

CHAPTER VII

CONCLUSION

Linguistics-oriented studies of style have not so far covered larger works of fiction, although statistical studies of word frequencies have necessarily concerned voluminous matter. Mention of the word "style" evokes expectations of insight into the aesthetic value of a text. The current work has not attempted to set up a grammar of stylistics, but viewed style from the point of view of mathematical linguistics, namely as a set of quantitatively definable characteristics. It has extended the study of the count of word-forms and word categories and sentence length by analysing quantitatively the phrase structure of sentences. In this work the structure of a sentence has been regarded as composed of three categories Noun, Verb and Adjective/Adverb, which may be represented as

$$S = (N_1)(N_2) \dots (N_r)(V(r)) (Adj/Adv)$$

where r represents the number of noun slots which the valence of the verb allows. The bracketing indicates that the relevant noun slot is optional. One Adverbial or Adjective whether bound or free is regarded as part of the structure. Sequential samples show that in different passages different rules predominate at varying depths, while the random samples showed that in spite of apparent variations in sentence

length etc, the overall complexity of the sentence structures shows remarkable constancy. The logical question which arises in this context is how much of this regularity is due to language, how much due to the individual artist, etc. Although it would be impossible to separate precisely the effects of language, genre, individual^{vi} etc, still by comparing a large number of novels in the same language and in different languages it would be statistically possible to establish the confidence limits within which the relative frequencies of application of various rules lie under each category and at each depth. The power of language resides in the recursive devices developed in it and only such phrase structure analysis can throw light on the types of recursion which take place, the restrictions they undergo in combination with other rules of formation etc. This is however not within the scope of one individual but will have to be undertaken on a teamwork basis over a number of years.

In the course of our work we could establish the various sentence types which occur, classified on the basis of the grammatical categories which were manifested in them. The patterns used by Thomas Mann in Noun Phrases and Adverbials were noted, but the number of possible patterns increased by leaps and bounds when the number of words in the noun phrase increased, so that if a long phrase pattern was repeated even once it became deviation from norm. Mann's

technique of Leitmotif, of repeating a phrase or even sentences with slight variations has been extensively commented upon by various research workers. As the secondary literature to Thomas Mann exceeds six thousand we cannot add anything new here, but all the same it is worth pointing out that even in surface structure one can discern a play on patterns, as the following examples show :

geradlinigen, weisslackierten und mit einem goldenen Loewenkopf verzierten Sofa (straight-backed, white enamelled Sofa, decorated with a golden lion's head) N (A A A (P (N (A))))

breit, doppelt und mit einem Ausdruck von Behaglichkeit (broad, doubled and with an expression of ease) A A P (N (P (N)))

hoch, steil und mit ploetzlichem Drucke (high, steep and with sudden pressure)

A A P (N (A))

starke, aschblonde, mit weissen Faeden durchsetzte Koteletten (strong, ash blond side-burns interspersed with white threads) N (A A A (P (N (A))))

As a problem in descriptive linguistics we have analyzed the participials in the corpus BUDDENBROOKS and classified the participles on the basis of the position of the participle, the occurrence of the accusative object and the possible transformations which the participial can undergo.

We have shown that participles which are free to occur both initially and finally exhibit stronger nominal character reflected in the restrictions on the use of minor clause constructions with conjunctions indem, waehrend while participles with final position alone emphasize the verbal character and hence along with relative clause construction, minor clauses with the other conjunctions are also possible. Among adverbials the predominance of agentives has been pointed out, used in the passive sense even where the phrase cannot be expanded into a passive minor clause.

As in the case of phrase structure generation, the participials also need to be studied with a larger corpus using the methods of both structural linguistics as well as transformational grammar as it has been done in this work. The way to linguistic universals and to a theory of language in the abstract is a long one which has to be covered in relays by several workers. This work has been presented with the hope that such methods would be usefully employed also for the analysis of Indian languages. The massive collection of data on languages like Gujarati and Hindi would necessarily call for the use of the computer in sifting data swiftly and accurately. It would then become more and more necessary for students of linguistics to be their own programmers.

Table 1. Ranks of rules according to their frequency
in the various samples.

