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Wrap the Dead : The funerary textile tradition from the Osmore Valley, South Peru, and its social-political implications

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APPENDIX 5: CALCULATION OF TIME AND MATERIAL EXPENDITURE FOR WARP-FACED CAMISAS

I. Camisa #99305 (Centro Mallqui code 3-026), type 3Adb; Unknown gender and age La Cruz (1998), Tomb 8; Ilo-Tumilaca/Cabuza culture.

Warp: camisa 121 cm long x 2 = 242 cm
Weft: 97 widening to 103 weft width (semi-trapezoidal by
spreading the warps)
average width: 100 cm
26 warps/cm (upper and lower warps) average;
7 wefts/cm average
Neck split 34 cm in total (front 18.5 and back 15.5 cm);
arm opening 18 cm
Quality score = 8.5

1. loom preparation and warping process:

prepare loom: 72 minutes (12 + 28 + 32 minutes, see §4.8)
warping: 206 minutes (total width 100 cm x
20.6 min/10 cm avrg)
total: 278 minutes = 4.6 hours

2. weaving:

242 cm total length – 20 cm finish area = 222 cm
222 cm: 4.5 cm/hour (*average weaving time*) =
49.3 hours of weaving
+ 8 hours to finish 20 cm of weaving with needle
total: 57.3 hours

3. plying:

warp length and time:

242 cm total length + 6% compensation = 256.5 cm
256.5 cm x 26 warps /cm x 100 cm total width =
6669 metres of plied warps
6669 metres: (21.8 plied metres/10 min. = *ply average*) =
305.9 of 10 minute-units = 51 hours

weft length and time:

100 cm average weft width x 7 weft/cm x 242 cm total length =
1694 metres of plied wefts
1694 metres: (21.8 plied metres/10 min = *ply average*) =
77.7 of 10 minute-units = 13 hours

warp and weft length and time:

6669 metres warp + 1694 metres weft =
8363 metres of plied yarn
51 hours warp plying + 13 hours weft plying
total: 64 hours

4. spinning:

8363 metres of plied yarn x 2 ply = 16,726 metres x 1.1 (compen-
sation) = 18,398.6 metres in total of spun yarn
18,398.6 metres: (17.4 spun metres/10 min = *spin average*) =
1057.4 of 10 min-units
total: 176.2 hours

total time and material required for the production of camisa #99305

18,398.6 metres of spun yarn	=	176.2 hours	58.3 %
8363 metres of plied yarn	=	64.0 hours	21.2 %
time loom preparation and warping	=	4.6 hours	1.5 %
total time for weaving camisa	=	57.3 hours	19.0 %
total time:		302.1 hours	100 %
total amount of spun yarn:		18.4 km	
+ considerable amount of time for cross-knit loop embroidery of both lateral seams and two neck plaques			

**II. Camisa #99211 (Centro Mallqui code 01-1014.01),
type 6A, worn by adult woman
La Cruz (1993), Tomb 5; Ilo-Tumilaca and possibly
Tiwanaku affiliation.**

Warp: camisa 85 cm long x 2 = 170 cm total warp length
Weft: 84 cm widening to 90 cm weft width
(semi-trapezoidal by spreading the warps),
average width 87 cm.
22 warps/cm (upper and lower warps) average;
5 wefts/cm average
Neck split 30 cm in total; arm opening 22.5 cm
Quality score = 5.5

1. loom preparation and warping process:

prepare loom: 72 minutes (12 + 28 + 32 minutes)
warping: 179 minutes (total width 87 cm x
20.6 min/10 cm avrg)
total: 251 minutes = 4.2 hours

2. weaving:

170 cm total length – 20 cm finish area = 150 cm
150 cm: 4.5 cm/hour (*average weaving time*) =
33.3 hours of weaving
+ 8 hours to finish 20 cm of weaving with needle
total: 41.3 hours

3. plying:

warp length and time:

