Supplementary Information

Supplementary Table 1a. Selected references to larger-than-average houses indicating great-than-average household wealth of the three types distinguished by[12].

Reference	Time	Place	Embodied	Relational	Material
[46]	Whenever the Domestic Mode of Production prevails	Wherever the Domestic Mode of Production prevails	x	x	x
[47]	"Wherever recorded data on wealth and household size [number of members] are present, the two indices apparently vary together" (p. 641)				
[48]	Archaeological and ethnographic	Northern temperate, sub-arctic, and arctic	Larger-than-average houses may indicate either more members in the household, or greater wealth permitting heating		
[49]	Neolithic	Levant	?	?	?
[49]	Early Dynastic	Mesopotamia	x	x	x
[50]	various	Anatolia	x		
[51]	By ~3000 BP	Northwest Coast, North America	x	x	x
[52]	~3000 - 2500 BP	Northwest Coast, North America	x		
[53]	Classic	Hohokam (Casa Grande)	Largest compound (Big House) thought to be elite residence, such as chief's house		
[54]	14th century	Montaillou, Ariège, France	x	x	x (though differences relatively modest)
[55]	15th century	Aztec settlements			x
[56]	17th century	Iroquois (chief's houses)	x	x	x

57	17th century	New Amsterdam			x
58	18th century	American colonies			x
59	“Traditional Europe” and colonial New England		x	x	x
60	19th & 20th centuries	Picardy, France	x	x	x
61	20th century	Kurdish village, Iran	x		x
62	20th century	Burmese villages		x	x
63	20th century	Syrian villages	x	x	x
64	20th century	Maya village	x		x
65	20th century	Peasant villages			x
66	20th century	Maya village			x
67	20th century	Chinese peasant village			x
68	Contemporary peasant communities		x	x	x

Supplementary Table 1b. References to larger-than-average houses having no verifiable relationship with greater-than-average embodied (E), relational (R), or material (M) wealth.

Reference	Time	Place	E	R	M
[69]	Late Classic	Hohokam (Pueblo Grande)			Status-related artifacts not associated with larger rooms in compounds
[70]	18th century	Hawaii			x

Supplementary Table 2. Data used in this study, sorted by hemisphere and ascending date, with metadata. (Downloadable spreadsheet).

Supplementary Table 3. Cross-tabulation of political scale by hemisphere among the sites and societies in our sample. Total observations in table: 63, χ^2 = 7.594, d.f. = 4, p = 0.108.

Political Scale	Factors	New World	Old World
Family	N	0	1
	Expected N	0.603	0.397
	χ^2 contribution	0.603	0.917
Local	N	5	7
	Expected N	7.238	4.762
	χ^2 contribution	0.731	1.141
Big Man	N	10	1
	Expected N	6.635	4.365
	χ^2 contribution	1.707	2.594
Regional	N	13	9
	Expected N	13.270	8.730
	χ^2 contribution	0.005	0.008
State	N	10	7
	Expected N	10.254	6.746
	χ^2 contribution	0.006	0.010

Supplementary Table 4. Cross-tabulation of political regime strategy by hemisphere among the states in sample. Total observations in table: 18, $\chi^2 = 5.10$, d.f. = 2, p = 0.078.

Political Regime	Factors	New World	Old World
Collective	N	1	4
	Expected N	3.056	1.944
	χ^2 contribution	1.383	2.173
Intermediate	N	8	2
	Expected N	6.111	3.889
	χ^2 contribution	0.584	0.917
Autocratic	N	2	1
	Expected N	1.833	1.167
	χ^2 contribution	0.015	0.024

Supplementary Table 5. Relationship between measures of demographic scale and Gini coefficients by hemisphere.

Measure of Demographic Scale	Factors	Gini Coefficients	
		New World	Old World
$\log_{10}$ (Site Population in Households)	Slope estimate	0.050	0.098
	r^2	0.131	0.293
	F	2.56	7.05
	$F_{(df)}$	1,17	1,17
	P > F	0.128	0.017
$\log_{10}$ (Regional Population in Households)	Slope estimate	0.045	0.060
	r^2	0.130	0.488
	F	4.62	9.539
	$F_{(df)}$	1,31	1,10
	P > F	0.040	0.011
$\log_{10}$ (Regional Population Density) = Log_{10} (Households / sq km)	Slope estimate	0.009	0.217
	F	0.148	9.857
	$F_{(df)}$	1,27	1,9
	P > F	0.702	0.012

Supplementary Table 6. Comparison of Ginis Calculated on House Sizes with those Calculated on Other Bases, in approximately matched contexts.

