## The purpose-driven iPod: Chance is part of the plan

## by David W. Ussery in the September 23, 2008 issue

By chance, while in Scotland I picked up a copy of David Bartholomew's book *God*, *Chance and Purpose*: *Can God Have It Both Ways?* It offers a wonderful look at the role of chance in science for people interested in science and theology.

Bartholomew, a professor of statistics, argues that chance is a real part of nature and is not necessarily the enemy of purpose; in fact, chance can be thought of as an integral part of God's creation. This claim contrasts with the view that randomness does not really exist and that things must have been designed by an Intelligent Designer or determined by a God who is in total control.

The author offers a clear description of chance and probability, and he looks at how humans use the notion of chance (for example, in games of chance) and then at how God might use chance.

To explore the possible role of chance in making music, Bartholomew gives a link to a Web page that features a musical game for composing a minuet based on the random throw of a pair of dice. There are more than a trillion possible combinations.

By chance I have found that my iPod seems to have moods. When I put it on shuffle mode, sometimes it plays mostly jazz, sometimes mostly classical songs, sometimes mostly preclassical Gregorian chants and Renaissance music. This might not be that surprising, since I have loaded roughly an equal amount of each of these three kinds of music. However, it does seem to me that sometimes my iPod knows which music I want to hear.

The music I've added most recently is some Thai jazz, played by Thailand's King Bhumibol. I listen to my iPod for a few minutes, and one of these new songs starts playing. What are the odds of the iPod choosing this particular play list at any given point in time? This can be easily calculated. I have 9,073 of my top-rated songs to be shuffled. The chances of any one given order is incredibly small—smaller than 1 divided by the number of particles in the universe. Some might argue that this means divine intervention is necessary, because the probability is so small. However, I view this as merely meaning that any given shuffling is extremely unlikely, though one order has to be chosen.

Of course, God could well play a role in choosing which songs I listen to. But my point is that it is not always necessary to invoke divine action to explain an unlikely event.

By chance, while visiting family in Atlanta, I came across a copy of Steven Levy's book *The Perfect Thing*: *How the iPod Shuffles Commerce*, *Culture*, *and Coolness*. I was struck by Levy's chapter on shuffling, in which he says that many people are convinced, like myself, that their iPods in shuffle mode do not act randomly. Apparently the human brain is made to find patterns, and sometimes we are so good at finding patterns that we can see some that really aren't there.

By chance I noticed that the cover of Cardinal Christoph Schönborn's book *Chance or Purpose*: *Creation, Evolution, and a Rational Faith* not only resembles Bartholomew's book but uses the same picture of a spiral galaxy on the cover. The title of Schönborn's book implies that one is faced with a choice—either one believes in random chance or in purpose—though a close reading of his book reveals that the two categories are closer than might be thought.

Schönborn also considers the place of chance in music. "We marvel at Mozart, we love and revere him. It would not occur to anyone that these pieces of music had put themselves together." And yet the Web site Bartholomew points to shows that it is quite easy to generate a huge number of different minuets from a few basic parts that are combined together in novel ways by a random throw of the dice. Perhaps this is a physical mechanism for expressing what Schönborn calls God's "inexhaustible creativity." Identifying a physical mechanism for how something is done does not necessarily exclude the divine from being involved.

Are all the above-mentioned events random, without purpose? Of course, I think not. But that does not mean that these events did not have in them some underlying element of random chance. Purpose and chance do not necessarily have to be opposites.

I am one who is trying to put purpose and meaning to events that happen to me in diverse places, although I freely admit that there could well be a larger plan, outside of my control.