AN IRISHMAN'S DIARY

Long, long ago, the Murdoch parents gazed into the pram where little Brian lay, his face contorted in concentration. Ah, they said proudly to one another; ah, and then they made those revolting gooey noises that adults are wont to make in the company of small incontinent offspring. And just think, murmured one Murdoch parent to the other: soon the little fellow will be walking. Ah, they repeated together, and little Brian's face wrinkled up even more, so that it resembled an empty prune skin. Gootchy gootchy goo, cried a parent, mistaking the look of concentration; 'oo's a naughty ickle boy, doing number twos in his nappy wappy?

But young Brian was doing no such thing. Young Brian was thinking about walking. Not the physical feat of walking; for a child like Brian, that would have been tiresome, trivial stuff. No no, what interested him were the mathematics involved in random walks; and so while his parents simpered, his brow puckered in a frown of deep mathematical contemplation.

'Oo's a good ickle boy? Gutchy gutchy goo.

Random Walks

The foregoing might, or might not have happened. There is no documentary evidence as to when Brian Murdoch became interested in the mathematics of random walks. It seems, though, that when one takes an interest in the mathematics of random walks, the condition becomes permanent. Because after he did his BA in maths at Trinity, Brian went off to Princeton where he did a PhD in random walks.

Random walks, egad, I murmured; dear heaven above. A PhD on random walks. Whatever next? PhDs on the colour of

footballers' socks, PhDs on nail varnish tints as used by the teenage natives of Ulan Bator, possibly even the master's on scout camps in Powerscourt? Full of these speculations, I rang Brian up. What, I said with a testy sneer in my voice, the kind of testy sneer which would make Henry Kissinger break out in a sweat and tremble, what can be mathematical about walking? I mean, for heaven's sake, and so on.

Sighed Patiently

Brian sighed patiently. When you've given your life ever since pramhood to the mathematics of random walkings, you get used to being misunderstood. "It is," he conceded, "very hard to explain, even to fellow mathematicians, never mind to lay people."

Poo, I cried, stuff and nonsense; what can be remotely mathematical about having a ramble in the countryside? Eh? Got you there, haven't I? Hey? Go on, admit it. Game set and match, checkmate, a clean sweep in one. If Brian had wept at this point, I would not have blamed him. All his life has been like this, ever since his drooling parents were gutchy gutchy gooing.

"You see," he said slowly - I could sense him shaping his words with awful care, as if he were talking to a very old, very deaf person, which I think is generally considered a fair comparison with me on one of my better days - "what we are dealing with is a question of probabilities. Now, for example, imagine we're talking about a man who's hopelessly drunk"- well he could hardly have chosen a better example when talking to the Diary, drunk every morning by 10 o'clock - "and he doesn't know what direction he's going in and can't remember what direction he last stepped in. He can go forwards, backwards, left or right; that's where the mathematics of probabilities come in."

Harmonic Functions

Ah, I ahhed.   Ah.   And then assuming daylight had entered my brain, when in fact it had shut tight as an anemone, he started telling me about discrete harmonic functions.   Hoy, I interrupted, hoy, and so stilled the flow.

"Yes, well, I did warn you there's no simple way of explaining.   And our random walks are not limited to a two-dimensional plane.   They can be in three dimensions, or, if you can grasp this, four dimensions, or five."   Well, even my simple mind can grasp that speculations concerning four or five dimensions are the kind of thing to give you vertigo. "For example," added Brian cheerfully, "your drunk on a two-dimensional plane is certain to get to his destination over an infinite amount of time.   But a drunken spaceman, in three dimensions, is not.   And there's no simple way of explaining that either."

If you think that mathematicians engaged in the probabilities of random walks find themselves with no-one to talk to, you're right; so his fellow random walkers regularly keep in touch with their random walks theories.

Even at Trinity, where Brian is professor in charge of the sums department, there are few if any random walkers; his wife is not one, nor are his children.   So spare a thought, good reader, on this early day of a brand new, shining 1985, on the random walkers of this world.   Theirs is not an easy lot.

Kevin Myers

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