

## QUIPU AS103/N12

Museum identification: No. VA47078 (Museum für Völkerkunde, Berlin)

Main cord: color B

\$ 0.0 cm: 2 cords\* (1-2), then space of 1.5 cm.

1.5 cm: group of 5 pendant cords (3-7), then space of 6.0 cm.

9.0 cm: group of 12 pendant cords (8-19), then space of 3.5 cm.

15.0 cm: group of 12 pendant cords (20-31), then space of 1.5 cm.

18.5 cm: group of 12 pendant cords (32-43), then space of 39.5 cm.

60.5 cm: end ç

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
1	1s(7.5);1s(14.5);4L(27.0)	81.5ç	LB	1104	
2	3s(7.5);5s(14.5);6s(21.5);1E(28.0)	41.0ç	LB	3561	
3	1s(12.5);4s(20.0);4L(26.5)	56.5ç	LB	144	1:0.5
3s1	3s(13.0)	56.5ç	CB	300	
4	2s(19.0);7L(25.5)	54.0ç	B	27	
5	3s(13.5);2s(21.0);8L(28.0)	49.0ç	LB	328	1:0.5
5s1	2s(12.0);5L(26.5)	54.5ç	CB	205	
6	7s(20.0);5L(26.0)	44.5ç	B	75	1:0.5
6s1	3s(20.0);1E(26.0)	57.5ç	CB	31	
7	1s(6.0);3s(12.5);8s(21.0);8L(28.5)	40.0ç	LB	1388	1:0.5
7s1	2s(5.5);6s(20.0);7s(27.5)	40.5ç	CB	2670	
8	8s(9.0);2s(17.5);8L(27.5)	48.0ç	W	828	
9	8s(9.0);5s(18.5)	44.0ç	CB	850	
10	3s(8.0);2s(17.0);4L(27.0)	48.0ç	W	324	

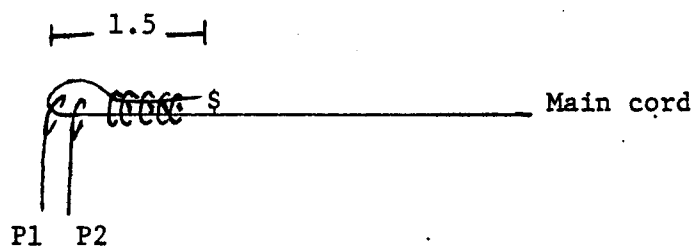
Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
11	3s(8.0);7s(18.0);3L(27.0)	39.5¢	CB	373	
12	2s(7.5);9s(18.0);2L(27.5)	45.0¢	W	292	
13	3s(8.0);9s(18.5);7L(27.0)	32.5¢	CB	397	
14	2s(8.0);9s(18.0);6L(27.0)	39.5¢	W	296	
15	2s(8.0);6s(17.5);1E(26.5)	48.0¢	CB	261	
16	1s(8.0);6s(17.5);3L(25.5)	49.0¢	W	163	
17	3s(8.0);8s(17.5);8L(25.5)	39.0¢	CB	388	
18	1s(8.0);6s(17.0);2L(25.0)	50.5¢	W	162	
19	3s(8.5);2s(17.0);4L(25.5)	43.0¢	CB	324	
20	2s(7.0);7s(17.0);1E(27.0)	59.5	LB	271	1:6.0
20s1	8s(9.5)	38.0¢	W	80	
21	6s(15.5);3L(24.5)	47.0¢	CB	63	1:6.0
21s1	1s(9.0);2L(18.0)	48.5¢	CB	12	
22	6s(14.0)	80.5¢	LB	60	1:5.5
22s1	3s(8.5);4L(19.0)	39.0¢	W	34	
23	2s(14.0);6L(24.0)	51.0¢	CB	26	1:5.5
23s1	2s(8.0);2L(17.5)	52.5	CB	22	
24	4s(14.5);2L(24.0)	64.5¢	LB	42	1:5.5
24s1	5s(9.0)	39.0¢	W	50	
25	2s(14.5)	55.0¢	CB	20	1:6.0
25s1	3s(8.5);3L(18.5)	45.0¢	CB	33	
26	5s(15.0);2L(24.5)	66.0¢	LB	52	1:6.0
26s1	4s(8.5);4L(17.5)	35.5¢	W	44	
27	1s(14.5);8L(24.0)	51.5¢	CB	18	1:5.5

