

QUIPU AS140/N9

Museum identification: VA16636 (Museum Für Völkerkunde, Berlin)

Main cord: attached to wooden bar*

- group of 9 pendant cords (1-9),
- group of 9 pendant cords (10-18),
- group of 9 pendant cords (19-27),
- group of 9 pendant cords (28-36),
- group of 9 pendant cords (37-45),
- group of 9 pendant cords (46-54),
- group of 9 pendant cords (55-63),
- group of 9 pendant cords (64-72),
- group of 9 pendant cords (73-81),
- group of 9 pendant cords (82-90),
- group of 9 pendant cords (91-99),
- group of 9 pendant cords (100-108),
- group of 9 pendant cords (109-117),
- group of 9 pendant cords (118-126),
- group of 9 pendant cords (127-135),
- group of 9 pendant cords (136-144),
- group of 9 pendant cords (145-153),
- group of 9 pendant cords (154-162),
- group of 9 pendant cords (163-171),
- group of 9 pendant cords (172-180).

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
1	3L(28.0)	59.5b	B	3	
2	1s(17.0); 3L(28.0)	60.0b	B	13	
3	8L(28.5)	60.5b	B	8	
4	2s(17.0); 2L(28.5)	60.0φ	B	22	
5	1s(16.0); 2L(27.0)	59.0b	B	12	
6	1s(17.0); 4L(28.0)	56.5φ	B:BB/B (4.0/56.5)	14	
7	1s(17.0)	59.5φ	B:BB/B (4.0/59.5)	10	
8	4L(28.5)	60.5b	B	4	
9	9s(17.5); 6L(27.5)	37.0b	B	96	1:10.0
9s1	--	25.5b	BB	0	
10	1s(16.5); 5L(26.5)	49.0φ	B	15	
11	1s(17.0); 5L(27.5)	51.0φ	B	15	
12	2s(16.5)	57.0φ	B	20	
13	1s(16.5)	55.0φ	B	10	
14	2s(17.0); 2L(26.5)	58.0φ	B	22	
15	7L(27.5)	59.0φ	B:BB/B (4.0/59.0)	7	
16	1s(16.0); 7L(26.5)	57.0φ	B:BB/B (4.0/57.0)	17	
17	4L(27.5)	54.5φ	B	4	
18	9s(18.5); 1E(28.0)	51.5φ	B	91	1:11.0
18s1	--	15.0b	BB	?	
19	1s(16.0); 6L(27.0)	47.5	B	16	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
20	1s(15.0); 3L(26.0)	55.5φ	B	13	
21	2s(15.0)	50.5φ	B	20	
22	1s(15.0); 9L(25.5)	44.0φ	B	19	
23	2s(15.5); 9L(26.5)	38.0φ	B	29	
24	1s(15.0); 8L(26.5)	56.0φ	B:BB/B (4.0/56.0)	18	
25	3s(16.0)	58.0b	B:BB/B (4.0/58.0)	30	
26	3L(24.0)	51.5φ	B	3	
27	9s(17.0); 5L(26.5)	43.0φ	B	95	1:10.5
27s1	2L(14.0)	27.5φ	BB	2	
28	2s(15.0)	52.5φ	B	20	
29	2s(15.0); 5L(24.5)	42.0φ	B	25	
30	2s(15.0)	56.0b	B	20	
31	1s(15.0); 5L(25.5)	46.0φ	B	15	
32	1s(15.0); 1E(25.0)	50.5φ	B	11	
33	1s(14.5); 5L(24.0)	53.5φ	B:BB/B (4.0/53.5)	15	
34	1s(14.0); 1E(23.5)	57.5b	B:BB/B (4.0/57.5)	11	
35	2L(24.0)	49.0φ	B	2	
36	9s(15.5)	54.0φ	B	90	1:9.5
36s1	--	5.0b	BB	?	
37	3s(14.0); 4L(24.0)	42.5φ	B	34	
38	3s(14.5); 2L(24.5)	51.5φ	B	32	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
