UNIFORMITY OF EXPONENTIAL PARAMETER FOR MORAL VIEWS AND VALUES IN HUMANS

ZULFIKAR MOINUDDIN AHMED

We report here the phenomena that is a great surprise. For any moral value the mean and standard deviation across 49 countries are $\bar{\lambda} = 0.49$ and $\sigma(\lambda) = 0.18$. Thus cross-country variation is bounded tightly.

But what is even more stunning is that for a given country, there is an even stronger bound: the same exponential parameter characterises *all* the values.

1. DATA

	B_COUNTRY	violence	pchild	pwife	terrorism	family	friends	work	religion
1	20	-0.701	-0.695	-0.702	-0.700	-0.702	-0.703	-0.701	-0.701
2	32	-0.461	-0.461	-0.460	-0.462	-0.462	-0.459	-0.462	-0.458
3	36	-0.497	-0.496	-0.494	-0.500	-0.495	-0.497	-0.497	-0.497
4	50	-0.942	-0.940	-0.942	-0.938	-0.940	-0.940	-0.933	-0.934
5	68	-0.481	-0.482	-0.481	-0.482	-0.482	-0.485	-0.481	-0.481
6	76	-0.346	-0.347	-0.346	-0.344	-0.344	-0.346	-0.345	-0.348
7	104	-0.784	-0.797	-0.787	-0.793	-0.802	-0.795	-0.786	-0.790
8	152	-0.384	-0.383	-0.383	-0.386	-0.384	-0.385	-0.387	-0.383
9	156	-0.532	-0.530	-0.530	-0.540	-0.531	-0.535	-0.532	-0.533
10	158	-0.630	-0.629	-0.633	-0.632	-0.626	-0.629	-0.631	-0.630
11	170	-0.392	-0.395	-0.395	-0.390	-0.393	-0.392	-0.395	-0.391
12	196	-0.475	-0.471	-0.474	-0.474	-0.473	-0.474	-0.473	-0.468
13	218	-0.347	-0.348	-0.351	-0.350	-0.349	-0.348	-0.349	-0.348
14	231	-0.375	-0.374	-0.379	-0.375	-0.377	-0.378	-0.380	-0.385
15	276	-0.849	-0.854	-0.846	-0.859	-0.849	-0.858	-0.858	-0.846
16	300	-0.616	-0.621	-0.624	-0.613	-0.608	-0.618	-0.620	-0.617
17	320	-0.320	-0.318	-0.320	-0.319	-0.319	-0.319	-0.319	-0.319
18	344	-0.501	-0.501	-0.503	-0.503	-0.500	-0.506	-0.502	-0.500
19	360	-0.514	-0.514	-0.513	-0.512	-0.516	-0.514	-0.514	-0.513
20	364	-0.498	-0.500	-0.501	-0.501	-0.498	-0.500	-0.499	-0.500
21	368	-0.445	-0.442	-0.443	-0.444	-0.443	-0.445	-0.445	-0.444
22	392	-0.611	-0.608	-0.594	-0.609	-0.606	-0.611	-0.608	-0.608
23	398	-0.371	-0.369	-0.370	-0.371	-0.371	-0.368	-0.372	-0.369
24	400	-0.487	-0.485	-0.486	-0.486	-0.488	-0.488	-0.484	-0.487
25	410	-0.575	-0.574	-0.575	-0.572	-0.571	-0.571	-0.575	-0.573
26	417	-0.340	-0.339	-0.338	-0.337	-0.338	-0.339	-0.336	-0.336
27	422	-0.535	-0.534	-0.537	-0.535	-0.536	-0.532	-0.533	-0.535
28	446	-0.536	-0.536	-0.533	-0.536	-0.537	-0.538	-0.537	-0.537
29	458	-0.253	-0.255	-0.254	-0.254	-0.254	-0.254	-0.254	-0.254

