

QUIPU AS152

Museum identification: No. VA47076 (Museum für Völkerkunde, Berlin)

Main cord: color B-W

- \$ 9.0 cm: group of 2 pendant cords (1-2), then space of 1.0 cm.
10.5 cm: group of 2 pendant cords (3-4), then space of 1.5 cm.
12.5 cm: group of 2 pendant cords (5-6), then space of 1.0 cm.
14.0 cm: group of 2 pendant cords (7-8), then space of 3.0 cm.
17.5 cm: pendant cord (9), then space of 5.5 cm.
23.0 cm: group of 5 pendant cords (10-14), then space of 1.0 cm.
25.5 cm: group of 5 pendant cords (15-19), then space of 1.0 cm.
27.5 cm: group of 5 pendant cords (20-24), then space of 1.0 cm.
29.5 cm: group of 4 pendant cords (25-28), then space of 1.0 cm.
31.5 cm: group of 3 pendant cords (29-31), then space of 0.5 cm.
32.5 cm: group of 3 pendant cords (32-34), then space of 0.5 cm.
33.5 cm: group of 4 pendant cords (35-38), then space of 0.5 cm.
35.0 cm: group of 3 pendant cords (39-41), then space of 0.5 cm.
36.0 cm: group of 3 pendant cords (42-44), then space of 2.0 cm.
38.5 cm: group of 4 pendant cords (45-48), then space of 0.5 cm.
40.0 cm: group of 3 pendant cords (49-51), then space of 0.5 cm.
41.5 cm: group of 3 pendant cords (42-54), then space of 0.5 cm.
42.5 cm: group of 2 pendant cords (55-56), then space of 1.5 cm.
44.5 cm: group of 5 pendant cords (57-61), then space of 0.5 cm.
46.0 cm: group of 4 pendant cords (62-65), then space of 0.5 cm.
47.5 cm: group of 4 pendant cords (66-69), then space of 0.5 cm.
49.0 cm: group of 5 pendant cords (70-74), then space of 0.5 cm.
50.5 cm: group of 2 pendant cords (75-76), then space of 4.0 cm.
55.0 cm: group of 4 pendant cords (77-80), then space of 13.0 cm.
69.0 cm: end ¢

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
1	6s(11.0);5s(23.0);1E(32.5)	43.0¢	B	651	
2	6s(11.5);9s(24.5)	26.5b	MB	69?	
3	3s(10.0);7s(23.0);4L(32.5)	44.5¢	B	374	
4	4s(10.5);8L(34.0)	45.5¢	YG-W	408	
5	3s(10.5);1s(24.0);2L(33.5)	69.0¢	YG	312	
6	6s(11.0);8L(33.5)	50.0¢	YG-B	608	
7	3s(10.0);1s(23.0);3L(32.0)	57.5¢	B	313	
8	6s(11.0);6s(24.0);3L(31.5)	38.0	B-BB	663	
9	1s(16.0);7s(27.0)	46.5¢	HB	170	2:1.5-2.0
9s1	6s(26.0)	56.5¢	YG:MB	60	
9s2	5L(34.4)	48.5¢	HB	5	
10	6s(12.0);5s(21.5);2L(33.0)	54.5¢	B	652	1:0.5
10s1	6L(32.5)	46.0¢	BB:W	6	
11	9L(32.0)	35.5¢	YG:MB	9	1:0.5
11s1	3L(30.5)	42.0¢	B/MB/BB (28.5/34.5/ 42.0)	3	
12	5L(30.5)	41.0¢	YG/B(19.5/ 41.0)	5	
13	4L(32.5)	55.0¢	W	4	1:0.5
13s1	1E(32.5)	53.0¢	B:W	1	
14	7s(21.0);2L(31.5)	51.5¢	B:W	72	
15	5s(11.5);6L(31.0)	42.0¢	B	506	1:0.5
15s1	2L(31.0)	55.5¢	BB:W	2	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
16	1E(30.0)	53.5¢	YG:MB	1	
17	4L(31.5)	64.5¢	YG/B(35.0/ 64.5)	4	
18	1E(31.5)	59.0¢	W	1	
19	6s(11.5)	52.0¢	B:W	600	
20	5s(11.5);1s(21.0);7L(30.5)	52.0¢	B	517	1:0.5
20s1	2L(31.0)	47.5¢	BB:W	2	
21	2L(30.0)	46.5¢	YG:MB	2	
22	1s(20.0);2L(29.5)	39.0¢	YG/B(20.5/ 39.0)	12	
23	1s(30.0)	39.0¢	W	1	
24	9s(22.0)	44.0¢	B:W	90	
25	8s(12.5);5s(20.5);3L(32.0)	36.5¢	YG-B	853	
26	3s(14.0);1s(25.5);9L(37.0)	53.0¢	YG-B	319	5:0.0-1.5
26s1	2L(30.0)	51.0¢	YG	2	
26s2	1E(35.0)	55.5¢	B	1	
26s3	3L(34.0)	51.5¢	W	3	
26s4	3L(25.0)	29.5¢	B/BB/B(9.5/ 23.0/29.5)	3	
26s5	2L(32.0)	38.5¢	BB:W	2	
27	2s(13.5);6s(26.5);1E(36.5)	54.0¢	YG-B	261	3:0.0-1.0
27s1	1E(35.0)	48.0¢	YG	1	
27s2	1E(35.0)	48.5¢	W	1	
27s3	1E(34.0)	42.5¢	BB:W	1	
28	2s(13.0);7s(27.0);2L(36.5)	45.0¢	YG-B	272	3:0.0-1.0