39	2s(14.0); 3L(23.5)	45.0¢	B	23	
40	2s(14.5); 3L(24.5)	51.0¢	B	23	
41	1s(13.5); 2L(23.0)	51.5¢	B	12	
42	2s(14.5); 5L(24.5)	59.0¢	B:BB/B (4.0/59.0)	25	
43	1s(14.0); 8L(24.5)	53.0¢	B:BB/B (4.0/53.0)	18	
44	7L(24.5)	50.5¢	B	7	
45	9s(15.5); 8L(25.0)	49.5¢	B	98	1:9.0
45s1	1E(13.5)	25.0¢	BB	1	
46	3s(14.0); 2L(24.0)	45.5¢	B	32	
47	3s(14.5); 6L(24.5)	42.0¢	B	36	
48	2s(14.0); 6L(24.5)	44.5¢	B	26	
49	2s(14.0); 6L(24.0)	42.5¢	B	26	
50	1s(13.5)	55.0¢	B	10	
51	1s(13.5); 5L(23.5)	53.5¢	B:BB/B (4.0/53.5)	15	
52	2s(13.5); 3L(23.5)	59.5¢	B:BB/B (4.5/59.5)	23	
53	9L(23.0)	45.5¢	B	9	
54	7s(13.0); 9L(22.0)	39.5¢	B	79	1:9.0
54s1	--	30.0¢	BB	0	
55	9L(24.0)	48.5¢	B	9	
56	1s(13.5)	61.0¢	B	10	
57	1s(13.0); 6L(22.0)	47.0¢	B	16	
58	1s(13.0); 8L(24.0)	50.5¢	B	18	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
59	1s(13.0); 1E(23.0)	56.0φ	B	11	
60	6L(22.0)	47.0φ	B:BB	6	
61	1s(14.0); 4L(23.0)	45.5φ	B:BB	14	
62	2L(22.5)	59.0φ	B	2	
63	9s(15.0); 3L(22.5)	37.5φ	B	93	1:9.0
63s1	1E(13.0)	26.5φ	B	1	
64	2s(16.5); 2L(28.0)	54.0φ	B	22	
65	1s(16.0); 8L(28.0)	51.5φ	B	18	
66	1s(16.0); 4L(27.5)	48.5φ	B	14	
67	3s(16.0); 6L(27.5)	47.0φ	B	36	
68	1s(15.0)	59.5φ	B	10	
69	5L(26.0)	51.5φ	B:BB	5	
70	1s(15.0); 7L(26.0)	44.5φ	B:BB	17	
71	2L(24.5)	52.0φ	B	2	
72	9s(15.5); 3L(25.0)	40.5φ	B	93	1:9.0
72s1	1E(15.0)	26.0φ	B	1	
73	3s(14.0)	51.5φ	B	30	
74	4s(15.0); 1E(25.0)	44.5φ	B	41	
75	1s(14.5); 5L(24.5)	52.5φ	B	15	
76	4s(14.5); 5L(23.5)	45.5φ	B	45	
77	1s(14.0); 6L(24.5)	50.5φ	B	16	
78	1s(14.0); 8L(23.5)	45.5φ	B:BB	18	
79	3s(13.5)	52.0φ	B:BB	30	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
80	1s(13.5); 1E(24.0)	57.5φ	B	11	
81	9s(14.5); 8L(24.0)	55.0φ	B	98	1:9.5
81s1	1E(13.0)	28.0φ	B	1	
82	3s(13.0); 1E(22.5)	55.0φ	B	31	
83	2s(12.0); 3L(22.5)	59.0φ	B	23	
84	2s(12.0); 8L(22.5)	55.0φ	B	28	
85	4s(12.5); 3L(22.0)	56.5φ	B	43	
86	3s(12.5); 5L(22.0)	58.0φ	B	35	
87	3L(21.5)	57.0φ	B:BB	3	
88	1s(11.5); 8L(21.5)	49.0φ	B:BB	18	
89	2s(12.0); 2L(22.0)	71.0φ	B	22	
90	9s(12.5); 6L(21.5)	42.0φ	B	96	1:9.5
90s1	1E(12.0)	26.5φ	B	1	
91	1s(4.0); 1s(11.0); 4L(21.5)	61.0φ	B	114	
92	1s(12.0)	57.5φ	B	10	
93	2s(12.0); 3L(23.0)	49.5φ	B:G	23	
94	2s(11.0); 4L(21.5)	55.5φ	B:G	24	
95	3s(12.0); 1E(22.0)	61.0φ	B	31	
96	3s(12.0)	49.5φ	B	30	
97	2s(12.0)	51.5φ	B	20	
98	6s(12.5); 9L(22.0)	37.5φ	B	69	
99	3s(12.5); 5L(22.0)	50.0φ	B	35	
100	6s(13.5); 3L(22.0)	50.5φ	B	63	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