170 cm total length + 6% compensation = 180.2 cm
180.2 cm x 22 warps /cm x 87 cm total width =
3449 metres of plied warps
3449 metres: (21.8 plied metres/10 minutes = *ply average*) =
158.2 of 10 minute-units = 26.4 hours

weft length and time:

87 cm average weft width x 5 weft/cm x 170 cm total length =
739.5 metres of plied wefts
739.5 metres: (21.8 plied metres/10 cm = *ply average*) =
33.9 of 10 minute-units = 5.7 hours

warp and weft length and time:

3449 metres warp + 739.5 metres weft =
4188.5 metres of plied yarn
26.4 hours warp plying + 5.7 hours weft =
total: 32.1 hours

4. spinning:

4188.5 metres of plied yarn x 2 ply = 8377 metres x 1.1
(*compensation for shortening of yarn by plying procedure*) =
9,214.7 metres in total of spun yarn
9214.7 metres: (17.4 spun metres/10 min = *spin average*) =
529.5 of 10 min-units
total: 88.3 hours

total time and material required for the production of camisa #99211

4188.5 metres of spun yarn	=	88.3 hours	53.2 %
9214.7 metres of plied yarn	=	32.1 hours	19.4 %
time loom preparation and warping	=	4.2 hours	2.5 %
total time for weaving camisa	=	41.3 hours	24.9 %
total time:		165.9 hours	100 %
total amount of spun yarn:		9.2 km	

III. Camisa #02568 (Centro Mallqui code 00/918-1072.05), style 5B, adolescent woman La Cruz (1993), Tomb 15; Ilo-Tumilaca/Cabuza culture.

Warp: camisa 97.5 cm long x 2 = 195 cm total warp length
 Weft: 80.5 widening to 114 weft width (semi-trapezoidal);
 average width: 97.3 cm
 46 warps/cm (upper and lower warps) average;
 9 wefts/cm average
 Neck split 37 cm in total (front and back 18.5 cm);
 arm opening 16 cm
 Quality score: 10.5

1. loom preparation and warping process:

prepare loom: 72 minutes (12 + 28 + 32 minutes)
 warping: 200 minutes (total width 97.3 cm x
 20.6 min/10 cm avrg)
total: 272 minutes = 4.5 hours

2. weaving:

195 cm total length – 20 cm finish area = 175 cm
 175 cm: 4.5 cm/hour (*average weaving time*) =
 38.9 hours of weaving
 + 8 hours to finish 20 cm of weaving with needle
total: 46.9 hours

3. plying:

warp length and time:

195 cm total length + 6% compensation =
 206.7 cm total warp length
 206.7 cm x 46 warps /cm x 97.3 cm total width =
 9251.5 metres of plied warps
 9251.5 metres: (21.8 plied metres/10 minutes *average*) =
 424.4 of 10 minute-units = 70.7 hours

weft length and time:

97.3 cm average weft width x 9 weft/cm x 195 cm total length =
 1707.6 metres of plied wefts
 1707.6 metres: (21.8 plied metres/10 cm *average*) =
 78.3 of 10 minute-units = 13.1 hours

warp and weft length and time:

9251.5 metres (warp) + 1707.6 metres (weft) = 10,959.1 metres of
 plied yarn in total
 70.7 hours (warp) + 13.0 hours (weft) =
total: 83.8 hours

4. spinning:

10,959.1 metres of plied yarn x 2 ply = 21,918.2 metres x 1.1 =
 24,110.0 metres in total of spun yarn
 24,110.0 metres: (17.4 spun metres/10 min *average*) =
 1385.6 of 10 min-units = 230.9 hours
total: 230.9 hours

total time and material required for the production of camisa #02568

24,110.0 metres of spun yarn	=	230.9 hours	62.1 %
10,959.1 metres of plied yarn	=	83.8 hours	22.6 %
time loom preparation and warping	=	4.5 hours	1.3 %
estimated time for insertion discount. warps	=	5.0 hours	1.4 %
total time for weaving camisa	=	46.9 hours	12.6 %
total time:		372.1 hours	100 %
total amount of spun yarn:		24.1 km	