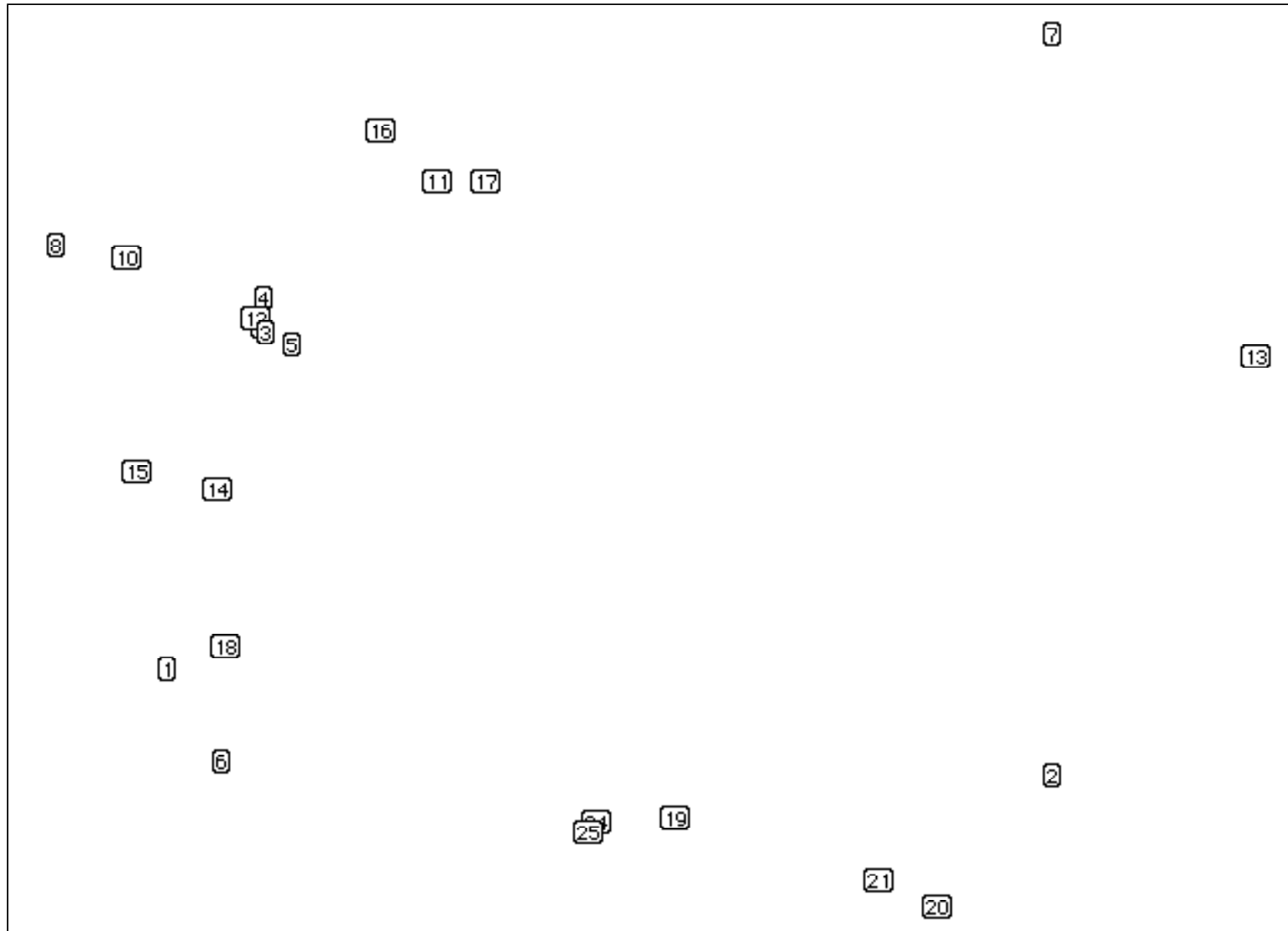
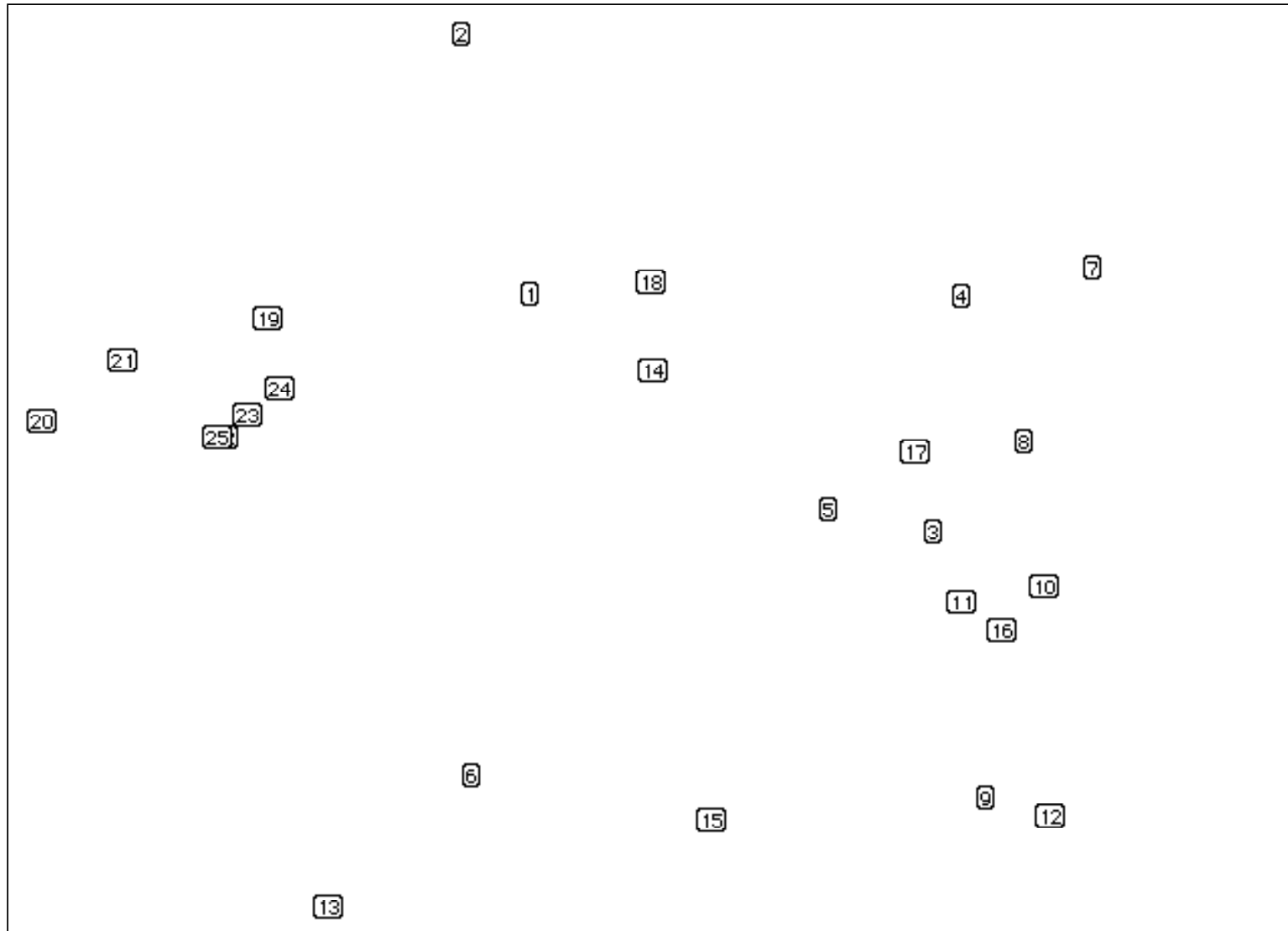


APPENDIX 2 - Cluster analysis of