101	6L(23.0)	55.5¢	B	6	
102	2s(12.5); 2L(21.5)	52.5¢	B:G	22	
103	1s(12.0); 6L(21.5)	46.5¢	B:G	16	
104	1s(12.5); 7L(22.5)	47.5¢	B	17	
105	1s(12.5); 6L(22.0)	52.0¢	B	16	
106	1s(13.0); 1E(23.0)	62.5¢	B	11	
107	6s(14.0); 1E(23.5)	54.0¢	B	61	
108	2s(13.5); 5L(23.5)	53.5¢	B	25	
109	5s(14.0); 3L(23.0)	58.0¢	B	53	
110	6L(24.0)	52.5¢	B	6	
111	1s(12.5); 1E(22.5)	35.0¢	B:G	11	
112	2s(13.0)	53.5¢	B:G	20	
113	1s(13.5); 6L(23.5)	52.0¢	B	16	
114	2s(13.5); 1E(23.5)	50.5¢	B	21	
115	1s(13.5); 2L(24.5)	61.0¢	B	12	
116	3s(13.5); 2L(23.5)	50.0¢	B	32	
117	1s(14.0); 5L(25.5)	56.5¢	B	15	
118	3s(14.0); 4L(24.5)	61.0¢	B	34	
119	4L(23.5)	51.5¢	B	4	
120	6L(24.0)	47.0¢	B:G	6	
121	1s(14.0); 2L(24.5)	48.5¢	B:G	12	
122	6L(24.0)	49.5¢	B	6	
123	1s(13.5); 8L(25.0)	56.0¢	B	18	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
124	1s(13.5)	57.5¢	B	10	
125	6L(24.0)	50.5¢	B	6	
126	5L(24.5)	53.5¢	B	5	
127	5s(14.5); 3L(24.5)	47.0¢	B	53	
128	8L(24.0)	44.5¢	B	8	
129	1s(14.0); 1E(25.5)	53.5¢	B:BB	11	
130	1s(13.5); 9L(24.5)	46.0¢	B:BB	19	
131	2s(13.5); 5L(25.0)	48.5¢	B	25	
132	2s(14.5); 4L(25.0)	48.0¢	B	24	
133	1s(13.0); 2L(24.5)	60.0¢	B	12	
134	2s(13.5); 1E(24.5)	59.5¢	B	21	
135	2s(14.0); 1E(25.0)	50.0¢	B	21	
136	7s(14.5); 5L(24.5)	45.0¢	B	75	
137	8L(24.0)	50.5¢	B	8	
138	1s(13.5)	45.2¢	B:BB	10	
139	2s(14.0); 2L(24.0)	50.5¢	B:BB	22	
140	1s(14.0); 8L(24.5)	50.5¢	B	18	
141	1s(13.5); 8L(23.0)	39.0¢	B	18	
142	3L(23.0)	53.0¢	B	3	
143	2s(13.5); 7L(24.0)	50.5¢	B	27	
144	1s(13.5); 1E(23.0)	50.5¢	B	11	
145	5s(14.5); 6L(24.0)	42.0¢	B	56	
146	7L(24.0)	50.5¢	B	7	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
147	1s(15.0); 1E(24.5)	54.0¢	B:BB	11	
148	1s(15.0); 1E(23.0)	51.5¢	B:BB	11	
149	2s(14.5)	54.5¢	B	20	
150	1s(15.0); 8L(25.0)	54.5¢	B	18	
151	1s(14.0); 1E(23.0)	57.5¢	B	11	
152	1s(14.0); 2L(23.5)	54.0¢	B	12	
153	1s(14.5); 2L(24.5)	51.0¢	B	12	
154	7s(16.0)	52.5¢	B	70	
155	8L(25.0)	51.0¢	B	8	
156	1s(15.0); 7L(25.5)	44.5¢	B:BB	17	
157	1s(15.0); 8L(25.0)	45.0¢	B:BB	18	
158	2s(16.0); 3L(26.5)	56.0¢	B	23	
159	2s(15.0)	56.5¢	B	20	
160	1s(15.0); 3L(26.0)	58.5¢	B	13	
161	3s(15.0); 7L(26.0)	51.0¢	B	37	
162	1s(14.5); 4L(25.0)	51.5¢	B	14	
163	4s(16.0); 5L(26.0)	52.5¢	B	45	
164	4L(26.5)	61.0¢	B	4	
165	1s(15.0); 3L(25.5)	49.0¢	B:BB	13	
166	5L(26.5)	46.5¢	B:BB	5	
167	1s(16.0); 1E(27.0)	61.0¢	B	11	
168	2s(16.0); 1E(27.5)	62.0¢	B	21	
169	4L(27.0)	59.5¢	B	4	

