Appendix B: Statistical Analysis of Bede's Use of Clausulae

Table 6: *Cursus mixtus* and metrical forms in Bede

	˘ ˘ ˘ x	˘ ˘ ˘ – ˘ ˘ x	– ˘ ˘ – ˘ ˘ x	– ˘ – ˘ ˘ x	– – ˘ x	˘ ˘ ˘ – ˘ x	– ˘ ˘ ˘ – ˘ x	– ˘ ˘ – ˘ x	– ˘ ˘ – ˘ x	– ˘ ˘ – – ˘ x	˘ ˘ ˘ – – ˘ x	– ˘ – – ˘ x	˘ – – – ˘ x	– – – – ˘ x	˘ ˘ ˘ ˘ – x	– ˘ ˘ ˘ – x	– ˘ ˘ – x	– ˘ – x	˘ ˘ ˘ – – x	– ˘ ˘ – – x	– ˘ – – x	– – – x	total
A					1				1			3	2				14	1		1	85	27	135
B			1	10	8			12	2			36	1	9				1		3	1	1	85
C									1	1					1			11	2			4	20
D										3	1		1			5	2	16	2	12	2	28	72
E	2		1	2	2				9	3	1		5	4		1		2				3	35
F																		1		2		5	8
G											1	1						6			2	2	12
	2	0	2	12	11	0	0	12	13	7	3	40	9	13	1	6	16	38	4	18	90	70	367

A = planus, B = tardus, C = velox, D = trispondaicus, E = medius, F = dispondaicus, G = other

Table 7: Metrical forms in Bede and Oberhelman's control authors[1]

	˘ ˘ ˘ x	˘ ˘ ˘ – ˘ ˘ x	– ˘ ˘ – ˘ ˘ x	– ˘ – ˘ ˘ x	– – ˘ x	˘ ˘ ˘ – ˘ x	– ˘ ˘ ˘ – ˘ x	– ˘ ˘ – ˘ x	– ˘ ˘ – ˘ x	– ˘ ˘ – – ˘ x	˘ ˘ ˘ – – ˘ x	– ˘ – – ˘ x	˘ – – – ˘ x	– – – – ˘ x	˘ ˘ ˘ ˘ – x	– ˘ ˘ ˘ – x	– ˘ ˘ – x	– ˘ – x	˘ ˘ ˘ – – x	– ˘ ˘ – – x	– ˘ – – x	– – – x	total
H	2	0	2	12	11	0	0	12	13	7	3	40	9	13	1	6	16	38	4	18	90	70	367
I	28	4	1	21	47	2	0	12	33	19	7	21	30	54	15	21	95	184	9	32	88	277	1000
J	33	4	4	28	64	2	1	10	66	10	7	40	36	43	8	16	72	171	10	22	104	249	1000
K	15	3	1	21	5	0	3	5	65	4	13	92	14	61	12	105	4	257	30	5	248	37	1000
L	3	0	6	11	9	1	0	4	8	0	1	10	6	1	5	1	26	55	0	2	53	46	248
M	12	0	32	22	12	1	0	10	23	0	2	55	8	21	4	8	36	128	13	17	146	157	707
N	6	0	3	18	9	0	0	5	12	0	2	29	1	2	5	4	21	65	2	2	67	52	305

H = Bede, I = Descartes, J = Polydore, K = Cicero, L = Dante, M = Gilbert, N = John of Salisbury.

[1] Data taken from Oberhelman, *Rhetoric and Homiletics*, Table I.