feature U (labialization).



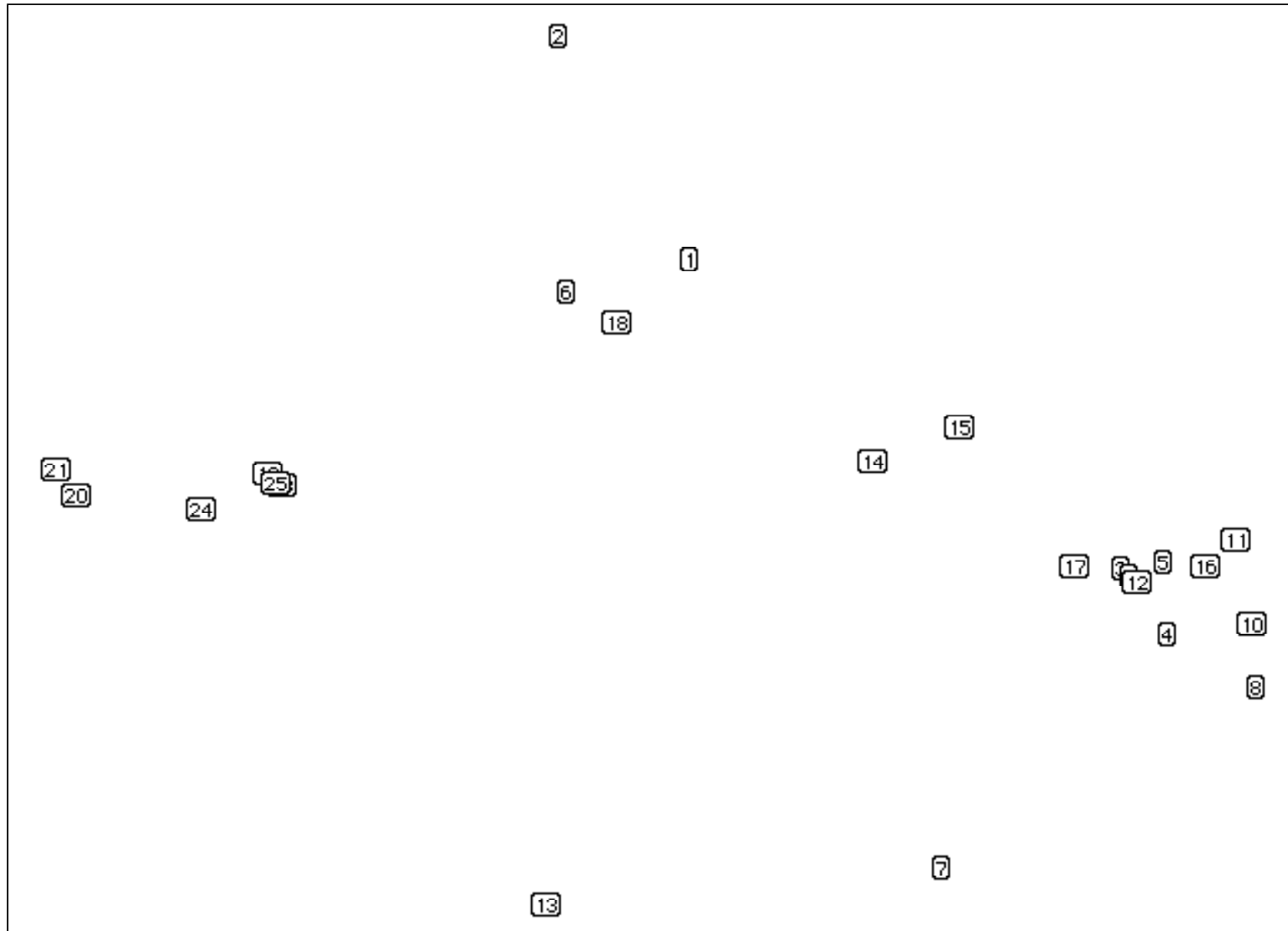
APPENDIX 3 - Cluster analysis of feature V (affrication).