	Gini Coefficients		
Society	This paper (house-size distributions	5	Basis for Gini coefficients in 5
Ju'hoansi !Kung (foragers, Botswana)	0.17	0.16	31 items of wealth distributed among 12 couples ("preferred measure" accounting for substitution and complementarity among wealth types)
Hohokam	0.25 (All Hohokam compounds, Colonial period, ~AD 850)	0.56 (Belleview site, ~AD 900)	Burial goods on individuals, randomly reassigned to form male-female couples (average)
Columbia Plateau	0.20 (Bridge River 2, ~AD 500)	0.62 (22 burial sites, mostly first and early 2nd-millennium AD)	Burial goods on individuals, randomly reassigned to form male-female couples (average)
Roman Republic and Empire	Herculaneum, 0.52; Pompeii, 0.54, both at AD 79	0.85	Landholdings in 12 contexts from 116 BC - AD 525 after taking into account those with no landholdings

Supplementary Table 7. Data for Gini Calculation, Tenochtitlan (data for the single imperial suite are in text).

Site	No.	Social category	Houselot area (sq m)	Statistics, Social Category Mean	s
C 5	1	Ellite	1,148		
C 7	6	Elite	1,466		
F 4	B	Elite	1,216		
				1,277	167.5
E 5	1	Wealthy commoner	817		
G 5	1.2	Wealthy commoner	800		
H 11	3	Wealthy commoner	817		
				811	9.8
C 7	5	Commoner	567		
F 9	2	Commoner	522		
F 9	3	Commoner	522		
F 9	4	Commoner	522		
F 9	5	Commoner	522		
H 11	1	Commoner	475		
C 7	1	Commoner	462		
C 8	1	Commoner	420		
G 10	2	Commoner	408		
C 7	4	Commoner	393		
E 5	A	Commoner	390		
D 5	1	Commoner	360		
H 5	2	Commoner	348		
D 8	5	Commoner	336		
C 7	3	Commoner	330		
C 7	2	Commoner	325		
D 7	1	Commoner	320		
H 5	1	Commoner	318		
F 9	1	Commoner	307		
H 11	2	Commoner	306		
D 8	11	Commoner	305		
G 12	1	Commoner	281		
E 5	2	Commoner	260		
G 5	5	Commoner	235		
H 7	7	Commoner	234		
E 4	C	Commoner	224		
I 8	2	Commoner	224		
H 7	1	Commoner	210		
D 8	3	Commoner	205		
G 12	2	Commoner	180		
D 3	A	Commoner	170		
D 6	1	Commoner	167		
G 5	2	Commoner	167		
E 8	4	Commoner	165		
C 6	5	Commoner	162		

D 9	2	Commoner	162		
C 6	2	Commoner	160		
F 9	8	Commoner	154		
D 6	1.1	Commoner	152		
E 4	B	Commoner	144		
I 8	1	Commoner	140		
G 9	8	Commoner	136		
G 12	3	Commoner	134		
G 5	7	Commoner	126		
G 5	8	Commoner	118		
C 6	3	Commoner	111		
H 10	1	Commoner	104		
F 4	A	Commoner	102		
H 10	2	Commoner	80		
G 5	3	Commoner	50		
G 9	9	Commoner	50		
F 4	C	Commoner	44		
E 4	A	Commoner	36		
				252	143.4

Supplementary References

46. Coupland, G. & Banning, E. B. Introduction: The archaeology of big houses. *People Who Lived in Big Houses: Archaeological Perspectives on Large Domestic Structures* 1–10 (1996).

47. Netting, R. M. Some Home Truths on Household Size and Wealth. *Am. Behav. Sci.* **25,** 641–662 (1982).

48. Hayden, B., Reinhardt, G., MacDonald, R., Holmberg, D. & Crellin, D. Space per capita and the optimal size of housepits. *Monographs in World Archaeology* 151–164 (1996).

