MAY 29 2021: ZULF'S MORAL SPECIAL FUNCTION

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We claim discovery of a special function that we will call *Zulf's Moral Special Function* and leave alternative analysis putting it in the context of other Special Functions later.

$$Z(u;a) = \int_a^{a+iu} e^{z^2} dz$$

We will consider pure jump Levy processes with characteristic functions as follows.

Suppose our linear fit for biased Bernoulli lead to log-fit of line $L(x) = c_2 x + c_1$.

Let

$$a = (c_2 - c_1)/2$$

and

$$b = (-c_2 - c_1)/2$$

Then let

$$\log \varphi(u) = Z(u;b) - Z(u;a) - iu[e^{a^2} - e^{b^2}] \tag{1}$$

We claim this is a very good general form for pure jump Levy process characteristic function for models of moral distribution evolution for human race.

1. Fits of Coefficients c_2, c_1 for Q177-Q195

These are actual fits to data for coefficients for the Levy Process Moral Model. We will assess the model further in the future.

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	var	c2	c1
1	Q177	1.0295	0.7412
2	Q178	0.9239	1.0327
3	Q179	1.0520	1.5664
4	Q180	0.9325	1.5123
5	Q181	1.0025	1.5207
6	Q182	1.2403	0.4892
7	Q183	1.0859	0.8628
8	Q184	1.2195	0.5917
9	Q185	1.0629	0.3027
10	Q186	1.1871	0.3252
11	Q187	1.1174	1.1208
12	Q188	1.1975	0.5310
13	Q189	1.1860	1.3365
14	Q190	1.0970	0.8541
15	Q191	0.8999	1.7826
16	Q192	1.0982	1.4021
17	Q193	1.2007	0.5476
18	Q194	0.9382	1.6307
19	Q195	1.1902	0.4107