	Felix IV	I Bud.	II Bud.	Rand. III	Bud. Rand. V	FAUSTUS
26 = P(N)	1	1	1	1	1	1
10 = N(A)	2	2	2	2	2	2
36 = NN	3	9	4	3	3	3
1 = A(A)	4	4	5	5	4	4
33 = AA	5	10'5	3	4	5	5
11 = N(G)	6	7	7	8	6	6
16 = N(P)	7	5	6	7	7	7
15 = N(R)	8	6	8	6	8	8
3 = A(P)	9	8	10	10	9	9
38 = PP	10	10'5	9	9	10	10
34 = GG	11	3	11	11	11	11

rho values for rank difference in frequency of
rules between pairs of samples

$$P = 1 - \frac{6 \sum D^2}{N(N^2-1)}$$

I & II	I & III	II & III	IV & III
0.23	0.30	0.96	0.93

Table 2. Relative frequencies of the high frequency rules in Sample I (Buddenbrooks) at various depths as percentages of total no. of rules in sample (708)

	26	10	34	1	16	36	3	15	11	33	38
I	-	-	3'67	-	-	1'41	-	-	-	-	-
II	12'99	6'49	1'55	1'69	3'1	0'84	1'55	1'41	0'99	-	-
III	6'22	5'36	1'55	1'55	1'27	0'14	0'70	0'84	1'55	-	-
IV	2'26	3'95	0'14	0'99	0'56	0'14	0'56	0'70	0'28	-	-
V	1'27	0'42	0'14	0'70	0'14	-	0'14	0'28	0'14	-	-
VI	0'28	0'28	-	0'42	0'14	-	-	0'14	0'14	-	-
VII	0'14	-	-	-	-	-	0'14	-	-	-	-
VIII	0'14	-	-	-	-	-	-	-	-	-	-
IX	-	0'14	-	-	-	-	-	-	-	-	-
23'30	16'64	7'05	5'35	5'21	2'53	3'09	3'37	3'10	0	0	0
= 69'64 (Total %)											

High frequency rules arranged according to rank - Sample I (BUDDENBROOKS)

26	23'30	1	5'35	11	3'10	33	0.00
10	16'64	16	5'21	3	3'09	38	0.00
34	7'05	15	3'37	36	2'53		

Table 3. Relative Frequency in percentage of
 prepositions at various depths in Sample I
 (Buddenbrooks)
 (a) in terms of total rules (507) rules
 (b) in terms of preposition alone (165) rules

	II	III	IV	V	VI	VII	VIII	IX	X	total
a)	18'14	8'68	3'16	1'78	0'39	0'2	0'2	-	-	32'55
b)	55'76	26'67	9'7	5'45	1'21	0'6	0'6	-	-	100

Ratio of prepositions

at depths IV:II

V:III

16/92 (17'39%)

9/44 (20'45%)

Table 5. Frequencies of rules in Random Sample from Buddenbrooks at various depths - absolute values

	I	II	III	IV	V	VI	
36	70	7	24	7	2	-	110
33	19	48	11	10	1	1	90
38	16	10	-	-	-	-	26
35	2	-	-	-	-	-	2
26	-	140	70	20	9	1	240
10	-	136	44	26	1	3	210
15	-	45	10	7	-	1	63
16	-	43	10	8	-	-	61
23	-	38	-	-	-	-	38
1	-	38	29	9	3	1	80
11	-	31	12	8	1	2	54
37	-	15	-	-	-	-	15
3	-	9	7	-	1	-	17
20	-	9	-	-	-	-	9
13	-	9	2	-	-	-	11
14	-	8	2	-	-	-	10
17	-	8	-	-	-	-	8
39	-	7	4	1	1	-	13
34	-	4	1	1	-	1	3
rest	-	19	32	10	4	-	65
	107	620	258	107	23	10	1125

Table 6. Relative frequencies of the high frequency rules in Random Sample from
BUDDENBROOKS at various depths as percentages of total number of rules
in sample (1125)

	26	10	34	33	1	16	36	3	15	11	38
I	--	--	--	1'69	--	--	6'22	--	--	--	1'42
II	12'44	12'09	--	4'26	3'38	3'82	0'62	0'80	4'00	2'76	0'89
III	6'22	3'91	0'09	0'98	2'58	0'89	2'13	0'62	0'89	1'16	--
IV	1'78	2'31	0'09	0'89	0'73	0'71	0'62	--	0'62	0'71	--
V	0'73	0'09	--	0'09	0'27	--	0'18	0'18	0'09	--	--
VI	0'09	0'27	0'09	0'09	0'09	--	--	--	0'09	0'18	--
Total	21'26	18'67	0'27	8'00	7'05	5'42	9'77	1'51	5'60	4'90	2'31
	= 84'76 %										

The High frequency rules arranged according to rank

26	P(N)	=	21.26 %
10	N(A)	=	18.67 %
36	NN	=	9.77 %
33	AA	=	8.00 %
1	A(A)	=	7.05 %
15	N(R)	=	5.60 %
16	N(P)	=	5.42 %
11	N(G)	=	4.90 %
38	PP	=	2.31 %
3	A	=	1.51 %
34	GG	=	0.27 %
Total	..	=	84.76 %

Table 7. Absolute frequencies of the high frequency rules in random sample
from FELIX KRULL at various depths - total number of rules 782