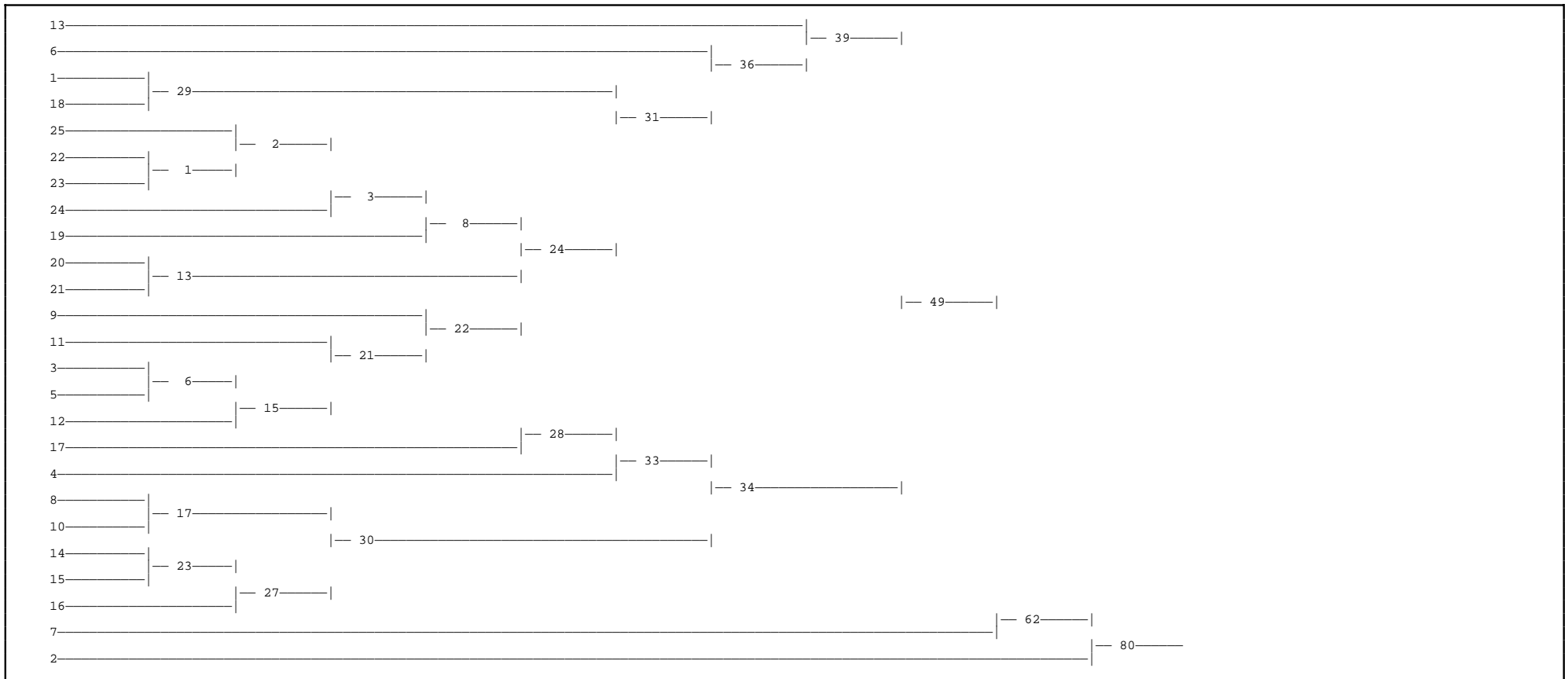
APPENDIX 4 - Cluster analysis of feature X (degree of oral closure).



