

Supplementary document

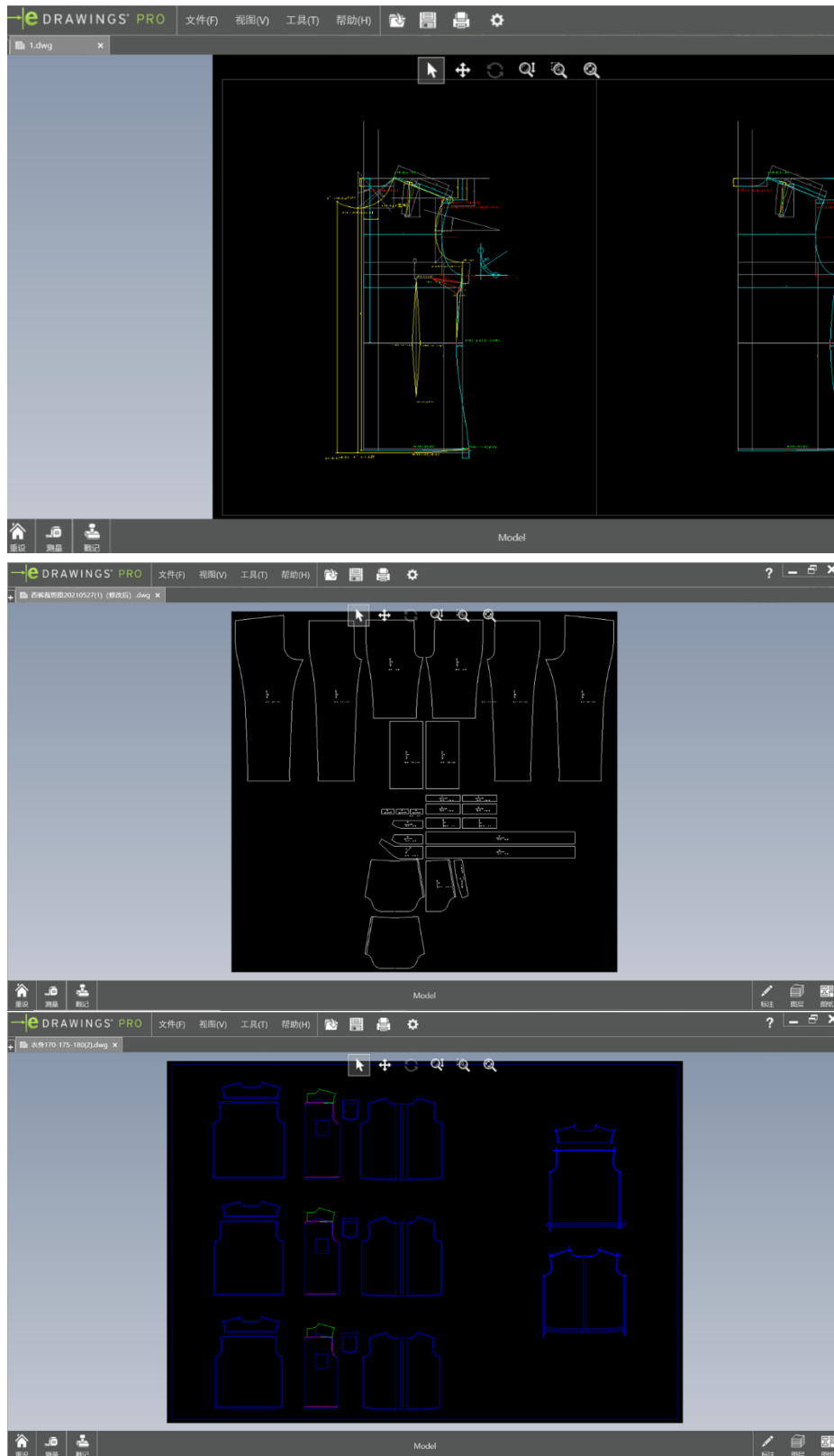


Figure S1. Patterns drawn after secondary development of other mapping software

Figure S2. Parameterized coordinate points of the original model

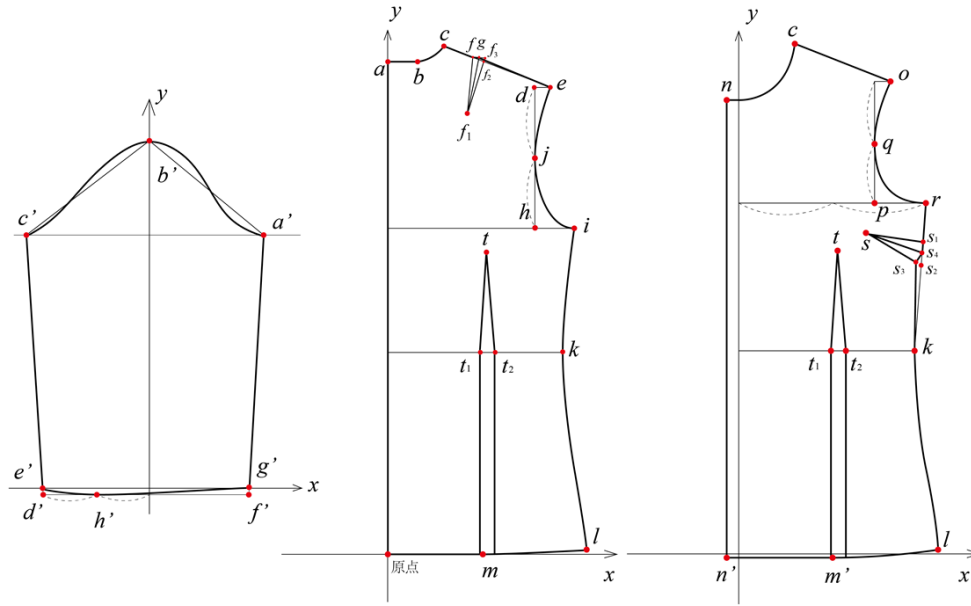


Table S1. Parameterized coordinate points of the original model

	Point	Parameter coordinates
Back	a	$(0, L)$
	b	$(N/10, L)$
	c	$(N/5, L+2)$
	d	$(1.5*B/10+4.5, [L-(B/20+0.5)])$
	e	$(1.5*B/10+4.5+2, [L-(B/20+0.5)])$
	f	$c+[(e-c)/ e-c]*4$
	g	$(f+z')/2$
	h	$(1.5*B/10+4.5, [L-(B/20+0.5)]-B/10+8.5)$
	j	$(1.5*B/10+4.5, [2*[L-(B/20+0.5)]-(B/10+8.5)]/2)$
	i	$(B/4, [L-(B/20+0.5)]-B/10+8.5)$
	k	$(B/4-1.5, L+2-4)$
	l	$(B/4+1.5, 0.5)$
	m	$(B/8, 0)$
	o	$(0, 0)$
	v	$(B/8+0.7, [L+20-(B/20)-(B/10+6)]-4)$
	v1	$(B/8+0.7-1, L+2-4)$
	v2	$(B/8+0.7+1, L+2-4)$
	n	$(L-N/5, -1.5)$
	o	$(3.5, C.N.)$
	c	$(N/5, L+2)$
	q	$(N/5+housian_lenght**2-(B/20)**2, [L+20-(B/20)])$
	s	$(1.5*B/10+3, [L+20-(B/20)]+[L+20-(B/20)-(B/10+6)]/2)$
	r	$(1.5*B/10+3, [L+20-(B/20)-(B/10+6)])$
	t	$(B/4, [L+20-(B/20)-(B/10+6)])$