	26	10	34	33	1	16	36	3	15	11	38
I	-	-	-	13	-	-	44	-	-	-	13
II	81	78	5	17	15	18	22	5	21	26	-
III	35	37	1	7	16	11	4	6	7	15	2
IV	26	18	-	4	9	5	2	2	1	2	-
V	7	11	-	3	3	3	1	1	2	1	1
VI	8	4	-	-	3	1	1	-	1	-	-
VII	1	4	-	2	-	1	-	-	1	-	-
VIII	1	-	1	-	1	-	-	-	-	1	-
	159	152	7	46	47	39	74	17	33	45	16

Total $\frac{635}{782} = 81.21\%$

Table 8. Relative frequencies of the high frequency rules in random sample from FELIX KRULL at various depths as percentage of total number of rules (782)

	26	10	34	33	1	16	36	3	15	11	38
I	-	-	-	1'66	-	-	5'64	-	-	-	1'66
II	10'36	9'97	0'64	2'17	1'91	2'30	2'82	0'65	2'69	3'32	-
III	4'48	4'73	0'52	0'90	2'04	1'41	0'52	0'78	0'90	1'91	0'26
IV	3'32	2'30	-	0'52	1'15	0'64	0'26	0'26	0'13	0'26	-
V	0'90	1'41	-	0'39	0'39	0'39	0'13	0'52	0'26	0'13	0'13
VI	1'02	0'52	-	-	0'39	0'13	0'13	-	0'13	-	-
VII	0'13	0'52	0'52	0'26	-	0'13	-	-	0'13	-	-
VIII	0'13	-	-	-	0'13	-	-	-	-	0'13	-
	20'34	19'45	1'68	5'9	6'01	5'00	9'50	2'21	4'24	5'75	2'05
Total	82'13	%									

The high frequency rules arranged according to rank - Random Sample (Felix Krull)

26	P(N)	=	20'34	%
10	N(A)	=	19'45	%
36	NN	=	9'50	%
1	A(A)	=	6'01	%
33	AA	=	5'9	%
11	N(G)	=	5'75	%
16	H(P)	=	5'00	%
15	H(R)	=	4'24	%
3	A(P)	=	2'21	%
38	PP	=	2'05	%
34	GG	=	1'68	%
				82'13
				%

Table 9. Absolute values of the high frequency rules in random sample from
DOKTOR FAUSTUS (Total number of all rules 1501)

	26	10	34	33	1	16	36	3	15	11	38
I	--	-	-	43	-	-	76	-	-	-	32
II	148	111	4	31	37	41	23	15	25	41	8
III	80	65	-	23	35	16	9	15	12	26	-
IV	38	29	5	11	29	10	8	13	10	16	-
V	26	13	3	3	10	6	1	-	-	6	1
VI	10	13	-	2	5	-	-	-	-	2	4
VII	1	5	-	1	3	-	-	-	1	-	-
VIII	-	1	1	-	1	-	-	-	1	-	-
IX	-	-	-	-	-	-	-	1	-	-	-
X	1	-	-	-	-	-	-	-	-	-	-
	304	237	13	114	120	73	127	45	51	95	41

Total 1220 rules (approximately 80%)

Table 10. Frequency of Prepositions in Sample (Buddenbrooks)

	Total	Depths							
		II	III	IV	V	VI	VII	VIII	
mit	31	13	9	4	2	2	-	1	
in	17	12	3	1	1	-	-	-	
auf	15	13	1	-	1	-			
von	13	4	9	-					
in	12	8	2	2	-				
aus	7	5	1	1	-				
an	6	4	1	-	1	-			
als	5	-	3	1	1	-			
bei	5	4	-	-	1	-			
nach	5	3	1	1					
um	4	3	1	-					
wie	4	1	2	1	-				
zwischen	4	1	2	1	-				
am	3	2	1	-					
durch	3	2	1	-					
ins	3	2	-	-	-	-	1	-	
ueber	3	-	1	1	1	-			
fuer	3	1	1	1					
gegenueber	3	1	1	1					
zu	3	2	-	1	-				

Table 10 contd..

	Total	Depths							
		II	III	IV	V	VI	VII	VIII	
gegen	2	1	1	-					
vor	2	2	-						
ausser	2	2	-						
ohne	1	-	-	-	1	-			
neben	1	-	1	-					
zum	1	-	1	-					
vom	1	-	1	-					
beim	1	1	-						
hinter	1	1	-						
ausserhalb	1	1	-						
unter	1	1	-						
jenseits	1	1	-						
aufs	1	1	-						
	165	92	44	16	9	2	1	1	
Total No.of different prepositions	33	27	21	12	8	1	1	1	