49. Banning, E. B. Houses, compounds and mansions in the prehistoric Near East. *People who lived in big houses: archaeological perspectives on large domestic structures* 165–185 (1996).

50. Cutting, M. More than One Way to Study a Building: Approaches to Prehistoric Household and Settlement Space. *Oxford Journal of Archaeology* **25,** 225–246 (2006).

51. Ames, K. M. Life in the big house: household labor and dwelling size on the Northwest Coast. *People who lived in big houses: archaeological perspectives on large domestic*

structures 131–150 (1996).

52. Coupland, G. The evolution of multi-family households on the Northwest coast of North America. *People who lived in big houses: Archaeological perspectives on large domestic structures* 121–130 (1996).
53. Wilcox, D. R. & Shenk, L. O. *The Architecture of the Casa Grande and Its Interpretation*. **115,** (Arizona State Museum, 1977).
54. Ladurie, E. L. R. *Montaillou, the promised land of error*. (Vintage, 1979).
55. Olson, J. M. & Smith, M. E. Material Expressions of Wealth and Social Class at Aztec-period Sites in Morelos, Mexico. *Ancient Mesoamerica* **27,** 133–147 (2016).
56. Thwaites, R. G. 1896--1901 The Jesuit Relations and Allied Documents. 73 vols. *Burroughs Brothers, Cleveland* (1959).
57. Rothschild, N. A. Keeping Up with the Stuyvesants: House Size and Status in Seventeenth-Century New Amsterdam. in *Configurations of Power: Holistic Anthropology in Theory and Practice* (eds. Henderson, J. S. & Netherly, P.) 228–243 (Cornell University Press, 1993).
58. Jones, A. H. *Wealth of a nation to be: The American colonies on the eve of the Revolution*. (Columbia University Press, 1980).
59. Shorter, E. *The making of the modern family*. (Basic Books, 1975).
60. Morel, A. Power and ideology in the village community of Picardy: past and present. *Rural Society in France. John Hopkins University Press, Baltimore* (1977).
61. Kramer, C. An archaeological view of a contemporary Kurdish village: domestic architecture, household size, and wealth. in *Ethnoarchaeology: Implications of Ethnography for Archaeology* (ed. Kramer, C.) 139–163 (Columbia University Press, 1979).
62. Nash, M. *The golden road to modernity: village life in contemporary Burma*. (New York, 1965).
63. Kamp, K. From Village to Tell: Household Ethnoarchaeology in Syria. *Near Eastern Archaeology* **63,** 84–93 (2000).

64. Wilk, R. R. Little house in the jungle: The causes of variation in house size among modern Kekchi Maya. *Journal of Anthropological Archaeology* **2,** 99–116 (1983).
65. Castro, A. P., Hakansson, N. T. & Brokensha, D. Indicators of rural inequality. *World Dev.* **9,** 401–427 (1981).
66. Tax, S. Penny capitalism: a Guatemalan Indian community. *Washington, DC: Smithsonian Institute of Social Anthropology* (1953).
67. Yang, M. C. *A Chinese Village: Taitou, Shantung Province*. (Columbia University, Department of Anthropology, 1945).
68. Blanton, R. E. *Houses and Households: A Comparative Study*. (Springer Science & Business Media, 1994).
69. Foster, M. S., Mitchell, D. R., Dale, B. C. & Robinson, C. K. Late Classic Period Hohokam Households: A Preliminary View from Pueblo Grande. *People Who Lived in Big Houses: Archaeological Perspectives on Large Domestic Structures* 27–45 (1996).
70. Earle, T. Wealth Inequality and the Pristine Hawaiian State: A Political Economy Approach. *Origini--Preistoria e protostoria delle civiltà antiche* **XXXVIII,** 195–210 (2017).
71. Flannery, K. V. & Marcus, J. *Excavations at San José Mogote 1: The household archaeology*. **1,** (University of Michigan Museum, 2005).
72. Turner, B. L. & Sabloff, J. A. Classic Period collapse of the Central Maya Lowlands: Insights about human–environment relationships for sustainability. *Proceedings of the National Academy of Sciences* **109,** 13908–13914 (2012).
73. Bocinsky, R. K., Rush, J., Kintigh, K. W. & Kohler, T. A. Exploration and exploitation in the macrohistory of the pre-Hispanic Pueblo Southwest. *Sci Adv* **2,** e1501532 (2016).
74. Pauketat, T. R. & Lopinot, N. H. Cahokian population dynamics. *Cahokia: Domination and Ideology in the Mississippian World* 103–123 (1997).
75. Milner, G. R. Mississippian Period Population Density in a Segment of the Central Mississippi River Valley. *Am. Antiq.* **51,** 227–238 (1986).