Cord	Knots (no., type, position)	Length	Color	Value	Subsidiaries (no., position)
170	1s(16.0); 6L(26.5)	37.0b	B	16	
171	4L(26.0)	53.0φ	B	4	
172	2s(16.0); 8L(27.0)	51.0φ	B	28	
173	4L(26.5)	52.0φ	B	4	
174	7L(27.0)	47.5φ	B:BB	7	
175	1s(15.0); 4L(25.5)	50.0φ	B:BB	14	
176	1s(16.0); 3L(27.0)	54.5φ	B	13	
177	1s(16.0); 5L(27.5)	52.0φ	B	15	
178	9L(27.0)	50.0φ	B	9	
179	1s(16.0); 1E(27.0)	56.0φ	B	11	
180	8L(28.0)	39.5b	B	8	

Observations

- 1.* The quipu is attached to a carved wooden bar. Figure 1 shows the way in which the quipu is attached to the bar and Figure 2 shows details of the carving.
2. AS136 and AS140 were acquired by the Museum in 1904. The provenance is given as Nasca. For a comparison of them, see AS136.
3. AS140 is discussed by Nordenskiöld(see Introduction). A photograph of it appears in Schmidt, Max, 1929, *Kunst und Kultur von Peru*, Impropyläen-Verlagzu, Berlin.
4. The way in which the bar is threaded separates the quipu into 2 parts each containing 10 groups of 9 pendants each.

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Note: The pendant order on the listing proceeds from one

end of the bar to the other, goes around the end, and continues on the other side [see diagram (a)]. However, similar color and number patterns are found in both parts if the pendants are read instead from one end of the bar to the other, and then beginning at the original end on the other side of the bar [see diagram (b)]. We will, therefore, refer to the pendants and groups on



side 2 as if following diagram (b). Part 1 is pendants $1 \longrightarrow 90$ and references to the j^{th} pendant in the i^{th} group correspond to pendant $9(i-1)+j$. Part 2 is pendants $180 \longrightarrow 91$ and references to the j^{th} pendant in the i^{th} group correspond to pendant $190-9i-j$.

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By color, each part is separated into 2 subparts of 6 groups and 4 groups respectively. Each group has the same color pattern: 5 B, 2 mixed, 2 B. In the first 6 groups in part 1, the 2 mixed cords are B:BB/B, and in the last 4 groups they are B:BB. In the first 6 groups in part 2, the 2 mixed cords are B:BB, and in the last 4 groups they are B:G.

5. Subsidiaries are only on the last pendant in each group in part 1. All are BB.
6. In all groups in both parts:
 - a) The last pendant in each group has the maximum value.

b) With the exception of group 10 in part 1, the value on pendant 7 is always great than the value on pendant 8.

7. Within part 1:

a) For the 6 groups of the first subpart, the sum of the values in the 5th position equals the sum of the values in the 4th position. That is,

$$\sum_{i=1}^6 P_{i5} = \sum_{i=1}^6 P_{i4}$$

b) For the 4 groups of the second subpart, the sum of the values in the first position equals the sum of the values in the second position.

$$\sum_{i=7}^{10} P_{i1} = \sum_{i=7}^{10} P_{i2}$$

c) Excluding the last pendant in each group, the sum of the values in the first group equals the sum of the values in the corresponding group in the second subpart (group 7).

$$\sum_{j=1}^8 P_{1j} = \sum_{j=1}^8 P_{7j}$$