Table 8: *cursus mixtus* forms in Bede and Oberhelman's control authors[2]

	planus	tardus	velox	trispond.	medius	dispond.	other	total
Bede	135	85	20	35	72	8	12	367
Descartes	293	117	130	213	68	144	35	1000
Polydore	296	119	96	203	132	100	54	1000
Cicero	276	136	133	236	99	85	35	1000
Dante	93	50	93	0	2	10	0	248
Gilbert	210	141	142	133	31	27	23	707
John	84	259	356	153	45	37	23	1260

Equation 1
Confidence interval for single proportion:[3]

$$P_L = \frac{(2np + c_{\alpha/2}^2 - 1) - c_{\alpha/2}\sqrt{c_{\alpha/2}^2 - (2 + 1/n) + 4p(nq + 1)}}{2(n + c_{\alpha/2}^2)}$$

$$P_U = \frac{(2np + c_{\alpha/2}^2 + 1) + c_{\alpha/2}\sqrt{c_{\alpha/2}^2 + (2 + 1/n) + 4p(nq + 1)}}{2(n + c_{\alpha/2}^2)}$$

Where n is the total (so 367 for Bede), p is the proportion of the relevant result (240/367 = 0.653), where $c_{\alpha/2} = 2.75$,[4] where $q = n - p$. P_L and P_U give us the upper and lower limits of the confidence interval, and we have a 99% confidence that the values lie between these two limits.

Table 9: 99% confidence interval on *planus*, *tardus* and *velox* forms in Descartes, Polydore and Cicero:[*]
. cii 3000 1596, level (99)

-- Binomial Exact --

Variable	Obs	Mean	Std. Err. [99% Conf. Interval]	
3000	.532	.00911	.5083315	.5555661

[2] Data taken from Oberhelman, *Rhetoric and Homiletics*, Table I.
[3] J. L. Fleiss, *Statistical Methods for Rates and Proportions*, 2nd edn (New York, 1981)
[4] This is the cut-off point in the normal distribution.
[*] The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The output from the program has been copied into this appendix. The first line is the relevant command.

Table 10: 99% confidence interval on *planus*, *tardus* and *velox* forms in Dante, Gilbert and John:*
. cii 1260 1002, level (99)

Variable	Obs	Mean	Std. Err.	[99% Conf. Interval]	
	-- Binomial Exact --				
1260	.7952381	.0113681	.7644597	.8237501	

Table 11: 99% confidence interval on *trispondaicus* forms in Descartes, Polydore and Cicero:*
. cii 3000 652, level (99)

Variable	Obs	Mean	Std. Err.	[99% Conf. Interval]	
	-- Binomial Exact --				
3000	.2173333	.0075299	.1982337	.2373393	

Table 12: 99% confidence interval on *trispondaicus* forms in Dante and John:*
. cii 553 20, level (99)

Variable	Obs	Mean	Std. Err.	[99% Conf. Interval]	
	-- Binomial Exact --				
553	.0361664	.0079395	.0188705	.0618595	

Table 13: 99% confidence interval on *trispondaicus* forms in Gilbert:*
. cii 707 133, level (99)

Variable	Obs	Mean	Std. Err.	[99% Conf. Interval]	
	-- Binomial Exact --				
707	.1881188	.0146978	.1517713	.2287556	

Table 14: 99% confidence interval on metrical forms in Descartes and Polydore:*
. cii 2000 1379, level (99)

Variable	Obs	Mean	Std. Err.	[99% Conf. Interval]	
	-- Binomial Exact --				
2000	.6895	.0103462	.6621677	.7159203	

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Table 15: 99% confidence interval on metrical forms in Cicero:[*]
. cii 1000 781, level (99)

		-- Binomial Exact --		
Variable	Obs	Mean	Std. Err.	[99% Conf. Interval]
1000	.781	.0130782	.7455039	.8137749

.

