

QUIPU AS181

Museum identification: Unnumbered (Museum Für Völkerkunde, Berlin)

Main cord: color B:W

- \$ 1.5 cm: group of 2 pendant cords (1-2), then space of 3.5 cm.
- 5.5 cm: group of 2 pendant cords (3-4); then space of 0.5 cm.
- 6.5 cm: group of 2 pendant cords (5-6), then space of 0.5 cm.
- 7.5 cm: group of 2 pendant cords (7-8), then space of 0.5 cm.
- 8.5 cm: group of 2 pendant cords (9-10), then space of 0.5 cm.
- 9.5 cm: group of 2 pendant cords (11-12), then space of 1.5 cm.
- 11.5 cm: group of 3 pendant cords (13-15), then space of 0.5 cm.
- 12.5 cm: group of 2 pendant cords (16-17), then space of 0.5 cm.
- 13.5 cm: group of 2 pendant cords (18-19), then space of 0.5 cm.
- 14.5 cm: group of 2 pendant cords (20-21), then space of 0.5 cm.
- 15.5 cm: group of 2 pendant cords (22-23), then space of 2.0 cm.
- 18.0 cm: group of 2 pendant cords (24-25), then space of 0.5 cm.
- 19.0 cm: group of 2 pendant cords (26-27), then space of 0.5 cm.
- 20.0 cm: group of 2 pendant cords (28-29), then space of 0.5 cm.
- 21.0 cm: group of 2 pendant cords (30-31), then space of 0.5 cm.
- 22.0 cm: group of 2 pendant cords (32-33), then space of 57.5 cm.
- 80.0 cm: pendant cord (34), then space of 0.5 cm.
- 80.5 cm: group of 2 pendant cords (35-36), then space of 0.5 cm.
- 81.5 cm: group of 2 pendant cords (37-38), then space of 0.5 cm.
- 82.5 cm: group of 3 pendant cords (39-41), then space of 33.0 cm.
- 116.0 cm: end ç

| Cord | Knots (no., type, position) | Length | Color | Value | Subsidiaries (no., position) |
|-----------|--------------------------------|--------|-------|-------|---------------------------------|
| 1 | 9s(7.0); 8s(15.5); 9L(18.5) | 27.5 | DB:B | 989 | |
| 2 | 5s(9.0); 6s(19.0); 4L(28.0) | 56.0¢ | YB | 564 | 3:1.0-1.5 |
| 2s1 | 3s(10.0) | 31.5¢ | HB:W | 30 | |
| 2s2 | 3s(9.5); 8L(18.0) | 26.0¢ | B | 38 | 1:0.5 |
| 2s2s1 | 2s(10.0); 1EE(17.5) | 29.0¢ | DB:W | 21 | |
| 2s3 | 8L(19.0) | 35.5¢ | W | 8 | |
| 3 | 5s(7.0); 3s(14.0); 3L(17.0) | 21.5¢ | W | 533 | 2:0.5-1.0 |
| 3s1 | 9L(11.0) | 24.5¢ | DB:MB | 9 | 1:0.5 |
| 3s1s1 | 1s(10.5) | 23.5b | KB | 10(?) | 4:0.0-1.5, 1:7.5 |
| 3s1s1s1 | 2L(9.0) | 25.5¢ | W | 2 | 1:0.5 |
| 3s1s1s1s1 | 2L(9.0) | 27.0¢ | KB:W | 2 | |
| 3s1s1s2 | 1s(3.0) | 28.0¢ | YB | 10(?) | |
| 3s1s1s3 | 1EE(9.0) | 40.5¢ | MB | 1 | |
| 3s1s1s4 | 1EE(8.0) | 28.0 | G | 1 | |
| 3s1s1s5 | 1EE(7.0) | 26.5¢ | DB:B | 1 | |
| 3s2 | 6L(11.5) | 31.5¢ | W | 6 | |
| 4 | 5s(5.5); 3s(12.5); 2L(16.5) | 25.0¢ | B | 532 | 1:0.5 |
| 4s1 | 3s(5.5); 4s(10.0); 7L(14.5) | 21.0¢ | DB:B | 347 | |
| 5 | 5s(6.0); 1s(11.0); 2L(16.0) | 26.0¢ | W | 512 | 2:0.5-1.0 |