Table 11. Frequency of Prepositions in Sample II
(Buddenbrooks) 440 ff

	Total	II	III	IV	V	VI	VII	VIII	IX
in	20	16	3	-	1	-	-	-	-
mit	11	8	1	2	-				
im	5	4	1	-	-	-			
an	5	3	2	-					
als	6	3	3	-					
wie	4	3	1	-	-	-			
ohne	2	2	-						
trotz	2	2	-						
fuer	3	2	1	-					
zum	2	2	-						
aus	4	2	-	1	1				
ueber	3	2	-	-	-	1			
unter	3	2	-	1					
zu	5	2	2	1					
wieer	1	1	-						
ins	1	1	-						
durch	1	1	-						
nach	1	1	-						
vor	3	1	-	1	1				
bis	1	1	-						
zwischen	3	1	1	-	-	1			
von	11	1	7	1	1	1			
hinters	2	1	1						
am	1	1	-						
zur	2	-	1	-	1				
bei	3	-	1	2					
auf	1	-	1						
gegenueber	1	-	1						
gegen	1	-	1						
	<u>108</u>	<u>63</u>	<u>28</u>	<u>9</u>	<u>5</u>	<u>3</u>	<u>=</u>	<u>=</u>	<u>=</u>

Table 12. Words of over 1 per mille relative frequency
from Kaeding's list of 512 most frequent
words arranged according to word class

prepositions			determiners		
1.	in	17'24	1.	die	32'04
2.	zu	15'82	2.	der	31'30
3.	von	10'38	3.	den	12'71
4.	mit	8'39	4.	das	11'39
5.	auf	7'42	5.	des	8'82
6.	als	5'34	6.	dem	<u>8'17</u> 104'43
7.	an	5'10	7.	ein	7'87
8.	nach	5'02	8.	eine	6'35
9.	wie	4'70	9.	einen	2'86
10.	im	4'65	10.	einer	2'57
11.	fuer	4'63	11.	einem	2'22
12.	aus	3'72	12.	eines	<u>1'17</u> 23'04
13.	durch	3'69	13.	diese	2'26
14.	bei	3'56	14.	dieser	2'00
15.	um	2'77	15.	diesses	<u>1'02</u> 5'28
16.	ueber	2'34			<u>132'75</u>
17.	zum	2'13			
18.	zur	2'09	<u>Pronouns</u>		
19.	vor	2'00	1.	sie	9'37
20.	am	1'70	2.	sich	8'52
21.	unter	1'62	3.	er	7'98
22.	bis	1'50	4.	es	7'95
23.	gegen	1'32	5.	ich	7'53
24.	vom	1'25	6.	man	4'06
25.	ohne	1'18	7.	wir	3'47
			8.	sein	2'88
			9.	mir	2'46
			10.	ihm	2'31
			11.	ihr	2'18
			12.	ins	2'18
			13.	mich	1'96
			14.	ihn	1'90
			15.	seine	1'81
			16.	du	1'84
			17.	ihre	1'47
			18.	ihnen	1'40
			19.	seiner	1'38
			20.	alle	1'37
			21.	meine	1'33
			22.	seinen	1'06
			23.	ihrer	1'01
					<u>77'42</u>

Table 12 contd..

other particles			noun		
1.	und	29'34	1.	Zeit	1'33
2.	nicht	10'50			
3.	dass	8'06			
4.	so	6'81			
5.	aber	4'05			
6.	wenn	3'68			
7.	nur	3'62			
8.	noch	3'59			
9.	oder	2'78			
10.	da	2'15			
11.	doch	2'01			
12.	mehr	1'70			
13.	denn	1'69			
14.	nun	1'64			
15.	sehr	1'58			
16.	schon	1'53			
17.	selbst	1'55			
18.	hier	1'52			
19.	dann	1'42			
20.	wieder	1'35			
21.	ganz	1'24			
22.	einzelnen	1'23			
23.	wo	1'21			
24.	ja	1'15			
25.	jetzt	1'09			
26.	immer	1'07			
27.	wohl	1'04			
		<u>98'60</u>			

Table 13. Frequency distribution of nouns in Sample II
(BUDDENBROOKS) arranged according to
semantic groups

Parts of the body		Family designations		Personal names	
Augen	16	Kind	14	25 names total 173	
Hand	13	Mutter	9	with Tony max. 17	
Kopf	11	Vater	8	<u>Titles</u> and other	
Haende	10	Familie	7	references <u>to persons</u>	
Gesicht	10	Tochter	6	16 items account for	
Herzen	7	Gattin	5	122 concurrences,	
Haenden	6	Enkelin	4	<u>Frau</u> max. with 21	
Arme	5	Sohne	4	<u>House</u>	
Haar	5	Papa	4	Hause	16
Atem	4	Schwester	3	Treppe	6
Blick	4	Bruder	3	Tuer	6
Lippen	4	Gatten	3	Zimmer	5
Ohren	4	Grossmutter	3	Deckel	4
Stimme	4	Vaters	3	Treppenhaus	4
Arm	3			Korridor	4
Brauen	3		76	Diele	3
Nase	3			Etage	3
			3.72%	Garten	3
	112				54
	5.47%				2.64%