Table 16: 99% confidence interval on metrical forms in Dante and John:[*]
cii 553 429, level (99)

		-- Binomial Exact --		
Variable	Obs	Mean	Std. Err.	[99% Conf. Interval]
553	.7757685	.0177358	.7268847	.819801

Table 17: 99% confidence interval on metrical forms in Gilbert:[*]
. cii 707 552, level (99)

		-- Binomial Exact --		
Variable	Obs	Mean	Std. Err.	[99% Conf. Interval]
707	.7807638	.0155599	.7381366	.8195347

Equation 2

In my analyses, I used the upper value produced by the calculation of the confidence interval to produce the expected frequencies, by multiplying the upper limit by the total number of controls (so 0.555 × 3000 = 1665), then used this figure in the test below:

$$\chi^2 \text{ test:}^{5}\ \chi^2_{obt} = \sum \frac{(f_o - f_e)^2}{f_e}$$

where f_o = observed frequency and f_e = expected frequency and χ^2_{obt} = the result obtained.

[*] The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

[5] Pagano, *Understanding Statistics*, p. 403.

Table 18: χ^2 test on *planus*, *tardus* and *velox* forms in Descartes, Polydore and Cicero against Bede:*

. tabi 1665 240 \1335 127, chi2 expec

```
+--------------------+
Key
--------------------
frequency
expected frequency
+--------------------+

col
row         1          2            Total

1      1,665        240           1,905
     1,697.4      207.6           1,905.0

2      1,335        127           1,462
     1,302.6      159.4           1,462.0

Total      3,000        367      3,367
         3,000.0      367.0      3,367.0

Pearson chi2(1) =  13.0325            Pr = 0.000
```

Table 19: χ^2 test on *planus*, *tardus* and *velox* forms in Dante, Gilbert and John against Bede:*

. tabi 1037 240 \223 127, chi2 expec

```
+--------------------+
Key
--------------------
frequency
expected frequency
+--------------------+

col
row         1          2            Total

1      1,037        240           1,277
       988.9      288.1           1,277.0

2        223        127           350
         271.1       78.9          350.0

Total      1,260        367      1,627
         1,260.0      367.0      1,627.0

Pearson chi2(1) =  48.1141            Pr = 0.000
```

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Table 20: χ^2 test on *trispondaicus* forms in Descartes, Polydore and Cicero against Bede:[*]

. tabi 711 72 \2289 295, chi2 expec

+--------------------+
Key
----
frequency
expected frequency
+--------------------+

col row	1	2	Total
1	711 697.7	72 85.3	783 783.0
2	2,289 2,302.3	295 281.7	2,584 2,584.0
Total	3,000 3,000.0	367 367.0	3,367 3,367.0

Pearson chi2(1) = 3.0522 Pr = 0.081

0.081×5 = 0.405 P>α

Table 21: χ^2 test on *trispondaicus* forms in Dante and John against Bede:[*]

. tabi 34 72 \515 295, chi2 expec

+--------------------+
Key
----
frequency
expected frequency
+--------------------+

col row	1	2	Total
1	34 63.7	72 42.3	106 106.0
2	519 489.3	295 324.7	814 814.0
Total	553 553.0	367 367.0	920 920.0

Pearson chi2(1) = 39.2645 Pr = 0.000

[*] The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Table 22: χ^2 test on *trispondaicus* forms in Gilbert against Bede:*

. tabi 161 72 \546 295, chi2 expec

+--------------------+
Key
----
frequency
expected frequency
+--------------------+

col row	1	2	Total
1	161 153.4	72 79.6	233 233.0
2	546 553.6	295 287.4	841 841.0
Total	707 707.0	367 367.0	1,074 1,074.0

Pearson chi2(1) = 1.4145 Pr = 0.234

Table 23: χ^2 test on metrical forms in Descartes and Polydore against Bede:*

. tabi 1430 276 \570 91, chi2 expec

+--------------------+
Key
----
frequency
expected frequency
+--------------------+

col row	1	2	Total
1	1,430 1,441.5	276 264.5	1,706 1,706.0
2	570 558.5	91 102.5	661 661.0
Total	2,000 2,000.0	367 367.0	2,367 2,367.0

Pearson chi2(1) = 2.1142 Pr = 0.146

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Table 24: χ^2 test on metrical forms in Cicero against Bede:*
. tabi 813 276 \187 91, chi2 expec