Front	U	\
	U1	\
	U3	
	U2	$u + [(u2-u)/ u2-u] * u1-u $
	k	$(B/4-1.5, L+2-4)$
	l	$(B/4+1.5, c)$
	m'	$(B/8, -c)$
	n'	$(-3c, 0)$
	p	$(-b, -c)$
	o'	$(-b, C.N.)$
	v	$(B/8+0.7, [L+20-(B/20)-(B/10+6)]-4)$
	v1	$(B/8+0.7-1, L+2-4)$
	v2	$(B/8+0.7+1, L+2-4)$
Sleeve	a'	$(\sqrt{FAH^2 - (B/10 + 30)^2}, S.L. - C.W. - S.T.)$
	b'	$(0, SL-CW)$
	c'	$(\sqrt{-[BAH^2 - (B/10 + 30)^2]}, S.L. - C.W. - S.T.)$
	d'	$(-2a, -1)$
	e'	$(d + \vec{dc} / \sqrt{\{ \sqrt{-[BAH^2 - (B/10 + 30)^2]} + 14 \}^2 + (S.L. - C.W. - S.T.)^2} \times 10, 0)$
	f'	$(2a-1, -1)$
	g'	$(f + \vec{fa} / \sqrt{\{ \sqrt{FAH^2 - (B/10 + 30)^2} - 13 \}^2 + (S.L. - C.W. - S.T.)^2} \times 10, 0)$
	h'	$(-a, -1)$

Table S2. Baseline body size data of the participants

No.	Height/cm	Neck circumference/cm	Chest circumference/cm	Shoulder width/cm	Waist/cm	Back length/cm	Sleeve length/cm
1	156	31	78	37	60	38	50
2	163	33	88	38	70	39	52
3	168	36	100	41	73	40	54
4	172	34	83	41	68	42	55
5	154	32	90	37	59	37	51
6	161	33	89	39	71	39	50
7	171	34	101	39	70	40	52
8	160	36	89	38	67	38	51
9	159	36	93	39	64	42	53
10	164	35	99	38	76	40	50
11	163	35	99	40	64	42	53
12	165	36	106	40	61	93	53
13	159	33	96	37	71	41	51
14	157	34	97	38	62	93	53
15	170	33	85	37	67	40	53
16	163	34	85	39	66	39	53
17	158	32	98	36	71	39	50
18	158	33	81	38	68	40	53
19	161	34	79	38	68	41	53
20	164	35	82	39	64	40	52
21	159	33	95	39	71	41	51
22	155	33	87	36	71	39	50
23	175	38	88	43	76	44	55
24	161	34	86	36	67	39	51
25	168	34	84	37	68	41	52
26	163	33	95	36	71	39	50
27	159	34	86	38	68	39	53
28	171	37	91	40	72	40	52
29	163	37	89	39	71	38	50
30	166	35	91	38	68	42	53
31	157	36	103	37	59	40	52
32	168	37	83	38	68	39	51
33	166	35	87	40	67	41	53
34	164	36	85	38	71	42	50
35	159	37	91	39	65	39	52
36	158	35	89	37	69	39	53
37	157	36	84	38	65	40	50
38	166	37	88	37	64	39	51
39	169	35	86	39	63	41	52
40	160	36	80	37	69	41	52
41	172	35	88	39	67	39	52
42	168	37	84	39	66	40	50
43	159	36	85	38	69	39	52
44	164	35	89	36	72	41	50
45	159	37	96	39	64	40	52
46	165	36	101	38	62	40	52
47	162	35	90	37	66	41	50
48	159	34	91	38	72	39	52
49	171	34	89	41	65	41	52
50	168	33	87	39	64	40	51
51	163	36	97	38	70	38	52
52	155	33	84	36	68	39	51
53	167	35	89	40	64	40	50