| Cord | Knots (no., type, position) | Length | Color | Value | Subsidiaries (no., position) |
|-----------|--------------------------------|--------|-------|-------|---------------------------------|
| 5s1 | 6L(11.0) | 25.0¢ | DB:MB | 6 | |
| 5s1s1 | 4L(11.5) | 26.0¢ | KB | 4 | 5:0.0-2.0 |
| 5s1s1s1 | 1EE(9.5) | 24.0¢ | W | 1 | 1:0.5 |
| 5s1s1s1s1 | 1EE(9.5) | 26.5¢ | KB:W | 1 | |
| 5s1s1s2 | -- | 26.5¢ | YB | 0 | |
| 5s1s1s3 | 2L(9.5) | 31.0¢ | MB | 2 | |
| 5s1s1s4 | 1EE(9.0) | 28.0¢ | G | 1 | |
| 5s1s1s5 | 2L(9.0) | 25.5¢ | DB:B | 2 | |
| 5s2 | 5L(12.0) | 38.5¢ | W | 5 | |
| 6 | 5s(7.0); 1s(11.5); 3L(16.5) | 32.0¢ | B | 513 | 1:0.5 |
| 6s1 | 7s(7.0); 8L(13.0) | ? | DB:B | 78 | |
| 7 | 3s(7.5); 4L(16.5) | 27.5¢ | W | 304 | 4:0.5-1.5 |
| 7s1 | 6L(12.5) | 26.5¢ | DB:MB | 6 | 1:0.5 |
| 7s1s1 | 2L(10.5); 3L(14.0) | 24.5¢ | KB | 2+3 | 4:0.0-2.0 |
| 7s1s1s1 | 2L(9.0) | 26.0¢ | W | 2 | 1:0.5 |
| 7s1s1s1s1 | 1EE(9.5) | 27.0¢ | KB:W | 1 | |
| 7s1s1s2 | -- | 25.0¢ | YB | 0 | |
| 7s1s1s3 | 2L(7.5) | 33.0¢ | MB | 2 | |
| 7s1s1s4 | 1EE(7.0) | 25.0¢ | DB:B | 1 | |
| 7s2 | 5L(13.0); 2L(18.0) | 30.5¢ | W | 5+2 | |
| 7s3 | 4L(11.5) | 31.0¢ | DB:W | 4 | |
| 7s4 | 7L(10.0) | 19.5¢ | DB:MB | 7 | 1:0.5 |
| 7s4s1 | 2L(8.5) | 32.5¢ | G | 2 | |

| Cord | Knots (no., type, position) | Length | Color | Value | Subsidiaries (no., position) |
|------------|--------------------------------|--------|-------|-------|---------------------------------|
| 8 | 3s(7.5); 5L(16.0) | 20.5¢ | B | 305 | 1:0.5 |
| 8s1 | 4s(3.5); 3s(7.0); 7L(12.0) | 22.0¢ | DB:B | 437 | |
| 9 | 4s(7.0) | 31.5¢ | W | 400 | 2:0.5-1.0 |
| 9s1 | 5L(11.5) | 30.0¢ | DB:MB | 5 | 1:0.5 |
| 9s1s1 | 1s(6.0) | 9.0b | KB | 10(?) | 4:0.5-1.5, 1:3.5 |
| 9s1s1s1 | 1EE(10.0) | 27.5¢ | W | 1 | 1:0.5 |
| 9s1s1s1s1 | -- | 30.0¢ | KB:W | 0 | |
| 9s1s1s2 | 4L(9.5) | 20.0¢ | YB | 4 | |
| 9s1s1s3 | 2L(9.0) | 38.5¢ | MB | 2 | |
| 9s1s1s4 | 1EE(8.0) | 32.0¢ | DB:B | 0 | |
| 9s1s1s5 | -- | 27.5¢ | DB:B | 0 | |
| 9s2 | 4L(12.5); 2L(15.5) | 37.5¢ | W | 4+2 | |
| 10 | 3s(8.0); 2L(16.5) | 31.0¢ | B | 302 | 1:0.5 |
| 10s1 | 6s(7.5); 7L(13.0) | 21.5¢ | DB:B | 67 | |
| 11 | 4s(8.0); 7L(13.0) | 23.5 | W | 47 | 2:0.5-1.0 |
| 11s1 | 6L(11.5) | 27.0¢ | DB:MB | 6 | 1:0.5 |
| 11s1s1 | 3L(11.0) | 25.5¢ | KB | 3 | 5:0.5-2.0 |
| 11s1s1s1 | 2L(9.5) | 25.0¢ | W | 2 | 1:0.5 |
| 11s1s1s1s1 | -- | 31.5¢ | KB:W | 0 | |
| 11s1s1s2 | -- | 30.5¢ | W | 0 | |
| 11s1s1s3 | 1E(9.0) | 29.0¢ | MB | 1 | |
| 11s1s1s4 | -- | 31.5¢ | G | 0 | |