+--------------------+
Key
----
frequency
expected frequency
+--------------------+

col row	1	2	Total
1	813 796.6	276 292.4	1,089 1,089.0
2	187 203.4	91 74.6	278 278.0
Total	1,000 1,000.0	367 367.0	1,367 1,367.0

Pearson chi2(1) = 6.1574 Pr = 0.013

0.013×4=0.052 P>α

Table 25: χ^2 test on metrical forms in Dante and John against Bede:*
. tabi 453 276 \100 91, chi2 expec

+--------------------+
Key
----
frequency
expected frequency
+--------------------+

col row	1	2	Total
1	453 438.2	276 290.8	729 729.0
2	100 114.8	91 76.2	191 191.0
Total	553 553.0	367 367.0	920 920.0

Pearson chi2(1) = 6.0420 Pr = 0.014

0.014×4=0.056 P>α

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Table 26: χ^2 test on metrical forms in Gilbert against Bede:*

```
. tabi 579 276 \128 91, chi2 expec

+--------------------+
Key
--------------------
frequency
expected frequency
+--------------------+

col
row         1          2            Total

1       579        276            855
      562.8      292.2            855.0

2       128         91            219
      144.2       74.8            219.0

Total        707        367       1,074
       707.0      367.0           1,074.0

Pearson chi2(1) =   6.6628 Pr = 0.010
0.010×4=0.04 P<α
```

Table 27: forms of final cadence in Bede:

	1	*p*	*pp*
6p	0	2	3
5p	0	5	1
5pp	1	2	0
4p	3	39	14
4pp	1	61	11
3p	5	94	31
3pp	3	20	12
2	17	9	24
1	0	9	0

Table 28: expected forms of final cadence for Bede, calculated according to Janson's method:

	1	*p*	*pp*
4p	4	37	15
4pp	6	48	19
3p	11	85	34
3pp	3	23	9

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

2	4	33	13
other	2	15	6

Table 29: χ^2 test on observed and expected cadence forms in Bede, using Janson's method of internal comparison:

forms	o	e	(o-e)^2/e		pvalue		
14p	3	4.577657	0.543728		0.460892		
14pp	1	5.967302	4.134882		0.042008	0.756144	
13p	5	10.6267	2.979267		0.084337	1.518075	
13pp	3	2.861035	0.00675		0.934522		
"12"	17	4.087193	40.79586		1.69E-10	3.04E-09	sig
1 other	1	1.880109	0.411993		0.52096		
p4p	39	36.77384	0.134764		0.713543		
p4pp	61	47.93733	3.559509		0.059205	1.065695	
p3p	94	85.36785	0.872859		0.350165		
p3pp	20	22.98365	0.387326		0.533708		
p2	9	32.83379	17.30076		3.19E-05	0.000574	sig
p other	18	15.10354	0.555464		0.456094		
pp4p	14	14.6485	0.02871		0.865451		
pp4pp	11	19.09537	3.431983		0.063945		
pp3p	31	34.00545	0.265626		0.606281		
pp3pp	12	9.155313	0.883885		0.34714		
pp2	24	13.07902	9.119019		0.00253	0.045534	sig
pp other	4	6.016349	0.675769		0.411047		
total	367	367					

Equation 3

McNemars' test:[6]

$$\chi^2 = \left\{ \frac{|p_2 - p_1| - 1/n}{\text{s.e.}(p_2 - p_1)} \right\}^2 = \frac{(|b - c| - 1)^2}{b + c}$$

$$\text{where } p_1 = \frac{a + c}{n} \text{ and } p_2 = \frac{a + b}{n}$$

from a table:

	Factor Present	Factor Absent	Totals
Factor Present	a	b	a+b
Factor Absent	c	d	c+d
Totals	a+c	b+d	n

[6] Fleiss, *Statistical Methods*, pp. 113-114.

