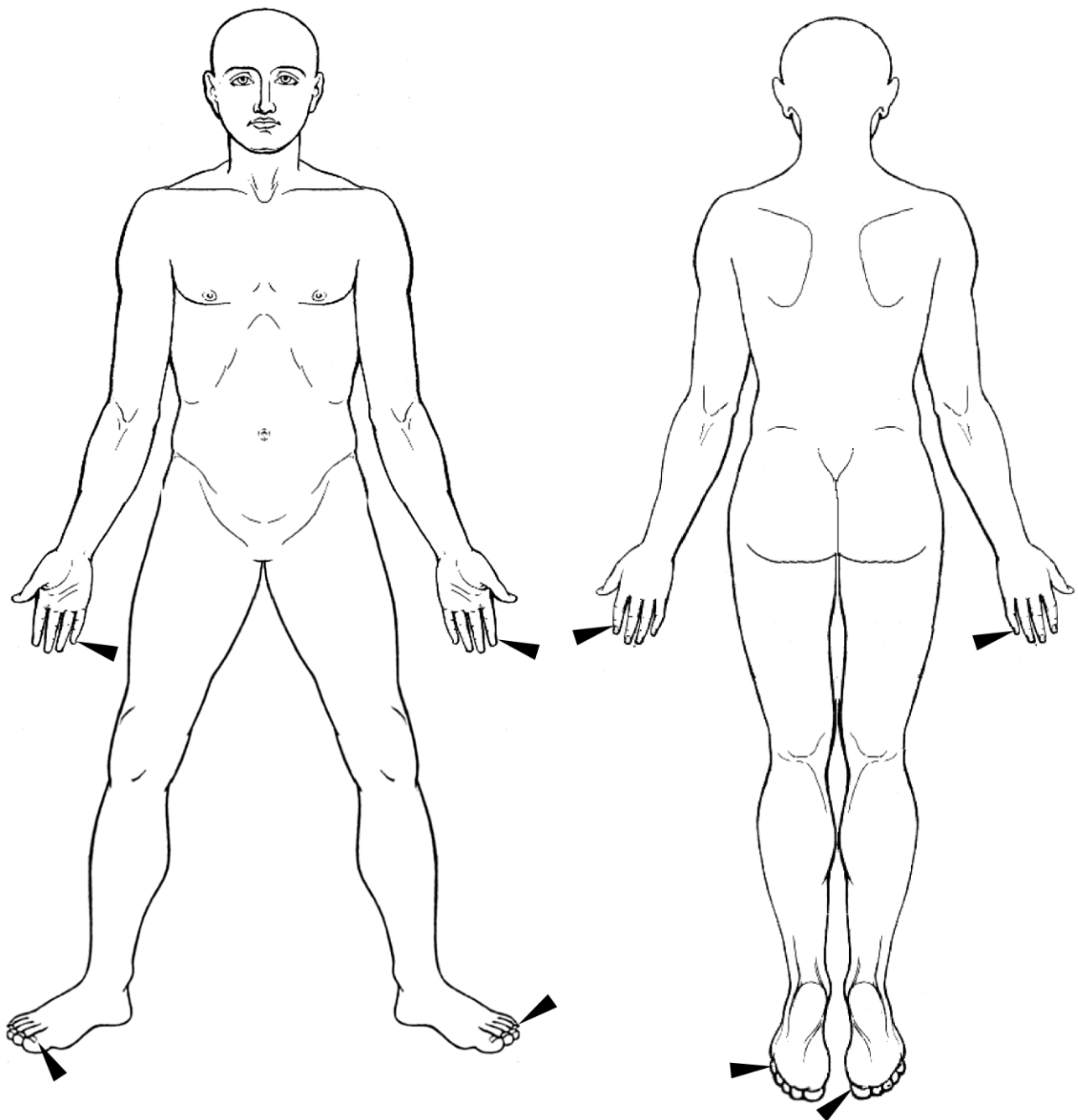# Supplementary Material

Investigation of acupuncture sensation patterns under sensory deprivation using a geographic information system