| Cord | Knots (no., type, position) | Length | Color | Value | Subsidiaries (no., position) |
|----------|--------------------------------|--------|-------|-------|---------------------------------|
| 11s1s1s5 | -- | 31.0¢ | DB:B | 0 | |
| 11s2 | ? | ? | W | ? | |
| 12 | -- | 36.5¢ | B | 0 | 1:0.5 |
| 12s1 | 9s(5.5); 8L(10.0) | 22.0¢ | DB:B | 98 | |
| 13 | 6s(7.5); 2s(15.0); 7L(25.5) | 73.0 | W | 627 | 3:16.5-17.0 |
| 13s1 | -- | 32.5¢ | DB:MB | 0 | |
| 13s2 | 2s(9.0); 9L(18.0) | 32.5¢ | DB | 29 | |
| 13s3 | 2s(8.5); 2L(17.0) | 37.5¢ | DB:W | 22 | |
| 14 | 1s(5.5); 2L(14.0) | 36.0¢ | W | 12 | 3:0.5-1.5 |
| 14s1 | 5L(11.5) | 24.0¢ | KB:W | 5 | |
| 14s2 | 1s(5.0) | 26.5¢ | W | 10 | |
| 14s3 | 1EE(12.0) | 22.0¢ | DB:B | 1 | 1:0.5 |
| 14s3s1 | 5L(12.0) | 29.0¢ | HB:W | 5 | |
| 15 | 1s(5.5); 3L(13.5) | 31.0¢ | B | 13 | 1:0.5 |
| 15s1 | -- | 37.5¢ | DB:B | 0 | |
| 16 | 3s(12.5); 5L(16.5) | 25.0¢ | W | 35 | 4:0.5-1.5 |
| 16s1 | 1EE(11.5) | 22.5¢ | MB | 1 | |
| 16s2 | 6L(14.0) | 38.0¢ | B:W | 6 | |
| 16s3 | -- | 24.5¢ | DB:MB | 0 | 2:0.5,7.0 |
| 16s3s1 | 5L(11.0) | 31.0¢ | HB:W | 5 | |
| 16s3s2 | 5L(5.5) | 16.0¢ | KB-W | 5 | |
| 16s4 | 1s(10.5) | 38.5¢ | W | 10 | |