Table 30: McNemar's test on the proportion of *14p* cadences in Bede:[*]

```
. symmi 3 53 \27 284, contrib
```

col

row	1	2	Total
1	3	53	56
2	27	284	311
Total	30	337	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	8.4500

	chi2	df	Prob>chi2
Symmetry (asymptotic)	8.45	1	0.0037
Marginal homogeneity (Stuart-Maxwell)	8.45	1	0.0037

Revised probability: 0.0037×18=0.0666 – therefore slightly over the alpha-boundary of 0.05.

Table 31: McNemar's test on *14pp* cadences in Bede:[*]

```
. symmi 1 72 \29 265, contrib
```

col

row	1	2	Total
1	1	72	73
2	29	265	294
Total	30	337	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	18.3069

	chi2	df	Prob>chi2
Symmetry (asymptotic)	18.31	1	0.0000

[*] The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command

Marginal homogeneity (Stuart-Maxwell)	18.31	1	0.0000

Table 32: McNemar's test on *13p* cadences in Bede:*
. symmi 5 125 \25 212, contrib

col			
row	1	2	Total
1	5	125	130
2	25	212	237
Total	30	337	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	66.6667

	chi2	df	Prob>chi2
Symmetry (asymptotic)	66.67	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	66.67	1	0.0000

Table 33: McNemar's test on *13pp* cadences in Bede:*
. symmi 3 32 \27 305, contrib

col			
row	1	2	Total
1	3	32	35
2	27	305	332
Total	30	337	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	0.4237

	chi2	df	Prob>chi2

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Symmetry (asymptotic)	0.42	1	0.5151
Marginal homogeneity (Stuart-Maxwell)	0.42	1	0.5151

P>α

Table 34: McNemar's test on *1 2* cadences in Bede:*

. symmi 17 33 \13 304, contrib

col			
row	1	2	Total
1	17	33	50
2	13	304	317
Total	30	337	367

Contribution
to symmetry
Cells chi-squared
----
n1_2 & n2_1 8.6957

	chi2	df	Prob>chi2
Symmetry (asymptotic)	8.70	1	0.0032
Marginal homogeneity (Stuart-Maxwell)	8.70	1	0.0032

0.0032 ×18=0.0576 P>α

Table 35: McNemar's test on *1 other* cadences in Bede:*

. symmi 1 22 \29 315, contrib

col			
row	1	2	Total
1	1	22	23
2	29	315	344
Total	30	337	367

Contribution
to symmetry
Cells chi-squared
----
n1_2 & n2_1 0.9608

	chi2	df	Prob>chi2

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command

Symmetry (asymptotic)	0.96	1	0.3270
Marginal homogeneity (Stuart-Maxwell)	0.96	1	0.3270

P>α

Table 36: McNemar's test on *p4p* cadences in Bede:*
. symmi 39 17 \202 109, contrib

col			
row	1	2	Total
1	39	17	56
2	202	109	311
Total	241	126	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	156.2785

	chi2	df	Prob>chi2
Symmetry (asymptotic)	156.28	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	156.28	1	0.0000

Table 37: McNemar's test on *p4pp* cadences in Bede:*
. symmi 61 12 \180 114, contrib

col			
row	1	2	Total
1	61	12	73
2	180	114	294
Total	241	126	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	147.0000

chi2 df Prob>chi2

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

	chi2	df	Prob>chi2
Symmetry (asymptotic)	147.00	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	147.00	1	0.0000

Table 38: McNemar's test on *p3p* cadences in Bede:*
. symmi 94 36 \147 90, contrib

col

row	1	2	Total
1	94	36	130
2	147	90	237
Total	241	126	367

Contribution
to symmetry

Cells	chi-squared
n1_2 & n2_1	67.3279

	chi2	df	Prob>chi2
Symmetry (asymptotic)	67.33	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	67.33	1	0.0000