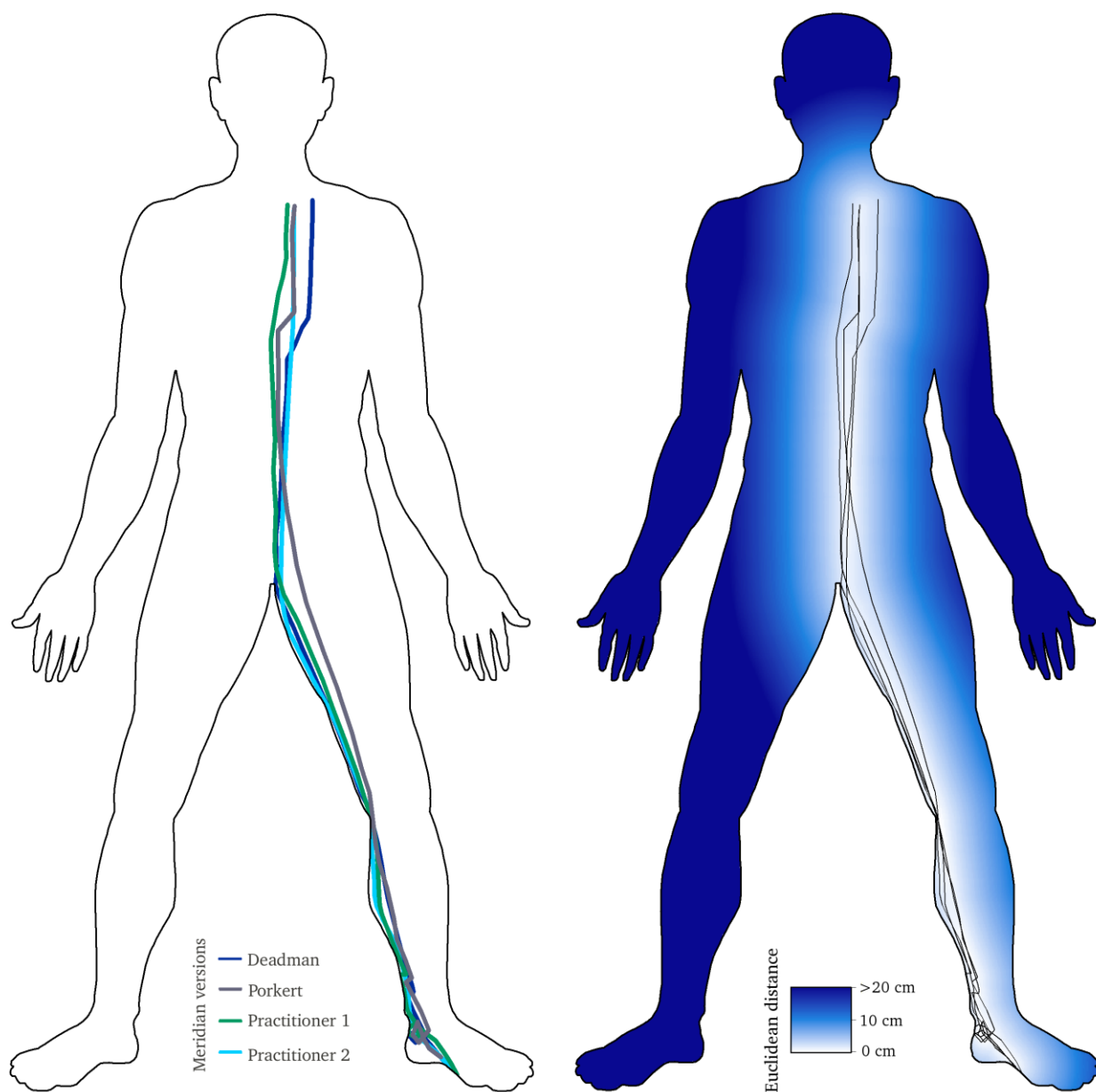Florian Beissner,[1] Irene Marzolff [2]

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Supplementary Figure 1: The body scheme, that was used by the subjects to sketch their sensations during laser acupuncture. The arrow heads mark the points of stimulation.

Meridian versions
- Deadman
- Porkert
- Practitioner 1
- Practitioner 2

Euclidean distance
- >20 cm
- 10 cm
- 0 cm

Supplementary Figure 2: Methodological approach to measure distances from a cohort of meridians. The left picture shows the variability of different sources concerning the course of the kidney (KI) meridian. The right picture shows the Euclidean distance field that was then intersected with the mean center lines (see Figure 3+4 and Table 3).