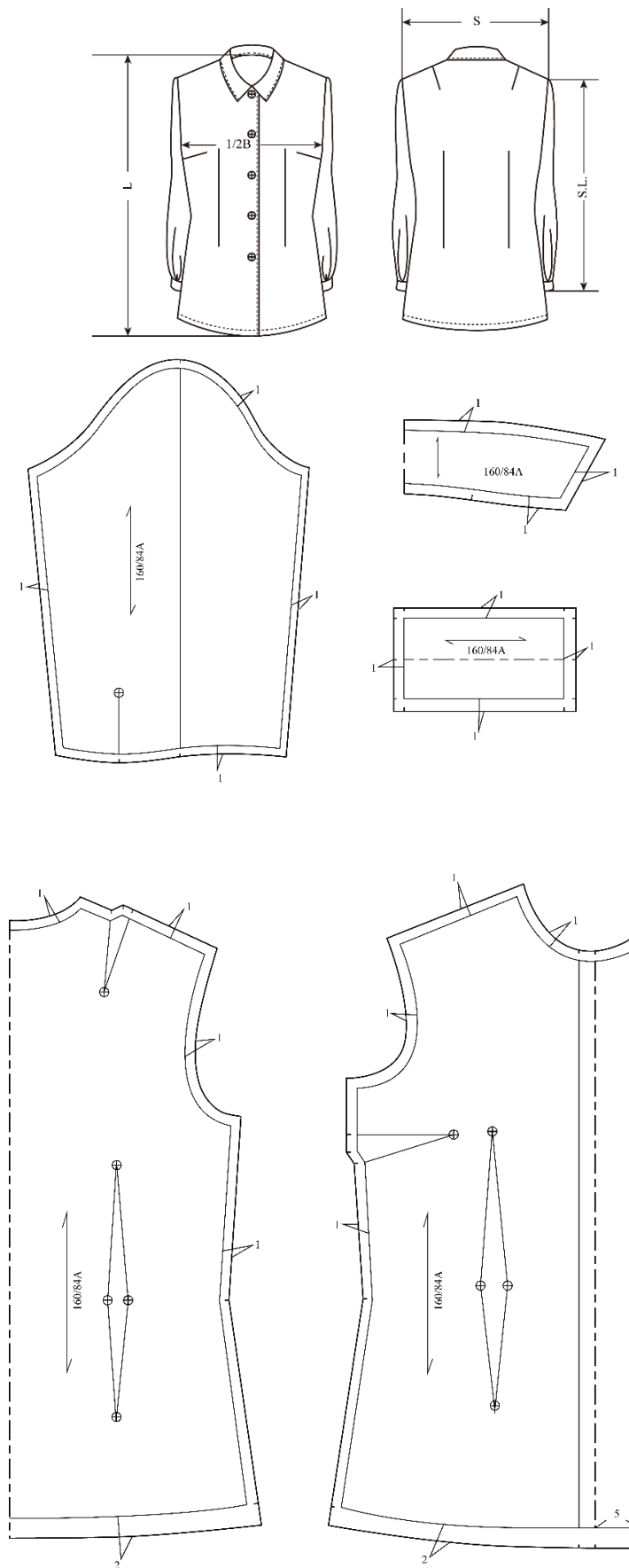


Figure S3. Structure diagram of style 1 shirt

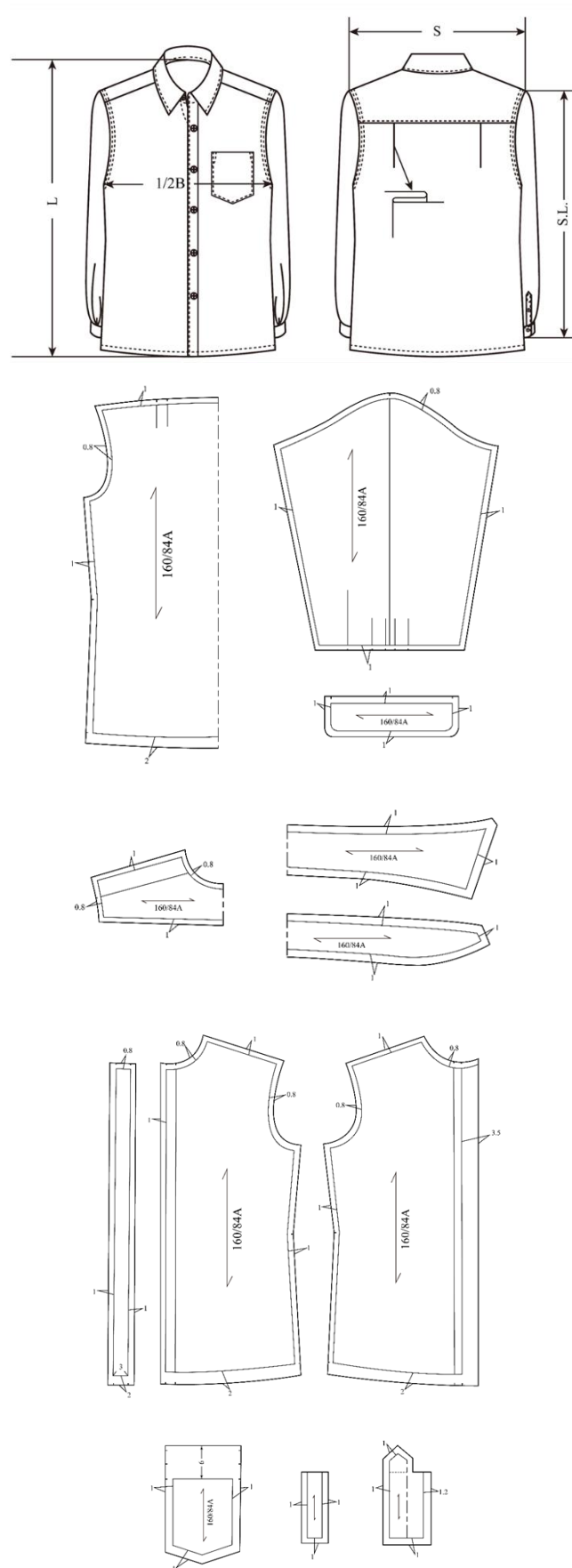