30	484	-0.309	-0.308	-0.307	-0.309	-0.309	-0.306	-0.307	-0.309
31	554	-0.508	-0.509	-0.504	-0.508	-0.509	-0.507	-0.508	-0.505
32	558	-0.344	-0.344	-0.343	-0.343	-0.342	-0.341	-0.343	-0.343
33	566	-0.491	-0.491	-0.493	-0.490	-0.490	-0.491	-0.490	-0.492
34	586	-0.365	-0.365	-0.365	-0.367	-0.365	-0.365	-0.364	-0.368
35	604	-0.473	-0.470	-0.471	-0.471	-0.471	-0.469	-0.474	-0.468
36	608	-0.185	-0.187	-0.185	-0.186	-0.188	-0.186	-0.187	-0.185
37	630	-0.366	-0.366	-0.365	-0.368	-0.367	-0.366	-0.365	-0.367
38	642	-0.436	-0.434	-0.436	-0.440	-0.432	-0.433	-0.435	-0.434
39	643	-0.397	-0.396	-0.398	-0.397	-0.396	-0.397	-0.397	-0.398
40	688	-0.215	-0.217	-0.218	-0.215	-0.217	-0.216	-0.217	-0.217
41	704	-0.452	-0.455	-0.454	-0.454	-0.456	-0.453	-0.454	-0.454
42	716	-0.270	-0.267	-0.268	-0.269	-0.268	-0.268	-0.269	-0.268
43	762	-0.651	-0.641	-0.652	-0.648	-0.649	-0.647	-0.655	-0.646
44	764	-0.579	-0.578	-0.582	-0.577	-0.580	-0.584	-0.581	-0.580
45	788	-0.544	-0.547	-0.540	-0.544	-0.545	-0.545	-0.548	-0.548
46	804	-0.515	-0.513	-0.513	-0.511	-0.513	-0.511	-0.512	-0.511
47	818	-1.202	-1.219	-1.218	-1.212	-1.198	-1.215	-1.214	-1.216
48	840	-0.458	-0.459	-0.456	-0.456	-0.458	-0.459	-0.457	-0.458

2. Characterisation

One simple model might be to simply assign to every country a single λ for all values chosen from the approximate GHD, which will be close to $N(\mu = 0.49, \sigma = 0.18)$ and that is a simple parsimonious model for all values.

3. Uniformity for Child Values

There is an analogous regularity for importance of values for children, Q27–Q42 of World Values Survey. I will present the table next but it is a remarkable feature that there is a very slight difference in these: the distributions have $\bar{\lambda} = 0.468$ with variation in third decimal place rather than $\bar{\lambda} = 0.49$ and the standard deviation is slightly narrower at $\sigma\lambda = 0.159$ rather than $\sigma(\lambda = 0.18$. Otherwise similar in nature to the other values from the past section such as almost constancy of λ within country. And we also have goodness-of-fit average $\bar{r^2} = 0.69$.

We can draw the elementary inference that a complete universality is broken for λ and for all human values there will be variations.