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
28s1	2L(34.0)	42.5¢	YG	2	
28s2	1E(34.0)	42.5¢	W	1	
28s3	2L(33.5)	44.5	BB:W	2	
29	5L(32.0)	55.5¢	MB/B(24.4/ 55.5)	5	
30	4L(32.5)	55.0¢	MB/B(19.5/ 55.0)	4	
31	6L(32.5)	52.0¢	MB/B(22.0/ 52.0)	6	
32	7s(25.5);2L(33.5)	42.0¢	AB	72	
33	6s(25.5)	51.0¢	AB	60	
34	5s(26.0)	52.5¢	AB	50	
35	8s(12.5);2s(21.0);2L(31.0)	40.5¢	YG-B	822	
36	3s(10.5);3s(18.5);2L(29.5)	40.5¢	AB-B	332	3:0.0-1.0
36s1	5L(25.5);1E(32.5)	41.5¢	B	5+1	
36s2	—	15.5b	W	?	
36s3	1E(27.0)	35.0¢	B	1	
37	2s(9.5);4s(18.0);5L(28.0)	33.5¢	AB-B	245	
38	2s(9.5);4s(18.0);5L(28.5)	34.5¢	AB-B	245	
39	—	32.5¢	W/B(12.5/ 32.5)	0	
40	—	36.0¢	W/B(14.5/ 36.0)	0	
41	6L(25.0)	28.5¢	W/B(16.0/ 28.5)	6	
42	—	44.5¢	AB	0	
43	—	45.0¢	AB	0	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
44	4s(18.0)	42.0¢	AB	40	
45	2s(11.5);1s(19.5)	53.0¢	B-BB	210	1:0.5
45s1	8s(19.5);8L(28.0)	53.0¢	B-BB	88	
46	1s(19.5)	50.0¢	B/HB(18.5/ 50.0)	10	1:15.0
46s1	3L(9.0)	25.5¢	W/BB/B(9.5/ 18.5/25.5)	3	
47	5L(25.0)	48.5	W	5	
48	1s(19.5)	40.0¢	YG:MB	10	
49	1s(11.0);9s(19.0);7L(27.0)	48.5¢	B-BB	197	1:0.5
49s1	7s(18.5);8L(26.0)	65.5¢	B-BB	78	
50	5L(26.0)	32.0¢	B/HB(?/ 32.0)	5	
51	2s(17.0);9L(27.0)	34.5¢	YG:MB	29	
52	1s(10.5);7s(21.5);8L(31.5)	67.0¢	B-BB	178	1:0.5
52s1	1s(9.5);1E(28.0)	65.5¢	B-BB	101	
53	3L(30.0)	36.5¢	B/HB	3	
54	1s(20.0);1E(32.0)	47.0¢	YG:MB	11	1:0.5
54s1	4L(31.0)	44.5¢	B/YG(32.0/ 44.5)	4	
55	1s(11.0);8s(20.5);8L(29.0)	33.5¢	B-BB	188	1:0.5
55s1	1s(9.5);2s(18.0);2L(26.5)	42.0¢	B-BB	122	
56	5L(28.5)	44.5¢	B	5	1:0.5
56s1	4L(26.5)	33.0¢	HB	4	
57	4s(8.5)	30.5b	YG-B	400(?)	
58	9s(18.5);6L(29.5)	41.0¢	AB-B	96	3:0.0-1.0