Table 14. List of high frequency nouns ranked for frequency - Sample I & II (BUDDENBROOKS) and in KAEDING's Count

Herr	2	2	-	Natur	49	-	16
Augen	6	3	11	Art	49	-	10
Hand	8	7	5	Ende	49	15	21
Vater	12	14	14	Uhr	49	-	24
Seite	15	28	7	Wort	79	-	19
Mann	19	8	2	Freund	79	-	25
Frau	23	1	9	Liebe	79	-	4
Sohn	23	-	23	Teil	79	-	15
Herren	30	67	3	Mutter	-	5	20
Jahren	30	-	12	Hause	-	8	17
Stadt	38	-	13	Leben	-	15	1
Weise	49	38	2	Herrn	-	28	6
Welt	49	-	8				
Tag	49	-	22	Total occurrences			
Sache	49	67	18				
				158	141	7%	
				2058	2046		

**Table 15. List of high frequency nouns in Sample from
EFFI BRIEST, other than personal names and
titles**

Frau	36
------	----

Kind	13
------	----

Tage	9
------	---

Mann	9
------	---

Stadt	8
-------	---

Zeit	8
------	---

Gott	8
------	---

Saal	8
------	---

Ende	6
------	---

Person	5
--------	---

Menschen	5
----------	---

Himmel	5
--------	---

Welt	5
------	---

Platz	5
-------	---

Blick	5
-------	---

Kopf	5
------	---

140	(Total occurrences 1372)
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Table 16. Word frequency distributions

121 x 1 = 121	215 x 1 = 215	281 x 1 = 281	357 x 1 = 357
20 x 2 = 40	24 x 2 = 48	41 x 2 = 82	43 x 2 = 86
6 x 3 = 18	10 x 3 = 30	10 x 3 = 30	17 x 3 = 51
2 x 4 = 8	6 x 4 = 24	9 x 4 = 36	10 x 4 = 40
1 x 5 = 5	6 x 5 = 30	3 x 5 = 15	6 x 5 = 30
1 x 8 = 8	2 x 8 = 16	3 x 7 = 54	3 x 6 = 10
	1 x 6 = 10	11 = 32	13 = 87
	10 = 21	4 x 8 = 32	4 x 9 = 36
		1 x 6 = 9	1 x 7 = 8
		10 = 12	11 = 12
		33 = 70	16 = 17
			42 = 113
			800
432 x 1 = 432	509 x 1 = 509	572 x 1 = 572	636 x 1 = 636
55 x 2 = 110	59 x 2 = 118	68 x 2 = 136	86 x 2 = 172
20 x 3 = 60	24 x 3 = 72	26 x 3 = 78	32 x 3 = 96
10 x 4 = 40	12 x 4 = 48	16 x 4 = 64	13 x 4 = 52
4 x 5 = 20	3 x 5 = 6	8 x 6 = 48	8 x 7 = 56
5 x 6 = 10	8 = 10	5 x 7 = 35	5 x 5 = 8
10 = 80	10 = 87	4 x 8 = 9	4 x 6 = 9
3 x 7 = 9	5 x 9 = 45	10 = 108	10 = 16
9 = 48	6 x 7 = 42	2 x 11 = 15	16 = 164
2 x 12 = 13	2 x 13 = 14	18 = 88	2 x 11 = 24
17 = 84	15 = 84	1 x 12 = 16	1 x 13 = 14
1 x 15 = 18	1 x 16 = 19	19 = 20	20 = 21
21 = 24	23 = 24	21 = 24	23 = 25
48 = 126	29 = 31	25 = 36	27 = 42
	53 = 195	40 = 58	43 = 61
	1200	271	289
		1400	1600

Table 16 contd..

691 x 1 = 691	749 x 1 = 749
94 x 2 = 188	107 x 2 = 214
32 x 3 = 96	31 x 3 = 93
19 x 4 = 76	21 x 4 = 84
8 x 5 = 40	9 x 5 = 45
6 x 7	7 x 7 = 49
9 = 96	5 x 6
5 x 8 = 40	9
4 x 10 = 40	11 = 130
3 x 6	4 x 8 = 32
11 = 51	3 x 10
2 x 14	13 = 69
29 = 86	2 x 12
1 x 12	21 = 66
13	1 x 14
16	15
17	16
18	17
19	18
20	24
25	26
26	28
28	29
34	32
46	33
49	34
73 = 396	49
	55
	79 = 469
1800	
	2000

