

Victoria BC, 30 July 2005

Dear Demetris,

Attached, you will find a treatise on my experiment with the transition from 'improbable' to 'impossible' which, as I have already hinted, you may repeat to verify my result.

However, to stick with the 'height of a person' example, I am going to try something that you may find more personally relevant. I make only one assumption: that you are about 190 cm tall.

In the USA persons' heights are rounded to whole inches and, for instance, your driver's license would give your height as 6'3". In Canada heights are rounded to whole centimeters, so 6'3" would be converted to 190 or 191 cm. The 'correct' value might be difficult to decide, because it could be closer to one or the other, depending if your measurement were taken in the morning or in the evening.

But let's say that some perfectionist country would try to give persons' heights in microns and go about it really scientifically: they would take a large number of your measurements (with an electron microscope, I suppose) and would come up with a histogram, because the measurements would vary depending on the temperature, your breathing, etc. Then they would fit a distribution model (it probably would be Normal) and take its average as the 'true' value.

I claim that it would make no sense to 'estimate' probabilities of your heights being, say, 50 or 5 cm, or 5 or 50 m, even though the model can give their precise values. I thus consider probabilities in those ranges irrelevant: it is physically impossible for you to shrink or stretch so much - the model simply loses meaning within a few centimeters and it does not matter that there are no fixed points where this happens: it surely does so before it reaches the above figures.

Actually, your exact height cannot be ascertained even for any given specific time instant when it obviously is fixed - see my demonstration overleaf, which also (I hope) demonstrates my above point.

With kind regards to you and Anna,

A handwritten signature in black ink, appearing to be 'JL' or similar, written in a cursive style.