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
58s1	1E(22.0)	23.5¢	W/BB/B (10.0/ 19.0/23.5)	1	
58s2	1s(16.5)	47.0¢	B	10	
58s3	1E(27.5)	36.5¢	W	1	
59	1s(9.0);1s(15.5);6L(26.5)	41.0¢	AB-B	116	1:0.5
59s1	1s(16.5)	45.0¢	B	10	
60	8s(18.5);6L(30.0)	38.5¢	AB-B	86	1:0.5
60s1	1s(17.5)	44.5¢	B	10	
61	1s(9.5);6L(29.5)	41.5¢	AB-B	106	
62	8L(27.5)	31.0¢	MB	8	
63	5L(27.0)	31.0¢	MB	5	
64	3L(27.0)	40.5¢	MB	3	
65	5L(26.5)	27.5b	MB	5	
66	--	39.5¢	AB	0	
67	--	41.5¢	AB	0	
68	--	38.0¢	AB	0	
69	--	39.0¢	AB	0	
70	3s(10.5);6s(19.5);9L(28.5)	36.5¢	YG-B	369	
71	1s(5.5);1s(14.0);4L(24.0)	36.5¢	YG-W	114	2:0.0-0.5
71s1	4L(24.0)	44.5¢	W	4	
71s2	2L(25.5)	38.0¢	W/BB/B (17.0/28.5/ 38.0)	2	
72	8s(12.5);1E(23.5)	31.0¢	YG-W	81	2:0.0-0.5

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
72s1	7L(25.0)	37.0¢	YG:W	7	
72s2	1s(16.0);2L(27.0)	46.5¢	B	12	
73	9s(13.0);2L(23.5)	32.0¢	YG-W	92	1:0.5
73s1	4L(19.5)	22.5¢	W/BB/B(11.5/ 20.0/22.5)	4	
74	8s(13.0);2L(23.5)	34.0¢	YG-W	82	
75	2L(28.0)	44.5¢	BB:W/B(24.0/ 44.5)	2	
76	--	43.5¢	BB:W/B(20.5/ 43.5)	0	
77	--	18.5b	W	?	
78	--	18.0b	W	?	
79	2s(23.0);6L(37.0)	48.5	AB	26	
80	2s(22.5);8L(32.0)	40.0¢	AB	28	

Observations

1. This is one of several quipus acquired by the Museum in 1907 with provenance Ica.
For a list of them, see AS100.
2. By spacing and color patterning, the quipu is in 5 parts.
 - a) Part 1 is 4 groups of 2 pendants each and then 1 single pendant.
 - b) Part 2 is 3 groups of 5 pendants each. Each group has the same color pattern: B, YG:MP, YG/B, W, B:W. Subsidiaries on the first position are BB:W, and those on the second and fourth positions are B/MB/BB and B:W respectively.

c) Part 3 is 3 groups of 4, 3, and 3 pendants and then another 3 groups of 4, 3, and 3 pendants. In the first and fourth groups, the first pendants are the same color. Excluding these 2 cords, each of the 6 groups is unified by being one color. The values on the first pendants in the first and fourth groups are the sums of the rest of the values in their respective groups. Calling these 2 special pendants P_{310} and P_{340} (zeroth pendant in first and fourth groups of part 3),

$$P_{310} = \sum_{j=1}^3 P_{3ij} \quad i=1,4.$$

d) Values in part 2 are the sums of values in part 3. The sums relate values in groups 1-3 of part 3 with values in corresponding positions in groups 4-6. In part 2, the sums appear in the group that corresponds to the summed positions. (For example, the sum of values in position 1 appears in group 1 and the sum of values in position 3 appears in group 3.) Specifically,

$$P_{2,i,2j-1} = P_{3,j,i} + P_{3,j+3,i} \quad \begin{matrix} \text{for } j=1,2,3 \\ \text{and } i=1,2,3. \end{matrix}$$

e) Part 4 is 4 groups of 4,3,3,2 pendants respectively. The 3 or 4 pendant groups share a basic 4-color pattern: B-BB, B/HB, W, YG:MB. (Where there are only 3 pendants, it is the third position that is non-existent.) Subsidiaries on position 1 are B-BB, and those on positions 2 and 4 are W/BB/B and B/YG respectively. The last 2-pendant group has the same first position color as the preceding groups.

f) Part 5 is 3 groups of 5, 4, and 4 pendants and then another 3 groups of 5, 2, and 4 pendants. As in part 3, the first pendants in the first and fourth groups are special pendants: they are the same color as each other; they are the same color as the 2 special pendants in part 3; they differ in color from the groups they are in; and their values are the sum of the other values in

their respective groups. Thus,

$$P_{5i0} = \sum_{j=1}^4 P_{5ij} \quad i=1,4.$$

g) The relationship of part 4 to part 5 is similar to the relationship of part 2 to part 3.

$$P_{4,i,j} = P_{5,j,i} + P_{5,j+3,i} \quad \text{for } j=1,2 \text{ and } i=1,2,3,4.$$