

Table S1: Fossil thoracic vertebrae and the missing landmarks estimated by thin-plates spline methods (TPS reference of same vertebral level in parentheses)^a.

	Kebara 2
T1	1 (TPS-LaCha), 20 (TPS-LaCha), 32 (TPS-Hs)
T2	1 (TPS-LaCha)
T3	20 (TPS-Hs)
T4	20 (TPS-Hs)
T5	8-11 (TPS-Hs), 40-43 (TPS-Hs)
T6	1 (TPS-Hs)
T7	No missing landmarks
T8	1 (TPS-Hs)
T9	No missing landmarks
T10	1 (TPS-LaCha), 2 (TPS-LaCha), 32 (TPS-Hs)
	La Chapelle-aux-Saints 1
T1	32 (TPS-Hs)
T2	25 (TPS-K), 29 (TPS-K), 32 (TPS-K)
T7	1, 8-11, 12-, 20, 32, 36-39, 40-43 (TPS-K)
T8	1 (TPS-Hs), 3-4, 5-7, 20, 22-23, 25, 29, 32, 44-46 (TPS-K)
T9	1-2, 12-15, 20, 32, 36-39 (TPS-K)
T10	12-15 (TPS-K), 32 (TPS-Hs), 36-39 (TPS-K)
	La Ferrassie 1
T1	1 (TPS-LaCha), 3-4 (TPS-K), 12-15 (TPS-K), 20 (TPS-LaCha), 22-23 (TPS-K), 32 (TPS-K), 36-39 (TPS-K)
T2	1 (TPS-LaCha), 3-4 (TPS-K), 32 (TPS-K)
T3	1 (TPS-K), 3-4 (TPS-K), 20 (TPS-Hs), 32 (TPS-K), 36-39 (TPS-K)
	El Sidrón
T3/T4	1, 3, 4 (TPS-K); 12, 13, 15 (TPS-K); 20 (TPS-Hs), 23 (TPS-K); 32 (TPS-K); 36, 37, 39 (TPS-K); 44

	(TPS-K)
T6/T7	32 (TPS-K); 40-43 (RR)

^aLaCha:- La Chapelle, Hs- modern human mean; K- Kebara 2.

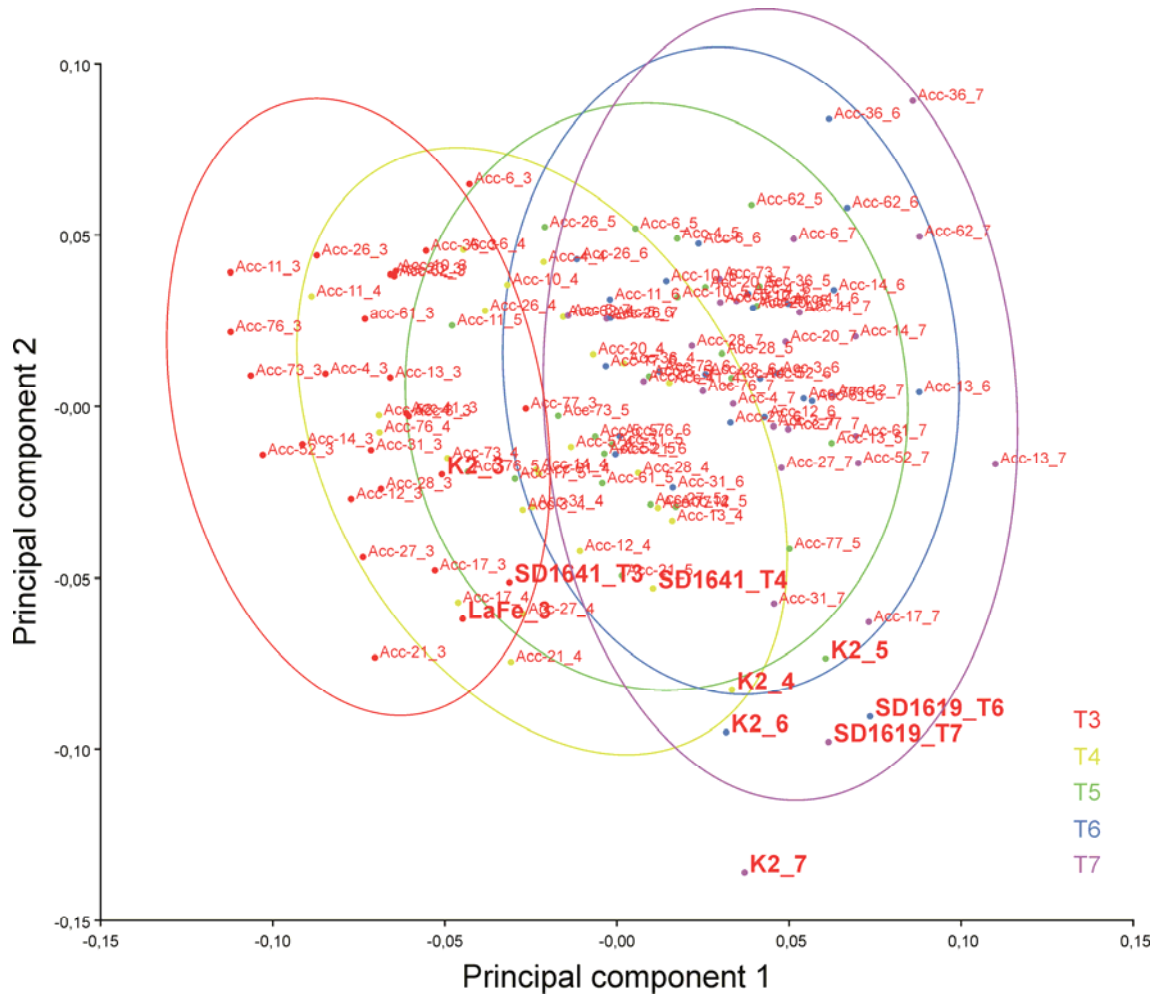


Figure S1. Same shape space projection as in Figure 6 of the main text but with serial levels marked by 95% confidence intervals. This demonstrates visually and quantitatively that serial variation is shown along PC1, but not along PC2.