

# Supporting Information

Gordon *et al.* 10.1073/pnas.0710041105

## Supporting References

1. Brown P, *et al.* (2004) A new small-bodied hominin from the Late Pleistocene of Flores, Indonesia. *Nature* 431: 1055–1061.
2. Howells WW (1996) Howells' craniometric data on the internet. *Am J Phys Anthropol* 101: 441–442.
3. Wood BA (1991) *Koobi Fora Research Project. Volume 4: Hominid Cranial Remains* (Clarendon, Oxford).
4. Tobias PV (1967) *Olduvai Gorge. Volume 2: The Cranium and Maxillary Dentition of Australopithecus (Zinjanthropus) boisei* (Cambridge Univ Press, Cambridge).
5. Lordkipanidze D, *et al.* (2006) A fourth hominin skull from Dmanisi, Georgia. *Anat Rec A* 288A:1146–1157.
6. Heim JL (1989) A new reconstruction of the Chapelle-aux-Saints cranium: Method and results (in French). *Bull Mem Soc d'Anth Paris* 1:95–118.
7. Kidder JH (1996) Defining anatomically modern *Homo sapiens* in the context of modern human origins: A size and shape approach. Ph.D. Thesis, University of Tennessee, Nashville, TN.
8. Trinkaus E (1983) *The Shanidar Neanderthals* (Academic, New York).
9. Suzuki H (1982) in *The Minatogawa Man: The Upper Pleistocene Man from the Island of Okinawa*, eds Suzuki H, Hanihara K (Univ of Tokyo Press, Tokyo), pp 7–49.
10. Lahr MM (1996) *The Evolution of Human Diversity* (Cambridge Univ Press, Cambridge, UK).
11. Wu X, Zhang Z (1985) in *Paleoanthropology and Palaeolithic Archaeology in the People's Republic of China*, eds Wu R, Olsen JW (Academic, Orlando), pp 107–133.
12. McCown TD, Keith A (1939) *The Stone Age of Mount Carmel II: The Fossil Human Remains from the Levallois-Mousterian* (Clarendon, Oxford).

Table S1. Cranial measurements

Specimen (ref.)	Species	GOL	BBH	XCB	BNL	BPL	ASB
LB1 (1)	—	143	89	113	81	88	97
2,524 crania (2)	Recent <i>H. sapiens</i>	151–206	107–155	116–167	83–120	80–123	88–128
KNM-ER 406 (3)	<i>P. boisei</i>	163	103	144	109	135	94
OH 5 (4)	<i>P. boisei</i>	173	98 (3)	142	113	137	89
Sts 5 (3)	<i>A. africanus</i>	146	101	111	99	127	90
KNM-ER 1813 (3)	<i>H. habilis</i>	149	90	113	84	105	90
OH 24 (3)	<i>H. habilis</i>	145	89	120	71	92	90
D2700 (5)	<i>H. erectus</i>	155	101	126	92	100	105
KNM-ER 3733 (3)	<i>H. erectus</i>	182	108	142	103	120	124
Sangiran 17 (3)	<i>H. erectus</i>	206	110	161	112	118	142
La Chapelle (6)	<i>H. neanderthalensis</i>	210	129	153	121.4	126.5	116.4
La Ferrassie (7)	<i>H. neanderthalensis</i>	208	141	159	124	119	124
Shanidar 1 (8)	<i>H. neanderthalensis</i>	207.2	135	154	116.4	117.1	118.2
Kabwe (7)	<i>H. sapiens</i> (African)	206	131	147	120	118	129
Minatogawa 1 (9)	<i>H. sapiens</i> (Asian)	182	132 (10)	148	101	102	115
Minatogawa 4 (9)	<i>H. sapiens</i> (Asian)	176	133 (10)	138	95	100	107
ZUC 101 (11)	<i>H. sapiens</i> (Asian)	206	133	144	109	107	122
Abri Pataud (7)	<i>H. sapiens</i> (European)	182	131	138	97	100	108
Cro-Magnon 1 (7)	<i>H. sapiens</i> (European)	203	132	151	100	99	107
Dolni Vestonice (7)	<i>H. sapiens</i> (European)	187	130	132	106	107	105
Gibraltar (12)	<i>H. sapiens</i> (European)	190	117	146	106	108	110
Kaufertsberg (7)	<i>H. sapiens</i> (European)	184	139	142	98	97	116
Mladec 1 (7)	<i>H. sapiens</i> (European)	203	143	145	105	110	112
Oberkassel 1 (7)	<i>H. sapiens</i> (European)	195	136	140	102	86	118
Oberkassel 2 (7)	<i>H. sapiens</i> (European)	181	132	126	95	87	105
Ofnet 13 (7)	<i>H. sapiens</i> (European)	186	135	130	104	95	110
Ofnet 24 (7)	<i>H. sapiens</i> (European)	184	131	140	100	95	114
Ofnet 6 (7)	<i>H. sapiens</i> (European)	183	137	140	97	92	106
Qafzeh 6 (7)	<i>H. sapiens</i> (Near East)	195	130	144	116	115	107
Skhul 4 (12)	<i>H. sapiens</i> (Near East)	206	128	148	110	105	132
Skhul 5 (12)	<i>H. sapiens</i> (Near East)	193	128	146	96	110	116
Skhul 9 (12)	<i>H. sapiens</i> (Near East)	213	130	145	115	106	120

All measurements are in millimeters. Ranges reported for recent modern human sample. Citations in parentheses indicate that those particular values were taken from the source specified.

**Table S2. Coefficients of determination, regression slopes, and 95% confidence intervals for regressions of logged cranial measurements again logged geometric mean for the modern human comparative sample**

Regressed variable	$R^2$	Major axis slope	95% C.I.	Reduced major axis slope	95% C.I.	Least squares slope	95% C.I.
ln GOL	0.665	1.24	1.21–1.27	1.19	1.17–1.22	0.973	0.946–1.00
ln BBH	0.558	1.52	1.48–1.56	1.37	1.34–1.40	1.03	0.989–1.06
ln XCB	0.287	1.65	1.57–1.74	1.32	1.28–1.36	0.707	0.663–0.750
ln BNL	0.758	1.54	1.51–1.57	1.46	1.44–1.48	1.27	1.24–1.30
ln BPL	0.494	1.96	1.90–2.03	1.63	1.59–1.67	1.15	1.10–1.19
ln ASB	0.433	1.53	1.48–1.59	1.33	1.30–1.36	0.876	0.837–0.915

Confidence intervals (C.I.) are bootstrapped for major axis and reduced major axis slopes. Note that similarity between regression slopes for a given measurement decreases as  $R^2$  decreases.