Table 39: McNemar's test on *p3pp* cadences in Bede:*
. symmi 20 15 \221 111, contrib

col

row	1	2	Total
1	20	15	35
2	221	111	332
Total	241	126	367

Contribution
to symmetry

Cells	chi-squared
n1_2 & n2_1	179.8136

	chi2	df	Prob>chi2
Symmetry (asymptotic)	179.81	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	179.81	1	0.0000

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Table 40: McNemar's test on *p2* cadences in Bede:*
. symmi 9 41 \232 85, contrib

col			
row	1	2	Total
1	9	41	50
2	232	85	317
Total	241	126	367

Contribution
to symmetry
Cells chi-squared
----
n1_2 & n2_1 133.6300

	chi2	df	Prob>chi2
Symmetry (asymptotic)	133.63	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	133.63	1	0.0000

Table 41: McNemar's test on *p other* cadences in Bede:*
. symmi 18 5 \223 121, contrib

col			
row	1	2	Total
1	18	5	23
2	223	121	344
Total	241	126	367

Contribution
to symmetry
Cells chi-squared
----
n1_2 & n2_1 208.4386

	chi2	df	Prob>chi2

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

	chi2	df	Prob>chi2
Symmetry (asymptotic)	208.44	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	208.44	1	0.0000

Table 42: McNemar's test on *pp4p* cadences in Bede:*
. symmi 14 42 \82 229, contrib

col row	1	2	Total
1	14	42	56
2	82	229	311
Total	96	271	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	12.9032

	chi2	df	Prob>chi2
Symmetry (asymptotic)	12.90	1	0.0003
Marginal homogeneity (Stuart-Maxwell)	12.90	1	0.0003
0.0003 × 18 = 0.0054	P<α		

Table 43: McNemar's test on *pp4pp* cadences in Bede:*
. symmi 11 62 \85 269, contrib

col row	1	2	Total
1	11	62	73
2	85	269	354
Total	96	331	427

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	3.5986

	chi2	df	Prob>chi2

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Symmetry (asymptotic)	3.60	1	0.0578
Marginal homogeneity (Stuart-Maxwell)	3.60	1	0.0578

0.0478 × 18 = 0.9 P>α

Table 44: McNemar's test on *pp3p* cadences in Bede:*

. symmi 31 99 \65 172, contrib

col			
row	1	2	Total
1	31	99	130
2	65	172	237
Total	96	271	367

Contribution
to symmetry

Cells	chi-squared
n1_2 & n2_1	7.0488

	chi2	df	Prob>chi2
Symmetry (asymptotic)	7.05	1	0.0079
Marginal homogeneity (Stuart-Maxwell)	7.05	1	0.0079

0.0079 × 15 = 0.1185, P>α

Table 45: McNemar's test on *pp3pp* cadences in Bede:*

. symmi 12 23 \84 248, contrib

col			
row	1	2	Total
1	12	23	35
2	84	248	332
Total	96	271	367

Contribution
to symmetry

Cells	chi-squared
n1_2 & n2_1	34.7757

	chi2	df	Prob>chi2

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

	chi2	df	Prob>chi2
Symmetry (asymptotic)	34.78	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	34.78	1	0.0000

Table 46: McNemar's test on *pp2* cadences in Bede:*
. symmi 24 26 \72 245, contrib

col row	1	2	Total
1	24	26	50
2	72	245	317
Total	96	271	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	21.5918

	chi2	df	Prob>chi2
Symmetry (asymptotic)	21.59	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	21.59	1	0.0000

Table 47: McNemar's test on *pp other* cadences in Bede:*
. symmi 4 19 \92 252, contrib (pp other)

col row	1	2	Total
1	4	19	23
2	92	252	344
Total	96	271	367

Cells	Contribution to symmetry chi-squared
n1_2 & n2_1	48.0090

	chi2	df	Prob>chi2

* The values in this table were calculated using the statistical software package Stata 8.0, (©Statacorp, 2003). The first line is the relevant command.

Symmetry (asymptotic)	48.01	1	0.0000
Marginal homogeneity (Stuart-Maxwell)	48.01	1	0.0000