Table 17. Frequency distribution of nouns in EPFI BRIEST
(random, sample)

$$565 \times 1 = 565$$

$$120 \times 2 = 240$$

$$41 \times 3 = 123$$

$$10 \times 4 = 40$$

$$14 \times 5 = 70$$

$$6 \times 6 = 36$$

$$5 \times 8 = 40$$

$$3 \times \frac{7}{9} = 48$$

$$2 \times 10 = 20$$

$$1 \times 12 = 12$$

$$1 \times 13 = 13$$

$$1 \times 14 = 14$$

$$1 \times 15 = 15$$

$$1 \times 16 = 16$$

$$1 \times 32 = 32$$

$$1 \times 36 = 36$$

$$1 \times 52 = 52$$

$$1372$$

Table 18. Table Rel. Freq. of 91 most frequ. words
from Keeding's list

25 prepositions	119'56
15 determiners	132'75
23 pronouns	77'42
27 other particles	98'60
1 noun	1'33
	<u>429'66</u>

Table 19. Loss in Hapax Legomena due to addition of a page of text - Sample I
(BUDDENBROOKS)

Page	H.L.	C.H.L.	Loss in HL	C.L.	Rest HL	Occur. N	Vocab V	log V log N
7	75	-	-	-	75	87	81	0'09840
8	73	148	16	-	132	194	159	0'09622
9	86	234	16	32	202	296	240	0'096314
10	79	313	19	51	262	399	316	0'096106
11	78	391	39	90	301	499	372	0'095272
12	65	456	31	121	335	595	425	0'094731
13	77	533	35	156	377	705	482	0'094202
14	87	620	56	212	408	819	534	0'093624
15	60	680	35	247	433	913	576	0'093243
16	78	758	64	311	447	1005	614	0'092873
17	71	829	38	349	480	1107	661	0'092644
18	70	907	52	401	506	1210	706	0'092410
19	64	971	28	429	542	1299	757	0'092468
20	70	1041	36	465	576	1390	806	0'092470
21	69	1110	32	497	613	1493	855	0'092372
22	95	1205	56	553	652	1598	910	0'092366
23	72	1277	42	595	682	1687	952	0'092301
24	67	1344	38	633	711	1779	989	0'092155
25	54	1398	32	665	733	1853	1020	0'092066
26	52	1450	22	687	763	1942	1059	0'091992
27	74	1524	43	730	794	2058	1103	0'091824

H.L. = Hapax Legomena
C.H.L. = Cumulative total of H.L.
C.L. = Cumulative Loss
Occur. = No. of tokens
Vocab. = No. of types

Table 20. Loss in Hapax Legomena due to addition of a page of text at a time
(EPI BRIEST)

	page no.	H.L.	Cum.	L.	Cum.L.	Rest	Occur.	Vocab.
1	35	40	-	6	-	40	58	48
2	97	51	91	12	6	85	131	102
3	36	42	133	9	18	115	194	144
4	65	59	192	12	27	165	268	200
5	136	52	244	12	39	205	340	250
6	94	50	294	19	58	236	408	291
7	109	32	326	16	74	252	466	317
8	90	39	365	17	91	274	515	345
9	82	55	420	25	106	304	586	388
10	102	51	471	24	140	331	660	426
11	54	47	518	28	168	350	727	461
12	70	30	548	11	179	369	784	489
13	39	44	592	14	193	399	851	525
14	80	49	641	29	222	419	919	555
15	5	61	702	25	247	455	1001	609
16	31	52	754	24	271	483	1068	645
17	26	37	791	14	285	506	1126	678
18	57	48	839	27	312	527	1206	714
19	12	35	874	21	333	541	1266	737
20	49	23	897	12	345	552	1307	752
21	173	35	932	22	367	565	1372	777

Explanations of columns and abbreviations in Tables 21 - 29.

Col. 1 indicates presence or absence of adverbial.

D.F. means Directional adverbial,

L.B. means Locational adverbial,

M. means Modal adverbial

A. means Agentive

F. means Free

B. means Bound

Col. 2 refers to minor clause transformations with der,
indem and waehrend

Col. 3 refers to minor clause transformations with only
relative pronoun der

Col. 4 refers to minor clause transformations with der
and indem

Col. 5 refers to minor clause transformations with der
and waehrend

Col. 6 refers to minor clause transformations with indem
and waehrend

Col. 7 refers to minor clause transformations with der
and weil

Col. 8 refers to minor clause transformations with der
and sowie

Col. 9 refers to minor clause transformations with der
and temporal conjunctions als etc.

Col. 10 refers to minor clause transformations with only
indem

Col. 11 refers to minor clause transformations with wenn
(conditional)

Table 21. Common featuresGroup I

Position of Participle - Final

Verb - Transitive

Accusative Object - present

Sentence No.	Verb	1	2	3	4	5	6	7	8	9	10	11
1	abwenden	D.F.	+									
194	abwenden	-	+									
62	ausbreiten	-	+									
96	ausbreiten	-	+									
238	ausbreiten	L.B.	+									
9	ausstrecken	L.F.	+									
253	betauen	A.F.	-	+								
247	biegen	A.F.	+									
150	emporziehen	M.F.	+									
175	emporziehen	-	+									
195	emporziehen	-	+									
145	erfassen	A.F.	+									
9	erheben	-	+									
173	falten	L.F.	+									
201	falten											
233	falten											
244	falten											
308	falten											
249	falten	L.F.	+									
40	frisieren	-	-	+								

Group I (contd..)

