

## QUIPU AS145

Museum identification: No. VA42533 (Museum für Völkerkunde, Berlin)

Main cord: color B

- § 3.5 cm: group of 2 pendant cords (1-2), then space of 4.5 cm.  
 8.5 cm: group of 7 pendant cords (3-9), then space of 0.5 cm.  
 10.0 cm: group of 7 pendant cords (10-16), then space of 0.5 cm.  
 11.5 cm: group of 7 pendant cords (17-23), then space of 0.5 cm.  
 13.0 cm: group of 7 pendant cords (24-30), then space of 2.0 cm.  
 16.0 cm: group of 14 pendant cords (31-44), then space of 1.5 cm.  
 20.5 cm: group of 14 pendant cords (45-58), then space of 1.0 cm.  
 24.5 cm: group of 16 pendant cords (59-74), then space of 1.0 cm.  
 28.5 cm: group of 14 pendant cords (75-88), then space of 111.5  
 143.0 cm: end ç

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Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
1	--	0.5b	DB	?	
2	--	0.5b	DB	?	
3	1E(12.5);2L(23.0)	53.5ç	B	1+0+2	
4	6L(17.5);3L(22.5)	47.0ç	B	6+3	
5	5L(17.5);3L(23.5)	47.5ç	B	5+3	
6	1E(17.0)	44.5ç	B	1+0	
7	3L(17.0);5L(22.5)	47.5ç	B	3+5	
8	3L(18.0)	55.0ç	B	3+0	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
9	1E(12.0);1E(17.5)	53.0¢	B	1+1+0	
10	2s(12.0);3L(17.0)	42.5¢	DB	23	
11	4s(13.5);3L(19.5)	40.5¢	DB	43	
12	6s(13.0);2L(18.5)	40.0¢	DB	62	
13	1s(13.0);8L(19.5)	36.0¢	DB	18	
14	1s(8.0);1s(13.0);2L(19.0)	46.0¢	DB	112	
15	1s(13.0);5L(18.5)	43.0¢	DB	15	
16	3s(13.0);4L(19.5)	40.5¢	DB	34	
17	1E(18.5)	54.5¢	B	1+0	
18	1E(18.0)	53.5¢	B	1+0	
19	4L(19.0);2L(26.0)	49.5¢	B	4+2	
20	5L(19.0)	49.0¢	B	5+0	
21	1E(12.0)	54.0¢	B	1+0+0	
22	1E(25.0)	56.5¢	B	1	
23	8L(19.0)	52.0¢	B	8+0	
24	1s(14.0);6L(19.5)	41.0¢	DB	16	
25	7L(19.5)	40.5¢	DB	7	
26	1s(14.0);5L(18.5)	41.0¢	DB	15	
27	1s(14.0);2L(19.5)	45.0¢	DB	12	
28	6L(20.0)	42.0¢	DB	6	
29	1s(14.0);9L(20.0)	38.0¢	DB	19	
30	4L(19.0)	40.5¢	DB	4	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
31	5L(24.0)	45.0¢	LC	5+0	
32	1s(6.0)	59.5¢	DB-W	1000	
33	2L(24.5)	63.5¢	LC	2+0	
34	1s(6.0);1s(11.5)	54.0¢	DB-W	1100	
35	4L(24.5)	47.0¢	LC	4+0	
36	4s(11.5);3s(20.0)	42.5¢	DB-W	430	
37*	2L(24.0)	61.0¢	LC	2+0	
38	8s(12.0);6s(20.5)	58.0¢	DB-W	860	
39	7L(23.5)	77.5¢	LC	7+0	
40	1s(6.5);1s(12.0);7s(22.0);4L(29.5)	39.0¢	DB-W	1174	
41	--	17.0b	LC	?	
42	3s(12.5);2s(21.5)	61.0¢	DB-W	320	
43	4L(22.5);2L(29.0)	55.5¢	LC	4+2	
44	4s(12.5)	17.0b	DB-W	4??	
45	9L(24.0)	52.5¢	LC	9+0	
46	1s(5.5);4s(11.5);9s(19.0);7L(25.5)	37.0¢	DB-W	1497	
47	9L(24.0)	29.0b	LC	9+?	
48	1s(5.5);4s(12.5);9s(19.5);8L(26.5)	37.0¢	DB-W	1498	
49	8L(23.5);2L(30.0)	48.5¢	LC	8+2	
50	1s(12.5);4s(19.0)	60.0¢	DB-W	140	
51	4L(23.5);3L(29.5)	44.5¢	LC	4+3	
52	1s(6.0);6s(12.5);3s(21.0)	21.0b	DB-W	16(3+)?	
53	1s(12.0);4s(18.0);8L(24.0);2L(30.0)	65.5¢	LC	148+2	
54	1s(6.5);7s(22.0)	61.5¢	DB-W	1070	1:0.5