4. Data

B_COUNTRY	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40	Q41	Q42
20	-0.701	-0.703	-0.698	-0.701	-0.699	-0.698	-0.699	-0.699	-0.702	-0.699	-0.702	-0.698	-0.700	-0.699	-0.695	-0.700
32	-0.459	-0.458	-0.463	-0.461	-0.459	-0.461	-0.461	-0.463	-0.460	-0.461	-0.463	-0.458	-0.461	-0.462	-0.461	-0.460
36	-0.494	-0.497	-0.499	-0.497	-0.497	-0.498	-0.498	-0.496	-0.497	-0.496	-0.498	-0.498	-0.496	-0.496	-0.501	-0.500
50	-0.942	-0.935	-0.927	-0.933	-0.937	-0.933	-0.935	-0.932	-0.924	-0.937	-0.936	-0.939	-0.931	-0.935	-0.943	-0.937
68	-0.484	-0.482	-0.481	-0.486	-0.485	-0.484	-0.484	-0.484	-0.482	-0.483	-0.482	-0.481	-0.483	-0.486	-0.480	-0.482
76	-0.349	-0.347	-0.347	-0.345	-0.345	-0.348	-0.347	-0.346	-0.346	-0.349	-0.350	-0.351	-0.346	-0.344	-0.346	-0.347
104	-0.791	-0.798	-0.794	-0.797	-0.793	-0.784	-0.786	-0.795	-0.792	-0.785	-0.791	-0.794	-0.801	-0.786	-0.797	-0.795
152	-0.383	-0.386	-0.386	-0.384	-0.385	-0.386	-0.385	-0.386	-0.384	-0.384	-0.383	-0.387	-0.385	-0.382	-0.385	-0.386
156	-0.534	-0.535	-0.539	-0.530	-0.535	-0.539	-0.532	-0.534	-0.535	-0.531	-0.536	-0.529	-0.531	-0.531	-0.534	-0.536
158	-0.628	-0.632	-0.629	-0.634	-0.631	-0.633	-0.630	-0.630	-0.634	-0.631	-0.626	-0.629	-0.632	-0.629	-0.627	-0.632
170	-0.392	-0.393	-0.392	-0.394	-0.393	-0.393	-0.390	-0.391	-0.394	-0.392	-0.390	-0.393	-0.393	-0.391	-0.391	-0.390
196	-0.471	-0.473	-0.471	-0.475	-0.473	-0.473	-0.473	-0.477	-0.474	-0.472	-0.473	-0.474	-0.475	-0.473	-0.475	-0.473
218	-0.346	-0.351	-0.347	-0.347	-0.347	-0.350	-0.349	-0.347	-0.349	-0.348	-0.346	-0.348	-0.348	-0.349	-0.349	-0.347
231	-0.379	-0.372	-0.383	-0.381	-0.381	-0.383	-0.380	-0.379	-0.376	-0.376	-0.376	-0.383	-0.381	-0.377	-0.377	-0.375
276	-0.859	-0.849	-0.851	-0.854	-0.860	-0.846	-0.844	-0.859	-0.838	-0.851	-0.853	-0.850	-0.863	-0.852	-0.856	-0.850
300	-0.619	-0.621	-0.614	-0.619	-0.631	-0.616	-0.621	-0.617	-0.627	-0.619	-0.617	-0.617	-0.623	-0.613	-0.618	-0.616
320	-0.318	-0.320	-0.319	-0.320	-0.319	-0.319	-0.319	-0.317	-0.319	-0.320	-0.320	-0.320	-0.318	-0.318	-0.320	-0.319
344	-0.505	-0.501	-0.504	-0.502	-0.506	-0.502	-0.499	-0.502	-0.503	-0.503	-0.500	-0.502	-0.504	-0.502	-0.499	-0.506
360	-0.514	-0.512	-0.513	-0.513	-0.512	-0.512	-0.512	-0.515	-0.511	-0.513	-0.512	-0.514	-0.514	-0.513	-0.514	-0.514
392	-0.617	-0.604	-0.604	-0.608	-0.610	-0.616	-0.600	-0.607	-0.618	-0.595	-0.608	-0.606	-0.604	-0.605	-0.618	-0.603
398	-0.370	-0.370	-0.370	-0.371	-0.371	-0.369	-0.369	-0.370	-0.371	-0.370	-0.370	-0.371	-0.370	-0.371	-0.370	-0.372
410	-0.575	-0.577	-0.576	-0.573	-0.576	-0.577	-0.576	-0.577	-0.573	-0.572	-0.574	-0.573	-0.575	-0.573	-0.576	-0.573
417	-0.338	-0.337	-0.339	-0.338	-0.339	-0.338	-0.341	-0.337	-0.336	-0.337	-0.338	-0.340	-0.338	-0.338	-0.339	-0.339
446	-0.536	-0.537	-0.536	-0.538	-0.536	-0.537	-0.539	-0.539	-0.537	-0.535	-0.538	-0.539	-0.536	-0.535	-0.538	-0.536
458	-0.253	-0.254	-0.254	-0.254	-0.254	-0.255	-0.255	-0.256	-0.254	-0.254	-0.255	-0.254	-0.254	-0.254	-0.253	-0.254
484	-0.307	-0.306	-0.307	-0.308	-0.307	-0.308	-0.307	-0.307	-0.307	-0.307	-0.308	-0.308	-0.308	-0.308	-0.307	-0.308
554	-0.506	-0.510	-0.506	-0.504	-0.510	-0.505	-0.504	-0.504	-0.509	-0.507	-0.505	-0.507	-0.507	-0.508	-0.510	-0.504
558	-0.342	-0.345	-0.342	-0.342	-0.341	-0.343	-0.343	-0.344	-0.344	-0.342	-0.343	-0.343	-0.346	-0.342	-0.344	-0.344