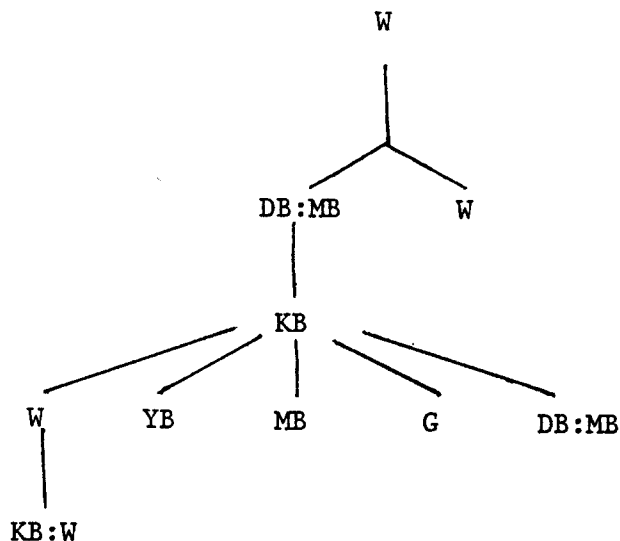
| Cord | Knots (no., type, position) | Length | Color | Value | Subsidiaries (no., position) |
|--------|--------------------------------|--------|-------|-------|---------------------------------|
| 17 | 1s(5.5); 3L(16.5) | 32.0¢ | B | 13 | 1:0.5 |
| 17s1 | 3s(5.0); 5s(7.5); 6L(12.5) | 20.5¢ | KB:W | 356 | |
| 18 | 9s(13.0); 2L(17.0) | 24.5¢ | W | 92 | 3:0.5-1.5 |
| 18s1 | 1EE(12.5) | 25.5¢ | DB:MB | 1 | 1:0.5 |
| 18s1s1 | 6L(12.5) | 27.0¢ | HB:W | 6 | |
| 18s2 | 7L(11.0) | 30.0¢ | HB:W | 7 | |
| 18s3 | 1s(8.0) | 46.5¢ | W | 10 | |
| 19 | 1s(6.5); 7L(16.5) | 33.0¢ | B | 17 | 1:0.5 |
| 19s1 | 5s(6.5); 5s(12.5); 8L(16.0) | 24.5¢ | DB:B | 558 | |
| 20 | 2s(11.5); 2L(18.0) | 30.5¢ | W | 22 | 4:0.5-1.5 |
| 20s1 | 2L(11.0) | 25.5¢ | DB:B | 2 | |
| 20s2 | 6L(10.5) | 36.0¢ | HB:W | 6 | |
| 20s3 | 7L(10.0) | 40.0¢ | B:W | 7 | |
| 20s4 | 1s(10.0) | 41.5¢ | W | 10 | |
| 21 | 2s(11.5); 3L(18.0) | 31.5¢ | B | 23 | 1:0.5 |
| 21s1 | 4s(6.5); 6s(13.5); 8L(23.0) | 44.5¢ | DB:B | 468 | |
| 22 | -- | 28.5¢ | W | 0 | 1:0.5 |
| 22s1 | -- | 24.5¢ | DB:B | 0 | 1:0.5 |
| 22s1s1 | 5L(6.0) | 20.0¢ | KB:W | 5 | |
| 23 | -- | 35.0¢ | B | 0 | 1:0.5 |
| 23s1 | 3s(6.0); 5s(13.5); 7L(23.0) | 39.5¢ | DB:B | 357 | |

| Cord | Knots (no., type, position) | Length | Color | Value | Subsidiaries (no., position) |
|------|--------------------------------|--------|-----------------------|-------|---------------------------------|
| 24 | 1s(8.0); 5L(15.5) | 31.5¢ | W | 15 | 3:0.5-1.5 |
| 24s1 | 2s(9.0); 3L(20.0) | 40.0¢ | KB:W | 23 | |
| 24s2 | 3L(15.0) | 26.0¢ | HB:W | 3 | |
| 24s3 | 6L(15.0) | 27.5¢ | W/KB:W (23.0/27.5) | 6 | |
| 25 | 2s(8.0); 4L(15.0) | 31.0¢ | B | 24 | 1:0.5 |
| 25s1 | 3s(2.0); 4s(8.5); 4L(13.5) | 25.5¢ | DB:B | 344 | |
| 26 | 1s(9.5) | 44.0¢ | W | 10 | 4:0.5-1.5 |
| 26s1 | 2s(9.0); 1E(20.0) | 32.0¢ | KB:W | 21 | |
| 26s2 | 1E(13.5) | 28.5¢ | RM:DB | 1 | |
| 26s3 | 3L(13.5) | 28.0¢ | HB:W | 3 | |
| 26s4 | 6L(13.0) | 26.0¢ | W/KB:W (20.5/26.0) | 6 | |
| 27 | 4L(15.5) | ?¢ | B | 4 | 1:0.5 |
| 27s1 | 3s(2.5); 5s(9.5); 4L(14.0) | 24.0¢ | DB:B | 354 | |
| 28 | 2s(8.0); 5L(15.0) | 26.5¢ | W | 25 | 4:0.5-1.5 |
| 28s1 | 2s(9.5); 1E(19.0) | 41.0¢ | KB:W | 21 | |
| 28s2 | 1E(14.0) | 32.5¢ | RM:DB | 1 | |
| 28s3 | 3L(14.0) | 27.5¢ | HB:W | 3 | |
| 28s4 | 5L(14.0) | 26.0¢ | W/KB:W (21.5/26.0) | 5 | |
| 29 | 1s(7.5); 4L(15.0) | 26.5¢ | B | 14 | 1:0.5 |
| 29s1 | 4s(9.5); 4L(15.0) | 29.5¢ | DB:B | 44 | |
| 30 | 2s(8.0); 4L(14.5) | 28.0¢ | W | 24 | 4:0.5-1.5 |