Sentence No.	Verb	1	2	3	4	5	6	7	8	9	10	11
58	heften	D.B.	+									
155	kreuzen	L.F.	-	-	+							
194	kreuzen	-	-	-	+							
47	legen	L.B.	+									
124	legen	L.B.	-	-	+							
12	neigen	D.F.	+									
24	neigen	D.F.	+									
62	neigen	D.F.	-	-	+							
96	neigen	D.F.	+									
111	neigen	D.F.	-	-	-	-	+					
94	richten	D.B.	+									
59	scheiteln	-	-	-	+							
119	schieben	-	+									
299	schieben	D.B.	+									
30	schlagen	D.B.	+									
108	schlagen	D.B.	+									
320	Schmiegen	L.B.	+									
80	senken	-	+									
31	stuetzen	L.B.	+									
68	stuetzen	L.B.	+									
69	stuetzen	L.B.	+									
199	stuetzen	L.B.	-	-	+							
222	stuetzen	L.B.	+									

... Group I (contd..)

Sentence No.	Verb	1	2	3	4	5	6	7	8	9	10	11
325	stuetzen	L.B.	+									
246	umnebeln	A.F.	-	+								
248	wenden	D.B.	-	-	+							
32	wuehlen	L.B.	+									
196	ziehen	D.B.	+	-								
150	zuruecklegen	-	-	-	-	-	+					
175	zuruecklehnen	-	+									
172	zurueckwerfen	D.B.	+									
84	zuwenden*	-	+									

* zuwenden occurs with Dative Object also.

Table 22. Common FeaturesGroup II

Position of Participle - Final

Verb - Transitive

A.O. - present, but functioning as subjective
or objective of main clause

Adverbial - Locational or Directional

Sentence No.	Verb	A.O.	1	2	3	4	5	6	7	8	9	10	11
40	beugen	Subj. L.F.	+										
220	decken	Subj. -		+									
35	heiraten	Subj. L.F.	-	+									
321	jagen	Subj. L.B.	-	-	+								
71	knoepfen	Subj. L.B.	-	-	-	+							
180	richten	Subj. D.B.	-	-	-	+							
335	richten	Subj. D.B.	-	-	-	+							
107	vornueber- beugen	Subj. -		+									
191	wenden	Subj. D.B.		+									
69	zuwenden*	Subj. -		+									

* zuwenden occurs also with Dative Object.

Table 23. Common FeaturesGroup III

Position of Participle - Final

Verb - Transitive

A.O. - not present

Adverbial - Modal, Bound

Sentence No.	Verb	1	2	3	4	5	6	7	8	9	10	11
311	aufstellen	M.B.	-	-	+							
29	beugen	M.B.	+									
207	erheben	M.B.	-	-	-	-	-	-	-	-	-	+
307	heullen	M.B.	-	-	+							
313	huellen	M.B.	-	-	+							
100	kleiden	M.B.	-	-	+							
305	kleiden	M.B.	-	-	+							
256	legen	M.B.	-	+								
118	vorbereiten	M.B.	-	-	-	-	-	+				

Table 24. Common FeaturesGroup IV

Position of Participle - Final

Verb - Transitive

A.O. - not present

Adverbial - Agentive, Bound

Sentence No.	Verb	1	2	3	4	5	6	7	8	9	10	11
240	abschliessen	A.B.	-	-	-	+						
259	bescheinen	A.B.	-	-	+							
264	machen	A.B.	-	-	+							
178	melden	A.B.	+	-								

Table 25. Common FeaturesGroup V

Verb - Intransitive

Sentence No.	Verb	Pos.	1	2	3	4	5	6	7	8	9	10	11
221	entfremden	F	-	-	-	-	-	-	-	-	-	-	+
322	erstarren	I,F MF	+										
42	folgen	I,F AB	-	-	-	-	-	-	-	-	-	-	+
316	folgen	I,F AB	-	-	+								
243	kehren	F MB	-	-	+								
318	liegen	F LB	-	-	-	-	-	-	-	+			