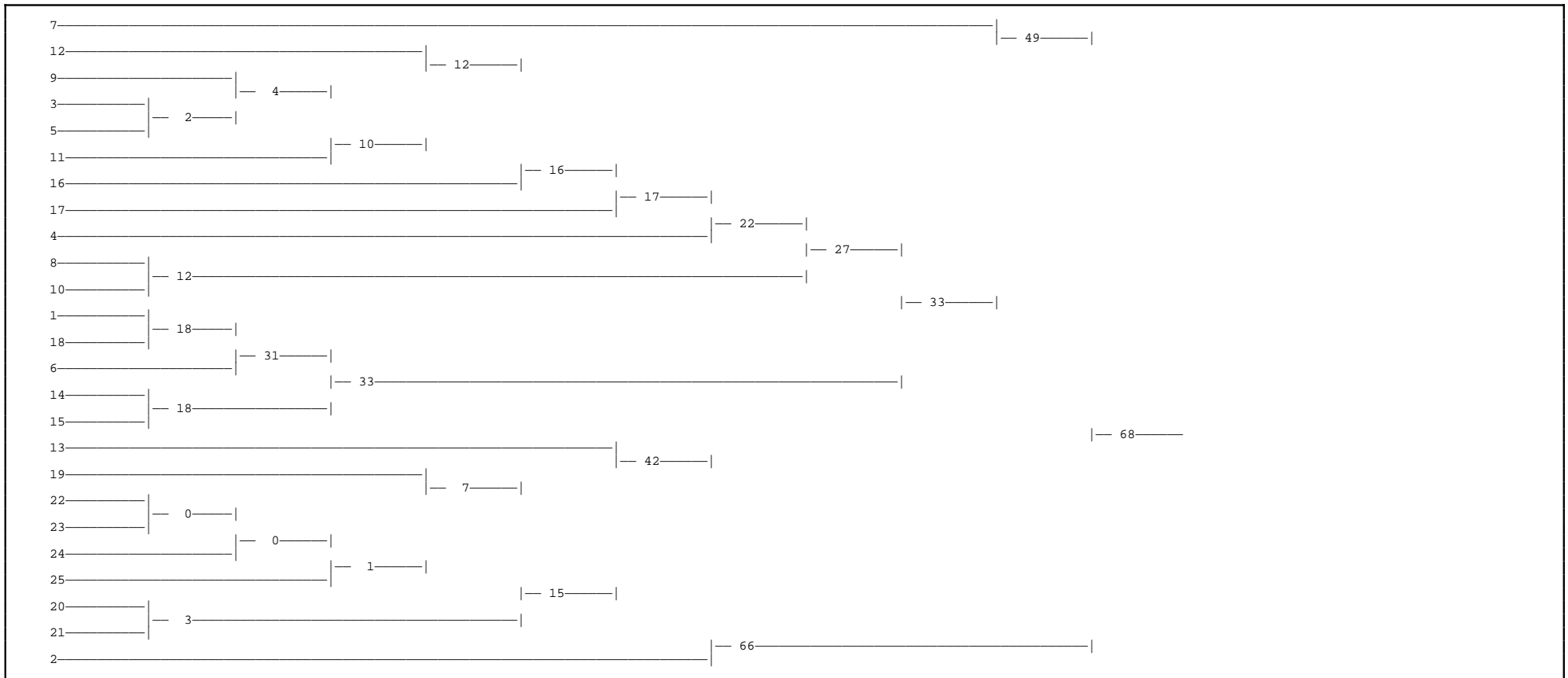
APPENDIX 5 - Cluster analysis of feature Y (place of articulation).