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
54s1	6L(26.0)	48.0¢	B	6	
55	3L(24.5);2L(30.0)	59.0¢	LC	3+2	
56	4s(12.5);3s(19.5)	47.0¢	DB-W	430	
57	4L(23.5);3L(30.0)	57.5¢	LC	4+3	
58	4s(12.5);5s(20.0);8L(25.5)	52.0¢	DB-W	458	
59	3L(23.0)	57.0¢	B	3+0	
60	3s(12.5)	52.0¢	DB-W	300	
61	4L(24.0)	64.5¢	LC	4+0	
62	4s(13.0);5s(20.5)	44.0¢	DB-W	450	
63	4L(24.0);2L(31.0)	61.5¢	LC	4+2	
64	3s(13.0);3s(20.5)	45.0¢	DB-W	330	
65	5L(24.5);2L(30.0)	62.5¢	LC	5+2	
66	3s(12.0);1s(19.0);7L(26.0)	40.5¢	DB-W	317	
67	--	67.5¢	LC	0	
68	--	65.0¢	DB-W	0	
69	--	38.0¢	LC	0	
70	--	71.5¢	DB-W	0	
71	--	48.5¢	B	0	
72	--	55.0¢	DB-W	0	
73	--	50.0¢	B	0	
74	--	55.5¢	DB-W	0	
75	4L(24.0);2L(30.0)	43.5¢	B	4+2	
76	1s(6.0)	43.5¢	DB-W	1000	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
77	6L(24.0); 2L(29.5)	41.0ç	B	1+2	
78	1s(5.5); 3s(12.0); 4s(19.5)	41.5ç	DB-W	1340	
79	1s(18.0); 8L(22.5); 3L(28.5)	39.0ç	LC	18+3	
80	5s(11.5); 9s(19.5); 4L(27.0)	44.5ç	BB-W	594	
81	3L(22.5); 3L(28.0)	37.0	LC	3+3	
82	8s(13.0); 9s(19.0); 7L(24.0)	29.5ç	DB-W	897	
83	5L(24.0); 2L(28.5)	36.0ç	LC	5+2	
84	1s(5.5); 1s(11.0); 8L(23.0)	30.5ç	DB-W	1108	
84s1**	5L(18.5)	32.0ç	DB	5	
85	--	40.5ç	LC	0	
86	--	54.0ç	DB-W	0	
87	--	50.0ç	LC	0	
88	--	45.5ç	DB-W	0	

#### Observations

- 1.\* A pendant fragment stored with the quipu was assumed to be part of pendant 37. Pendant 37 is broken at 16.0 cm.
- 2.\*\* A pendant fragment stored with the quipu was assumed to be part of subsidiary 84s1. The subsidiary is broken at 10.5 cm.
3. This is one of several quipus acquired by the Museum in 1907 with provenance Pachacamac. For a list of them, see AS97.
4. By spacing and color patterning, the quipu is separated into 3 parts. The

first part is one pair of pendants; the second is 4 groups of 7 pendants each; and the last part is 4 groups of 14 or 16 pendants each.

5. The quipu has 2 different knot cluster arrangements. One is the standard arrangement involving single knot clusters and long knot clusters. The other arrangement is only long knot clusters in one or more of 3 distinct positions on a cord. For convenience, call the former S and the latter N. The S and N arrangements are alternated on the quipu. In part 2, pendants in groups 1 and 3 are all N while in groups 2 and 4, they are all S. In part 3, within each group, the pendants alternate N, S, N, S, etc. The color patterning reinforces the alternation: in part 2, in groups 1 and 3, all pendants are B and in groups 2 and 4, they are DB; in part 3, in the first 2 groups, the colors alternate LC, DB-W, and in the next 2 groups, they alternate LC or B, DB-W. Thus, the knot arrangements and colors alternate together so that the N arrangement is associated with B or LC and the S arrangement with DB or DB-W.
6. Some of the values on the pendants in groups 1 and 3 of part 2 sum to each other. Two relationships are repeated for pendants 3 positions apart. Namely,

$$P_{3i} + P_{3,i+1} = P_{1i} \quad i=1,4$$

$$P_{3i} + P_{1i} = 2 P_{3,i-1} \quad i=4,7.$$