

Never Take Statistics From a Stranger: The First Lesson for the Children of Our Representative Sample Democracy

One of the saddest duties faced by parents is that of teaching our young innocents that not every smiling face and hand outstretched with candy belongs to a friend. Now, in the life of our nation, another of those sad lessons is due. Once, when we were a younger and much smaller nation, we were a representative democracy (still earlier, I'm told, we were a constitutional republic, but that was long ago and the facts are shrouded in mystery). Though we still fly the tattered symbols of that revered past, its not difficult to see, beyond them, the outlines of our true government. We are evolving a more efficient form of governance for our unwieldy pluralistic society of more than a quarter billion souls: a representative sample democracy.

It is only the outlines we see clearly though; the details, oh those details, of our statistically driven government remain obscure. What do the focus groups say: troops or bombs? But what are their demographics, are they truly representative samples of the public? There are a million marchers on the Mall? OK, but how many marchers does it take to sever an inalienable right, and must they be enumerated, or will statistical estimates of their number suffice? At what approval rating in opinion polls does an office holder become exempt from the law, and at what confidence interval? In fact, what about sample size? What is the mean, the standard error of the mean, and the standard deviation of our policy decision? Questions we all should be interested in.

Statistical analysis has become our new civics. But like the old civics, we know less of it than we like to think. Many of us believe "the mean" is a reference to rich Republicans, that the error of the mean is greed, and standard deviation is...well, behavior we had best learn to like in this pluralistic society of ours.

We could give our kids a healthy dose of statistical analysis in school, maybe add it to the exit exams in a few years; but then, in a few years it may all be taken care of for us by professionals.

As progress in statistical analysis continues, we will need only one political party, call it the Demographic Party, as its candidate could be scientifically chosen to represent us all (kind of a diversity through unity concept). The statistical selection process would, of course, supplant our outmoded electoral process.

Many people might be saddened at the thought of losing that time honored tradition, but the Demographic Party Convention could be retained to provide some of the old time flavor as statisticians from random locations around the country meet to argue such critical platform issues as chi squares and t-tests. And when the experts select a President, you'd better believe that America looks like him.

But until that glorious day, it remains the duty of parents to teach the children of our evolving representative sample democracy this lesson:

Never take statistics from a stranger!

Bill Kitchens

My wild idea of a representative sample democracy first appeared in a newspaper in 2000, but it has become more timely as time has worn on. I must admit to a slight disenchantment with statistical probability as I grow older however. Purely by chance one day, years ago, I happened to notice the nearly 100 percent probability that I would find what I was looking for in the very last place I looked. In fact, that seemed to be a nearly uniform experience. Amazing! In more recent days however, I find that statistical probability shrinking dramatically. The reason for the decline in statistical confidence is that now, after a few minutes of looking, I've forgotten what I was looking for. That just goes to show you that good statistics depend on a good sample.

Bill Kitchens