONJ]
Description1929	komen~1	1	Clause[NP0 komen~1 PP1 CONJ]

## APPENDIX B - Glossary

This appendix contains a glossary of the technical terms used in the lexicon documentation. Many of the terminology has its origin in the GENELEX model, and the PAROLE DTD based on this model .

Category	A major part of speech (such as noun, verb).
CombMF	A morphological paradigm stipulating how to derive word forms (types) from a certain lemma.
Construction	A set of syntagms describing a

	syntactic constellation (pattern). See also Syntagm.
Description	A set of constructions describing the arrangement of syntactic complements. See also  Construction.
Function	A grammatical function.
Graphical Morphological Unit	A graphical manifestation of a lemma.
IntervConst	Describes aspects of a lemma in a generic way, e.g. categorial status.
Lex Feature	A lexical feature, addressing morphosyntactic subtype.
Positionc	Placeholder for a syntactic complement, carrying Function information.
Self	A generic reference to a lemma type: one of the 13 basic PoS.
Simple Inflection Mode	The inflection paradigm for a simplex lemma.
Simple Morphological Unit	A non-complex (simplex) lemma.
Syntagme_NT_C	A non-terminal syntagm, i.e. a phrasal constituent, like NP, PP, AP, or Clause.
Syntagma_T	A terminal syntagm (basic part of speech, like DET, or N).
Syntactic Unit	A set of descriptions describing a single syntactic behavior (eventual alternations linked by transformations). In the Dutch lexicon, every syntactic unit corresponds to exactly one syntactic pattern. In other words: the set of descriptions is a singleton for every syntactic unit. See also Description.
Trait_Libre	Orthographical character for expressing combinations, like

	hyphens.
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## Appendix C – Conceptual relations

The lexicon is set up as an SGML file (over 30 MB of plain ASCII). Its contents have been encoded in a distributed manner: all formative entities (like lemmata, syntactic phrases, feature bundles) are SGML entities, related by a pointer mechanism to other entities. The exact specification of the conceptual model underlying the PAROLE lexica can be found in GENELEX (1993). An excerpt of the Dutch instantiation of this model is given in figure 1 below.



Figure 1: Excerpt of the Dutch instantiation of the GENELEX/PAROLE lexicon model (where necessary, SGML object names appear in brackets).

Lemmata have 1 to  $n$  graphical manifestations (graphical forms), each of which leads to exactly one morphological inflection pattern. Each orthographic variant of a lemma corresponds to one graphical form.

Every lemma can have 1 to  $n$  syntactic patterns. These patterns are represented by a hierarchy of objects, the top node of which is the syntactic unit (Usyn). Every Usyn has exactly one Description associated with it, which consists of an example sentence, an optional comment, and an optional pointer to a syntactic conglomerate object, the Construction. In a number of cases, the Construction is not present; these are cases for which only a comment was added (see 3.2.6 above). A Construction, finally, consists of 1 to  $n$  pointers to syntagms, through the intermediate object Position. Positions carry functional complement information (like SUBJECT). Syntagms can be either terminal (basic parts of speech) or non-terminal (syntactic phrases). They can have morphosyntactic (e.g. number), lexical (heads, or introducers) and syntactic (e.g. control) properties, which are specified by features.

## References

GENELEX (1993), Eureka Project GENELEX, report on the syntactic layer. Version 4.0, GENELEX consortium.

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