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
27s1	3s(9.0);6L(18.0)	42.0¢	CB	36	
28	7s(15.5);3L(23.5)	65.5¢	LB	73	1:5.5
28s1	1s(8.5);2L(16.5)	38.5¢	W	12	
29	4s(14.5);7L(23.0)	34.0¢	CB	47	1:5.0
29s1	1s(9.0);1E(18.0)	38.0¢	CB	11	
30	5s(14.0);3L(23.5)	57.5¢	LB	53	1:5.0
30s1	1s(9.0)	44.0¢	W	10	
31	2s(14.0)	52.0¢	CB	20	1:5.0
31s1	1s(9.0);5L(18.0)	48.0¢	CB	15	
32	4s(4.5);8s(13.5);5L(23.5)	49.5¢	LB	485	1:3.5
32s1	5s(8.5);4L(18.5)	50.0	B	54	
33	6s(4.5);8s(13.5);4L(23.5)	30.0¢	CB	684	1:3.5
33s1	2s(8.5)	51.0¢	CB	20	
34	2s(4.5);2s(12.0);2L(22.0)	70.0¢	LB	222	1:4.0
34s1	3s(9.0);4L(18.5)	43.5¢	B	34	
35	2s(4.5);3s(12.0);7L(21.5)	41.5¢	CB	237	1:3.5
35s1	2s(8.5);3L(17.0)	46.0¢	CB	23	
36	2s(4.5);2s(12.0);2L(21.5)	64.0¢	LB	222	1:3.5
36s1	--	50.0¢	B	0	
37	3s(5.0);2s(12.5);4L(22.0)	44.5¢	CB	324	1:3.5
37s1	--	45.0¢	CB	0	
38	2s(4.5)	63.0¢	LB	200	1:3.5
38s1	5s(9.0)	47.5¢	B	50	
39	2s(4.5);1s(12.0)	52.5¢	CB	210	1:3.5

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
39s1	3s(9.0);7L(18.0)	45.5ç	CB	37	
40	7s(13.5);8L(23.0)	52.0ç	LB	78	1:3.5
40s1	1s(9.0)	56.0ç	B	10	
41	3s(4.5);9s(14.5);4L(23.0)	30.0ç	CB	394	1:3.0
41s1	8L(17.5)	45.0ç	CB	8	
42	1s(4.0);1s(11.5)	60.5ç	LB	110	1:3.0
42s1	9s(9.5);6L(19.5)	36.0ç	B	96	
43	--	57.0ç	CB	0	1:3.0
43s1	8s(11.0)	48.5ç	CB	80	

Observations

- 1\*. The end of the main cord has been formed into a loop by bending it back on itself and binding it in place. Two pendants are suspended from the end loop.



2. This is one of several quipus acquired by the Museum in 1907 with provenance Ica. For a list of these quipus, see AS100.
3. This quipu has also been discussed by Nordenskiöld(see Introduction).

4. By spacing, the quipu is separated into 2 end cords, 1 group of 5 pendants, and then 3 groups of 12 pendants each. With 1 exception, each of the pendants in groups 1, 3, and 4 have 1 subsidiary each.
5. Each group has an alternating color pattern: the pendants in group 1 alternate LB, B with all subsidiaries CB; group 2 pendants alternate W, CB; group 3 alternates LB(with a W subsidiary), CB(with a CB subsidiary); and group 4 alternates LB(with a B subsidiary), CB(with a CB subsidiary).
6. Thirteen percent of the values on the quipu are multiples of 18. In particular,  $1/3$  of the values in group 2 are multiples of 18, and  $18^2$  appears on the quipu 3 times.
7. The values of groups 1 and 2 are related to, but not exactly, the sums of values in groups 3 and 4.
  - a) The sum of the pendant values in group 2  $\approx$  sum of pendant and subsidiary values in groups 3 and 4. (The group 2 sum is low by 24 or .5%).
  - b) The sum of the LB colored pendants in group 1  $\approx$  sum of the LB pendants in groups 3 and 4. (The group 1 sum is low by 8 or .4%).
  - c) The sum of all pendant and subsidiary values in group 1  $\approx$  sum of all pendant and subsidiary values in groups 3 and 4. (The group 1 sum is high by 486, which is 1 more than the value of the first pendant in group 4.)
  - d) In 2 positions, values in group 2 are sums of values on the corresponding pendant and subsidiary in group 3 and the pendant in group 4. Namely,
 
$$P_{2i} = P_{3i} + P_{3i}^{s1} + P_{4i} \quad i=7,9.$$
8. The values on the 2 end cords are related to the sum of the values in groups 3 and 4. Again, 1 of the 2 is inexact.
  - a) The value of P1 = sum of pendant and subsidiary values in group 3.
  - b) The value of P2  $\approx$  sum of pendant and subsidiary values in group 4.  
(The P2 value is low by 17 or .5%)

9. By virtue of observations #8 and #7a, the end cords could be related to the values in group 2. That is,

a) The value of  $P1+P2 \approx$  sum of pendant values in group 2.

(The group 2 sum is low by 7 or .2%)