Subject	VAS	front / back	Index	Radius/cm	front / back	Index	Length/cm	total Length / cm	front / back	Index	Area/cm²	total Area/cm²
			point-like sensations			line-like sensations				2-dimensional sensations		
1	6							0.00				0.00
2	21	b	I	1.60	b	I	3.14		b	I	8.28	
		b	II	0.50	b	II	3.24		b	II	9.40	
		f	I	0.50	b	III	3.19		b	III	64.82	
					f	I	10.07	37.21	b	IV	8.39	166.31
					f	II	9.96		b	V	32.91	
					f	III	2.57		b	VI	30.65	
					f	IV	2.47		f	I	11.86	
					f	V	2.58					
3	39				b	I	49.88		b	I	31.56	
									b	II	25.57	
									b	III	41.91	
								49.88	b	IV	47.07	487.61
									b	V	27.58	
									f	I	156.88	
									f	II	157.03	
4	31	b	I	1.00	b	I	7.98		b	I	11.10	
		b	II	1.40					b	II	11.65	
		b	III	1.00					b	III	10.31	
		b	IV	1.60				7.98	b	IV	8.74	206.01
		f	I	1.00					b	V	7.16	
		f	II	1.00					f	I	39.67	
									f	II	40.75	
									f	III	76.62	
5	42	b	I	1.20	b	I	33.85		b	I	24.09	
		b	II	1.00	f	I	19.64		b	II	85.77	
		b	III	1.70	f	II	15.24		f	I	363.74	
		f	I	1.00	f	III	9.00					
					f	IV	24.66	138.13				473.60
					f	IX	5.37					
					f	V	8.86					
					f	VI	8.57					
					f	VII	8.61					
					f	VIII	4.36					
6	37	b	I	0.70	f	I	19.53		b	I	259.18	
		b	II	2.80	f	II	14.48		b	II	81.46	
		f	I	0.70	f	III	6.59					
					f	IV	17.93	68.24				340.64
					f	V	3.68					
					f	VI	3.54					
					f	VII	2.48					
7	72	b	I	1.00	f	I	40.43		b	I	14.75	
					f	II	24.86		b	II	18.30	
									b	III	26.17	
								65.28	f	I	38.08	148.87
									f	II	7.86	
									f	III	26.26	
									f	IV	17.44	
8	5	b	I	1.00	b	I	6.67		b	I	19.58	
		b	II	2.50	f	I	6.30	12.97	f	I	13.91	41.16
		f	I	0.90					f	II	7.67	
9	6	f	I	1.80				0.00				0.00

Subject	count	t	idx	value	t	idx	value	total	t	idx	value	total
10	10				b	I	15.54	15.54	b	I	11.27	717.39
									b	II	399.50	
									b	III	7.34	
									f	I	15.06	
									f	II	284.22	
11	14	b	I	0.60	f	I	39.77	39.77	b	I	47.41	47.41
12	15	b	I	0.90				0.00				0.00
13	18	b	I	0.50				0.00				0.00
		b	II	1.00								
		f	I	0.90								
14	24	b	I	0.70	b	I	8.51	105.15	b	I	24.34	24.34
					b	II	27.20					
					f	I	14.73					
					f	II	25.99					
					f	III	28.73					
15	18							0.00	b	I	128.35	409.74
									f	I	281.38	
16	23	b	I	4.50	b	I	17.22	61.79	b	I	8.63	8.63
		b	II	0.70	b	II	6.64					
		b	III	1.60	b	III	8.47					
		b	IV	5.00	b	IV	11.27					
		b	V	4.50	b	V	9.76					
		b	VI	4.50	b	VI	8.41					
		b	VII	4.50								
		f	I	4.00								
17	69	b	I	1.20	b	I	4.97	47.22	b	I	16.48	361.24
		b	II	2.00	b	II	37.75		b	II	55.08	
		b	III	0.50	b	III	4.50		b	III	193.61	
									f	I	96.07	
mean	26.47			1.67			13.81	40.50			67.31	201.94

Supplementary Table 1: Numeric results of the GIS analysis of acupuncture sensation patterns. Sensation intensities are also shown. The index counts disjunct sensation patterns of the same type for each subject. For line-like and 2-dimensional sensations, "total length" and "total area" indicate the sum of all disjunct patterns.