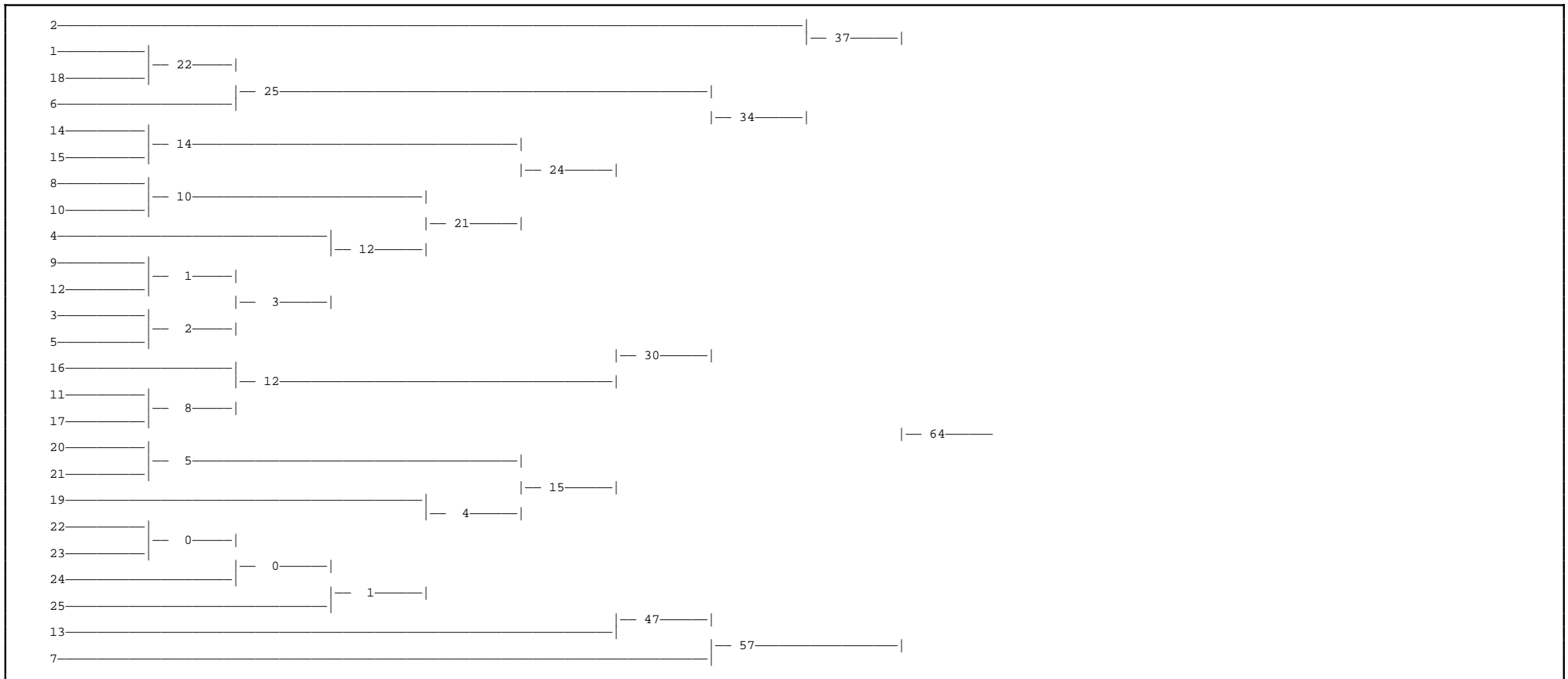
APPENDIX 6 - Cluster analysis of feature Z (voicing/aspiration).



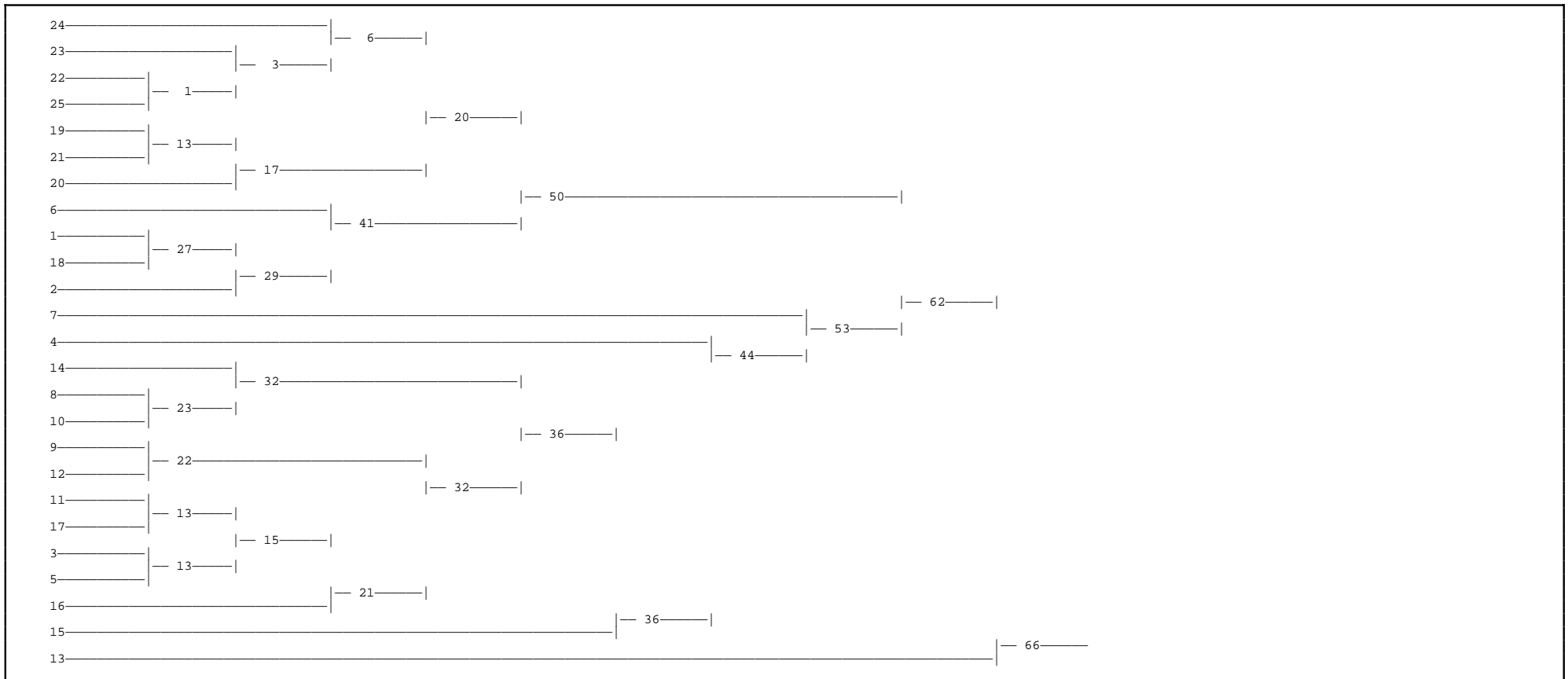