| Cord | Knots (no., type, position) | Length | Color | Value | Subsidiaries (no., position) |
|------|--------------------------------|--------|-----------------------|-------|---------------------------------|
| 30s1 | 3s(9.0); 2L(18.5) | 38.0¢ | KB:W | 32 | |
| 30s2 | 1E(14.0) | 32.0¢ | RM:DB | 1 | |
| 30s3 | 3L(14.0) | 29.5¢ | HB:W | 3 | |
| 30s4 | 4L(13.5) | 28.0¢ | W/KB:W (24.0/28.0) | 4 | |
| 31 | 1s(8.5); 4L(15.5) | 29.0¢ | B | 14 | 1:0.5 |
| 31s1 | 3s(2.5); 3s(9.5); 3L(14.5) | 22.0¢ | DB:B | 333 | |
| 32 | 2s(9.5); 4L(17.0) | 26.0¢ | W | 24 | 3:0.5-1.5 |
| 32s1 | 2s(9.5); 2L(20.0) | 48.5¢ | KB:W | 22 | |
| 32s2 | 2L(15.5) | 27.5¢ | HB:W | 2 | |
| 32s3 | 4L(15.0) | 29.0¢ | W/KB:W (26.0/29.0) | 4 | |
| 33 | -- | 34.0¢ | B | 0 | 1:0.5 |
| 33s1 | 2s(2.5); 2s(9.5); 4L(14.5) | 22.0¢ | DB:B | 224 | |
| 34 | 1s(7.5); 9L(13.5) | 33.0¢ | B | 19 | 1:3.0 |
| 34s1 | 5L(10.5) | 28.0¢ | DB:B | 5 | |
| 35 | 6L(12.5) | 30.5¢ | B | 6 | |
| 36 | 1EE(12.5) | 38.5¢ | B | 1 | |
| 37 | 3L(12.5) | 35.0¢ | B | 3 | |
| 38 | 4L(12.5) | 40.0¢ | B | 4 | |
| 39 | 1EE(11.5) | 34.0¢ | B | 1 | |
| 40 | 2L(12.5) | 36.5¢ | B | 2 | |
| 41 | 2L(11.5) | 22.5¢ | DB:W | 2 | |

Observations

1. By spacing, the quipu is in 5 parts. The first part is 1 pair of pendants; part 2 is 5 pairs of pendants; part 3 is a single pendant followed by 5 pairs of pendants; part 4 is 5 pairs of pendants; and part 5 is a single pendant followed by 3 groups of 2, 2, and 3 pendants respectively.
2. Parts 2, 3, and 4 have 5 pairs of pendants each, and each pair is W, B.
 - a) With one exception, each B has a DB:B subsidiary.
 - b) In part 2, the subsidiaries on the W pendant have a consistent color pattern and hierarchical arrangement. There are four levels of subsidiaries with as many as 5 branches on the third level. The arrangement is diagrammed as follows:



(The subsidiary organization of the W pendant in the 3rd pair varies slightly in that there are 2 more first-level subsidiaries and no G on the 3rd level.)

- c) The subsidiaries on the W pendants in part 4 have a consistent, but different, arrangement. Each has 3 or 4 subsidiaries in the same color order: KB:W; RM:MB; HB:W; W/KB:W. Where there are 3, it is the RM:MB that is non-existent.

3. The first pendant in part 5 has value 19 which is the sum of the remaining 7 pendants in that part.
4. The values of the first 3 pendant pairs in part 2 are numbers that differ by 1. That is; (533, 532), (512, 513), and (304, 305). Curiously, one of each of the values in these pairs is a multiple of 19. In part 3, the first and fourth pairs are also consecutive values: (12, 13) and (22, 23).
5. All of the pendants occur in pairs with the exception of the single first pendant in part 3, the single first pendant in part 5, and the last pendant on the quipu which is third in a group of 3 pendants. The single first pendant in part 3 is W and the single first pendant in part 5 is B with a DB:B subsidiary. Thus, together they have the color pattern of the pairs in parts 2, 3, 4. (Each of these 2 pendants has a value which is a multiple of 19.)