Table 26. Common FeaturesGroup VI

Position of Participle - Initial & Final

Verb - Transitive

A.O. - present, but functioning as subjective
or objective in the main clause

Adverbial - Bound Agentive

Sentence No.	Verb	A.O.	1	2	3	4	5	6	7	8	9	10	11
165	anbeten	subj.	-	-	-	+							
331	anwidern	subj.	-	-	-	+							
306	anziehen	subj.	-	-	+								
3	bedecken	obj.	-	-	+								
133	bedienen	subj.	-	-	+								
329	beeinflussen	subj.	-	-	-	-	-	-	-	+			
115	befriedigen	subj.	-	-	+								
16	begleiten	obj.	-	-	+								
105	begleiten	subj.	-	-	+								
268	begleiten	subj.	-	-	+								
339	beherrschen	subj.	-	-	+								
220	belegen	subj.	-	-	+								
74	bepacken	subj.	-	-	+								
77	beschaeftigen	subj.	-	-	+	+							
211	"	subj.	-	-	-	+							
258	"	subj.	-	+	-	-							
295	"	subj.	-	-	-	+							
165	beschenken	subj.	-	-	-	+							
181	beteiligen	subj.	-	-	-	-	-	-	-	+			

Group VI (contd..)

Sentence No.	Verb	A.O.	1	2	3	4	5	6	7	8	9	10	11
288	blenden	subj.	-	-	-	+							
235	einlullen	subj.	-	-	-	-	-	-	+				
95	einschliessen	subj.	-	+									
292	emporheben	subj.	-	-	+								
262	erfuellen	subj.	-	-	+								
225	ergreifen	subj.	-	-	-	+							
113	erhitzen	subj.	-	-	+								
103	ermatten	subj.	-	-	+								
288	ermatten	subj.	-	-	+								
39	erwaermen	subj.	-	-	-	-	+						
314	fuehren	subj.	-	-	+								
29	fuellen	subj.	-	-	+								
223	fuellen	subj.	-	-	+								
102	gewoehnen	subj.	-	-	-	-	-	+					
163	huellen	subj.	-	-	+								
300	huellen	subj.	-	-	+								
260	leiten	subj.	-	-	+								
198	ruehren	subj.	-	-	+								
324	ruehren	subj.	-	-	-	-	-	-	+				
2	schmuecken	obj.	-	-	+								
122	schmuecken	obj.	-	-	+								
139	schmuecken	obj.	-	-	+								

Group VI (contd...)

Sentence No.	Verb	A.O.	1	2	3	4	5	6	7	8	9	10	11
82	schmuecken	subj.	-	-	+								
220	schmuecken	subj.	-	-	+								
61	schreiben	subj.	-	-	+								
227	stuetzen	subj.	-	-	-	-	-	+					
231	stuetzen	subj.	-	+									
217	tragen	subj.	-	-	-	-	-	+					
312	tragen	subj.	-	-	-	-	-	+					
114	trennen	subj.	-	-	+								
174	ueberwaelti- gen	subj.	-	-	-	-	-	-	+				
204	umfliessen	subj.	-	-	-	+							
205	umfluestern	subj.	-	-	-	+							
213	umgeben	subj.	-	+									
245	umgeben	subj.	-	+									
310	umgeben	subj.	-	-	+								
318	umgeben	subj.	-	-	-	-	-	-	+				
338	umherdraengen	subj.	-	-	+								
274	umhertreiben	subj.	-	-	-	+							
125	umhuellen	subj.	-	-	-	+							
36	umrahmen	subj.	-	-	-	-	-	+					
104	umrahmen	subj.	-	-	-	-	-	+					
263	umwachsen	subj.	-	-	+								
91	verdecken	subj.	-	-	-	+							

Group VI (contd....)

Sentence No.	Verb	A.O.	1	2	3	4	5	6	7	8	9	10	11
170	vergleichen	subj.	-	-	-	-	-	-	-	-	-	-	+
307	verschnuepfen	subj.	-	-	+								
160	verschwaegern	subj.	-	-	-	-	-	-	-	+			
109	versehen	subj.	-	-	+								
327	versehen	subj.	-	-	-	+							
21	wickeln	subj.	-	-	+								
337	zerreißen	subj.	-	-	+								
252	zieren	subj.	-	-	+								

Table 27. Common Features

Group VII

Position of Participle - Initial & Final

Verb - Transitive

**A.O. - present, but functioning as subjective
or objective in main clause**

[illegible]

Table 29. Common FeaturesGroup IX

Participle used as complement to main verb.

Sentence	Verb	Posi.	A.O.	Verb	Adverbial	Main Verb
60	einnisten	IF	Obj. Intran.	LB	finden	
297	erfassen	F	Obj. Trans.	AB	halten	
135	erfuellen	IF	Subj. Trans.	AB	sein	
200	erfuellen	IF	Subj. Trans.	AB	sein	
286	erfuellen	IF	Obj. Trans.	AB	fuehlen	
156	falten	F	Obj. Trans.	LF	halten	
189	richten	IF	Obj. Trans.	DB	halten	
28	verschliessen	IF	Subj. Trans.	MF	liegen	
289	versuchen	IF	Obj. Trans.	-	fuehlen	
285	weiten	IF	Obj. Trans.	MF	fuehlen	
64	wenden	F	Obj. Trans.	DF	halten	