APPENDIX 7 - Composite dendrogram for all features.



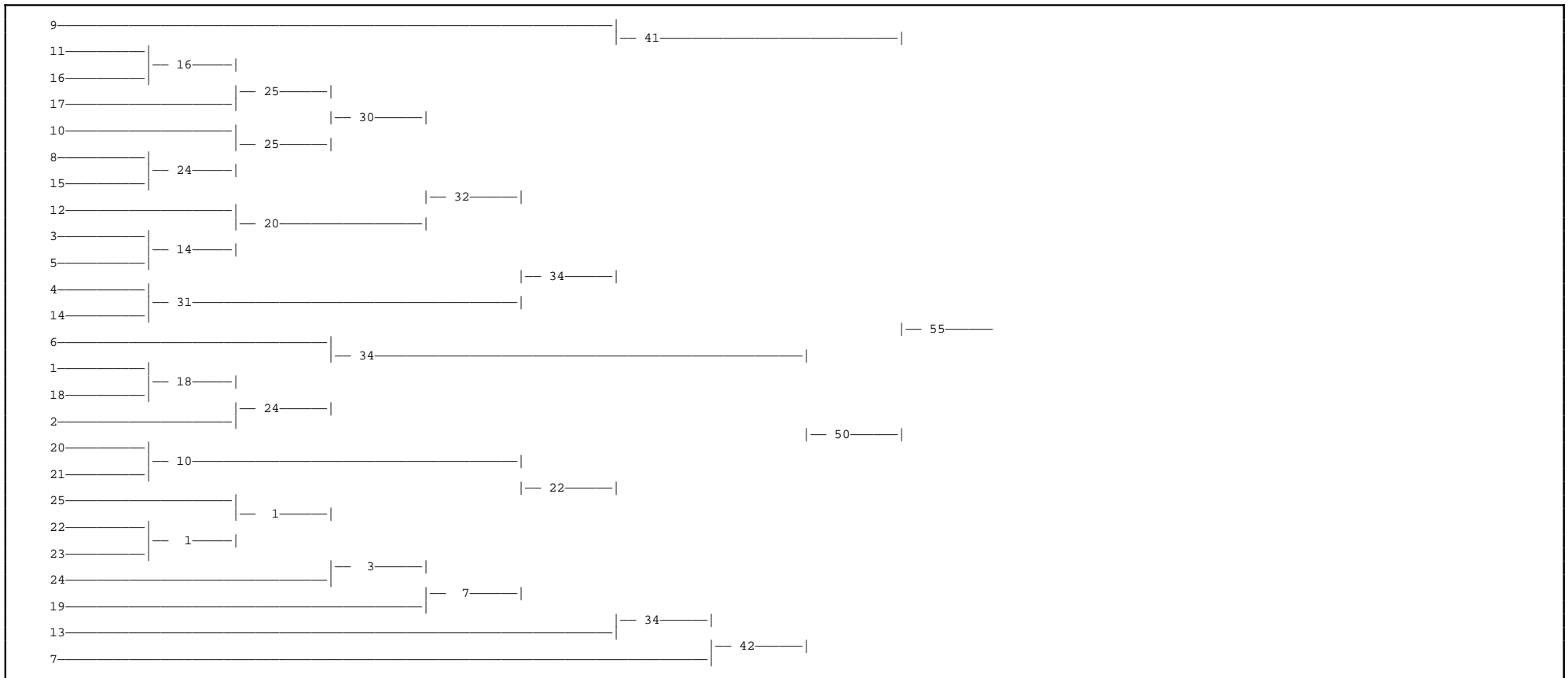
APPENDIX 8 - Dendrogram for feature U (labialization).