76. Milner, G. R. *The Cahokia Chiefdom: The Archaeology of a Mississippian Society*. (University Press of Florida, 2006).
77. Lawrence, D., Philip, G., Hunt, H., Snape-Kennedy, L. & Wilkinson, T. J. Long Term Population, City Size and Climate Trends in the Fertile Crescent: A First Approximation. *PLoS One* **11,** e0152563 (2016).
78. Hodder, I. *Çatalhöyük excavations: the 2000-2008 seasons*. (British Institute at Ankara, 2014).
79. Bogaard, A. *et al.* The Bandkeramik settlement of Vaihingen an der Enz, Kreis Ludwigsburg (Baden-Württemberg): an integrated perspective on land use, economy and diet. *Germania : Anzeiger der Römisch-Germanischen Kommission des Deutschen Archäologischen Instituts* **94,** 1–60 (2017).
80. Neimenggu Wenwu Kaogu Yanjiusuo. Keshiketeng Qi Nantaizi Yizhi. in *Neimenggu Wenwu Kaogu Wenji* (ed. Wei, J.) **2,** 53–78 (Zhongguo Dabaike Quanshu Chubanshe, 1997).
81. Shelach, G. Economic adaptation, community structure, and sharing strategies of households at early sedentary communities in northeast China. *Journal of Anthropological Archaeology* **25,** 318–345 (2006).
82. Peterson, C. E. & Shelach, G. Jiangzhai: Social and economic organization of a Middle Neolithic Chinese village. *Journal of Anthropological Archaeology* **31,** 265–301 (2012).
83. Neimenggu Wenwu Kaogu Yanjiusuo. *Baiyinchanghan: Xinshiqi Shidai Yizhi Fajue Baogao*. (Kexue Chubanshe, 2004).
84. Ma, X. *Emergent Social Complexity in the Yangshao Culture: Analyses of Settlement Patterns and Faunal Remains from Lingbao, Western Henan, China (c. 4900–3000 BC)*. **1453,** (Archaeopress, 2005).
85. Gansu Sheng Wenwu Kaogu Yanjiusuo. *Gansu Dadiwan: Xinshiqi Yizhi Fajue Baogao*. **1 & 2,** (Wenwu Chubanshe, 2006).

86. Yellen, J. E. *Archaeological approaches to the present: models for reconstructing the past*. **1,** (Academic Press, 1977).
87. Shandong Sheng Wenwu Kaogu Yanjiusuo, and Zaozhuang Shi Wenwuju. *Zaozhuang Jianxin—Shishixi Shidai Yizhi Fajue Baogao*. (Kexue Chubanshe, 1996).
88. Zhongguo Shehui Kexue Kaogu Yanjiusuo. *Mengcheng Yuchisi—Wanbei Xinshiqi Shidai Juluo Yicun de Fajue yu Yanjiu*. (Kexue Chubanshe, 2001).
89. Kurz, S. Zur Genese und Entwicklung der Heuneburg in der späten Hallstattzeit. in *'Fürstensitze' und Zentralorte der frühen Kelten : Abschlusskolloquium des DFG-Schwerpunktprogramms 1171 in Stuttgart, 12.-15. Oktober 2009. Teil II* (ed. Krauss, D.) 239–256 (Konrad Theiss, 2010).
90. Shandong Daxue Lishixi Kaogu Zhuanye Jiaoyanshi. *Sishui Yinjiacheng*. (Wenwu Chubanshe, 1990).