pair o' dice no paradox, men

The Urth list — 1 messages, 1 voices, 15 Dec 2001

https://urth.darkrealm.vip/thread/urth/2873

Michael Andre-Driussi — 15 Dec 2001, 15:43

Thanks Sunanda!

Joel Sieh also caught this and I thought he and I had posted to the list! Here is my quote and response to him.

> Joel Sieh wrote:
> 6 different throws on each of two sided dice gives us 36 possible throws.
>
> Possible combinations equalling 7:
>
> Die 1 Die 2
> 1 6
> 2 5
> 3 4
> 4 3
> 5 2
> 6 1
>
> Total combinations: 6
> Probability = combinations equalling 7 / all possible combos
> = 6 / 36 = 1 / 6 = 16.6%.
>
> Following these calculations, rolls of 2 or a 12 would each have a probability 1 / 36. I agree that these are much less probable than rolling a 7 (the most probable roll with two six sided dice), but it seems that 1 / 6 is still against the odds, if you consider "against the odds" to mean less than 50%.
>
> Wow, you are right!
>
> What was I thinking?
>
> Well, I was working off the fact that in games involving two dice, 7 is the middle of the bell curve. I was erroneously thinking in terms of the odds of rolling >= 7 or <= 7 (which is a 58% probability), rather than just 7.
>
> With regard to the text I was also puzzled as to why a 7 would mean death, when, for example, there are 10 men. Up until the moment I typed it in, I sort of thought there were only 7 men, and the dice were saying how many would die (all, in this case); but the dice tell a group fate, not a fractional amount (all die or none die). On my first reading I thought he was supposed to roll a number related to the number of crewmen, like, say = 8 (42% chance).
>
> Even as I was typing it in this evening, and there was a glimpse of the truth (that rolling a 7 really is a 1/6 chance), I veered away from this

> and into the notion "Why not just use one die, if one-in-six is the
> desired probability -- then the roll of a =1= would make the whole thing
> quite obvious." And the waste of a perfectly nice bellcurve (as opposed
> to the "flat" curve of a single die)!
>
> (The reason why one-in-six is important is made clear in the text: that is
> the fatality rate for sunmen.)
>
> The reason why a 7 means death is because that is the only way to squeeze
> out a 1 in 6 chance out of two dice!
>
> Anyway, I was wrong. Thanks for correcting me! (I still wonder why
> Harness would choose to use =two= dice when one die would work better.
> Well, work better for =me=, at least!)

Addendum: we both arrived independently at the notion that Harness is probably talking about the dice game "craps," which, in the pre-wargaming/pre-rpg world, was the most common exposure to dice games.

=mantis=

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