APPENDIX 9 - Dendrogram for feature V (affrication).



APPENDIX 10 - Dendrogram for feature X (degree of oral closure).



APPENDIX 11 - Dendrogram for feature Y (place of articulation).

Jouni Maho :: Calculating differences in phonological features in a sample of 25 Bantu languages :: 1995

1	1	- 25	33.629	(38)	6	6	- 21	40.238	(81)	11	5	- 11	24.475	(19)	16	14	- 16	35.283	(47)	21	19	- 21	14.493	(11)
	1	- 23	35.104	(45)		6	- 14	45.468	(104)		3	- 11	26.848	(22)		3	- 16	37.471	(61)		20	- 21	17.880	(12)
	1	- 24	35.535	(48)		6	- 18	46.385	(108)		11	- 17	31.682	(30)		11	- 16	39.058	(69)		21	- 23	23.415	(16)
	1	- 22	35.622	(49)		5	- 6	47.077	(111)		11	- 12	32.430	(33)		5	- 16	42.176	(90)		21	- 24	24.253	(17)
	1	- 5	35.892	(52)		1	- 6	47.096	(112)		10	- 11	37.689	(64)		8	- 16	44.274	(99)		21	- 22	24.415	(18)
	1	- 19	36.304	(56)		6	- 19	47.719	(119)		11	- 16	39.058	(69)		4	- 16	47.407	(115)		21	- 25	26.409	(21)
	1	- 3	36.856	(59)		6	- 23	48.193	(120)		11	- 14	39.853	(78)		12	- 16	48.227	(121)		18	- 21	39.923	(79)
	1	- 14	37.604	(62)		3	- 6	48.282	(122)		9	- 11	41.898	(87)		15	- 16	48.564	(124)		6	- 21	40.238	(81)
	1	- 18	38.205	(66)		6	- 22	49.193	(129)		11	- 18	42.967	(95)		16	- 17	49.026	(127)		1	- 21	50.297	(140)
	1	- 11	43.428	(96)		6	- 24	49.786	(135)		1	- 11	43.428	(96)		9	- 16	53.666	(153)		14	- 21	51.475	(146)
2	1	- 2	72.673	(236)	7	3	- 7	70.642	(228)	12	3	- 12	20.418	(13)	17	11	- 17	31.682	(30)	22	22	- 23	1.000	(1)
	2	- 19	88.459	(269)		7	- 12	70.992	(230)		5	- 12	21.671	(14)		5	- 17	31.880	(32)		22	- 25	1.994	(2)
	2	- 6	88.708	(271)		7	- 11	71.402	(231)		9	- 12	28.595	(25)		3	- 17	33.865	(40)		22	- 24	3.611	(5)
	2	- 18	91.508	(273)		5	- 7	71.766	(232)		10	- 12	31.846	(31)		17	- 18	39.671	(72)		19	- 22	10.828	(9)
	2	- 24	93.170	(276)		7	- 14	72.912	(237)		11	- 12	32.430	(33)		10	- 17	42.183	(91)		21	- 22	24.415	(18)
	2	- 23	93.238	(277)		7	- 7	78.587	(247)		12	- 15	35.952	(53)		9	- 17	44.818	(102)		1	- 22	35.622	(49)
	2	- 22	94.238	(278)		7	- 23	78.597	(248)		12	- 14	39.691	(73)		12	- 17	44.955	(103)		20	- 22	35.723	(51)
	2	- 21	95.021	(280)		7	- 16	78.768	(249)		4	- 12	41.381	(86)		14	- 17	46.868	(110)		5	- 22	36.237	(55)
	2	- 14	95.438	(282)		7	- 22	78.992	(251)		8	- 12	44.539	(101)		16	- 17	49.026	(127)		18	- 22	40.213	(80)
	2	- 25	96.232	(283)		7	- 24	79.546	(252)		12	- 17	44.955	(103)		17	- 19	50.112	(139)		14	- 22	40.533	(82)
3	3	- 5	8.542	(6)	8	8	- 10	22.500	(15)	13	13	- 20	51.509	(147)	18	18	- 19	31.458	(29)	23	22	- 23	1.000	(1)
	3	- 12	20.418	(13)		3	- 8	33.635	(39)		13	- 21	56.077	(166)		1	- 18	38.205	(66)		23	- 24	2.771	(3)
	3	- 11	26.848	(22)		5	- 8	34.774	(44)		13	- 22	62.971	(201)		18	- 23	39.213	(70)		23	- 25	2.994	(4)
	3	- 9	28.500	(24)		8	- 15	36.060	(54)		13	- 23	63.526	(207)		17	- 18	39.671	(72)		19	- 23	9.828	(8)