566	-0.490	-0.487	-0.490	-0.491	-0.491	-0.490	-0.488	-0.489	-0.493	-0.487	-0.492	-0.491	-0.488	-0.486	-0.492	-0.491
586	-0.366	-0.365	-0.365	-0.365	-0.364	-0.365	-0.364	-0.365	-0.366	-0.366	-0.366	-0.364	-0.365	-0.365	-0.364	-0.366
604	-0.469	-0.472	-0.470	-0.471	-0.470	-0.472	-0.470	-0.472	-0.472	-0.470	-0.471	-0.469	-0.470	-0.472	-0.468	-0.470
608	-0.186	-0.185	-0.186	-0.185	-0.186	-0.186	-0.186	-0.188	-0.186	-0.186	-0.186	-0.186	-0.186	-0.187	-0.187	-0.185
630	-0.368	-0.365	-0.367	-0.367	-0.365	-0.367	-0.365	-0.370	-0.367	-0.368	-0.367	-0.366	-0.367	-0.368	-0.367	-0.366
642	-0.434	-0.435	-0.434	-0.438	-0.435	-0.438	-0.436	-0.438	-0.435	-0.437	-0.434	-0.434	-0.438	-0.435	-0.436	-0.436
643	-0.399	-0.396	-0.397	-0.397	-0.397	-0.397	-0.396	-0.397	-0.395	-0.398	-0.398	-0.397	-0.398	-0.397	-0.395	-0.397
688	-0.218	-0.216	-0.218	-0.215	-0.218	-0.217	-0.217	-0.218	-0.216	-0.216	-0.218	-0.217	-0.217	-0.217	-0.216	-0.218
704	-0.452	-0.454	-0.454	-0.453	-0.454	-0.454	-0.455	-0.455	-0.453	-0.455	-0.453	-0.453	-0.453	-0.454	-0.453	-0.453
716	-0.270	-0.269	-0.269	-0.268	-0.269	-0.269	-0.268	-0.270	-0.269	-0.269	-0.268	-0.268	-0.270	-0.269	-0.269	-0.269
764	-0.579	-0.577	-0.577	-0.583	-0.585	-0.581	-0.581	-0.580	-0.579	-0.582	-0.582	-0.585	-0.583	-0.578	-0.584	-0.583
792	-0.466	-0.464	-0.465	-0.468	-0.467	-0.468	-0.470	-0.470	-0.466	-0.467	-0.467	-0.469	-0.472	-0.469	-0.465	-0.467
804	-0.510	-0.511	-0.515	-0.512	-0.512	-0.510	-0.513	-0.513	-0.514	-0.514	-0.513	-0.513	-0.515	-0.513	-0.511	-0.512
840	-0.455	-0.459	-0.456	-0.458	-0.457	-0.454	-0.455	-0.455	-0.456	-0.455	-0.455	-0.457	-0.454	-0.458	-0.457	-0.454