Figure S4. Structure diagram of style 2 shirt

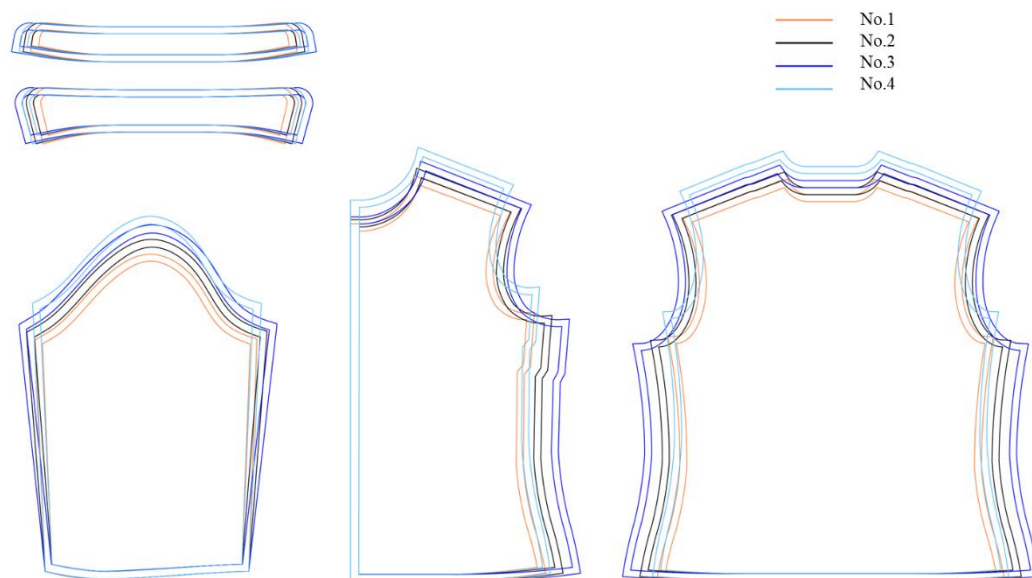


Figure S5. Style 1 pattern diagram for participants No.1-4