	3	- 14	30.419	(26)		8	- 14	39.299	(71)		13	- 19	63.558	(208)		18	- 24	39.805	(77)		21	- 23	23.415	(16)
	3	- 15	30.801	(27)		8	- 16	44.274	(99)		13	- 24	64.118	(209)		18	- 21	39.923	(79)		20	- 23	34.723	(43)
	3	- 4	32.655	(35)		8	- 12	44.539	(101)		13	- 25	64.965	(212)		18	- 22	40.213	(80)		1	- 23	35.104	(45)
	3	- 8	33.635	(39)		4	- 8	45.959	(106)		4	- 13	67.759	(221)		5	- 18	42.007	(88)		5	- 23	35.237	(46)
	3	- 17	33.865	(40)		8	- 9	47.322	(114)		6	- 13	67.943	(223)		18	- 25	42.206	(92)		18	- 23	39.213	(70)
	3	- 10	34.039	(41)		8	- 11	48.594	(126)		11	- 13	69.600	(224)		11	- 18	42.967	(95)		3	- 23	39.695	(74)
4	3	- 4	32.655	(35)	9	5	- 9	28.054	(23)	14	3	- 14	30.419	(26)	19	19	- 24	9.760	(7)	24	23	- 24	2.771	(3)
	4	- 5	33.304	(37)		3	- 9	28.500	(24)		14	- 15	30.939	(28)		19	- 23	9.828	(8)		22	- 24	3.611	(5)
	4	- 15	36.466	(57)		9	- 12	28.595	(25)		14	- 16	35.283	(47)		19	- 22	10.828	(9)		19	- 24	9.760	(7)
	4	- 14	40.610	(83)		9	- 10	37.682	(63)		5	- 14	35.669	(50)		19	- 25	12.822	(10)		21	- 24	24.253	(17)
	4	- 12	41.381	(86)		9	- 11	41.898	(87)		14	- 19	36.982	(60)		19	- 21	14.493	(11)		20	- 24	34.654	(42)
	4	- 8	45.959	(106)		9	- 15	42.254	(93)		1	- 14	37.604	(62)		19	- 20	26.339	(20)		1	- 24	35.535	(48)
	4	- 11	47.197	(113)		9	- 17	44.818	(102)		14	- 25	38.539	(68)		18	- 19	31.458	(29)		5	- 24	36.829	(58)
	4	- 16	47.407	(115)		9	- 14	46.079	(107)		8	- 14	39.299	(71)		1	- 19	36.304	(56)		14	- 24	39.705	(75)
	4	- 10	49.552	(132)		8	- 9	47.322	(114)		12	- 14	39.691	(73)		14	- 19	36.982	(60)		18	- 24	39.805	(77)
	4	- 17	51.353	(143)		4	- 9	53.539	(152)		14	- 24	39.705	(75)		5	- 19	42.056	(89)		3	- 24	41.288	(85)
5	3	- 5	8.542	(6)	10	8	- 10	22.500	(15)	15	3	- 15	30.801	(27)	20	20	- 21	17.880	(12)	25	22	- 25	1.994	(2)
	5	- 12	21.671	(14)		10	- 12	31.846	(31)		14	- 15	30.939	(28)		19	- 20	26.339	(20)		23	- 25	2.994	(4)
	5	- 11	24.475	(19)		5	- 10	32.464	(34)		5	- 15	33.236	(36)		20	- 24	34.654	(42)		19	- 25	12.822	(10)
	5	- 9	28.054	(23)		3	- 10	34.039	(41)		12	- 15	35.952	(53)		20	- 23	34.723	(43)		21	- 25	26.409	(21)
	5	- 17	31.880	(32)		9	- 10	37.682	(63)		8	- 15	36.060	(54)		20	- 22	35.723	(51)		1	- 25	33.629	(38)
	5	- 10	32.464	(34)		10	- 11	37.689	(64)		4	- 15	36.466	(57)		20	- 25	37.716	(65)		20	- 25	37.716	(65)
	5	- 15	33.236	(36)		10	- 17	42.183	(91)		9	- 15	42.254	(93)		6	- 20	51.139	(141)		5	- 25	38.230	(67)
	4	- 5	33.304	(37)		10	- 14	43.639	(97)		15	- 23	46.580	(109)		13	- 20	51.509	(147)		14	- 25	38.539	(68)
	5	- 8	34.774	(44)		10	- 15	49.111	(128)		15	- 24	47.512	(116)		18	- 20	56.320	(167)		18	- 25	42.206	(92)
	5	- 23	35.237	(46)		4	- 10	49.552	(132)		15	- 22	47.580	(118)		1	- 20	61.198	(195)		3	- 25	42.689	(94)

APPENDIX 13 - Numerical relations between the languages based on all features.