

MATHEMATICIAN FINDS
MAGIC IN NUMBERS

The Wizard

Strategy and luck – that’s what Richard Garfield, C’85, Gr’93, is all about. A former math professor, Garfield created a new genre of trading-card game when he released *Magic: The Gathering* in 1993. What began as a favorite of fantasy aficionados huddled at tabletops alchemized into a worldwide phenomenon that includes national tournaments and pro tours. Today, there are more than 6 million *Magic* players, and Garfield has started looking at the world of electronic gaming.

As a teenager, he discovered *Dungeons and Dragons*, a role-playing game popular in the 1970s, as well as chess, bridge and the Japanese strategy game *Go*. In his undergraduate days at Penn, Garfield never imagined making a career in games, which had always been a serious hobby. His plan was to work in academia. At first, he was drawn to English and physics before exploring music theory and philosophy. It was in junior year, however, that luck – set in play by an eagerness to try new things – led him into mathematics, which finally trumped every other major.

In hindsight, it seems a given that he would find himself engrossed in numbers. Like games, Garfield says, each math system has its own frame of rules, which structures what can be

proven. A great game also has a set of rules that players use to reach a preferred outcome, that is, to win.

Garfield merged his two great loves and created a runaway hit that combines the fantasy of *Dungeons and Dragons*, the strategy of chess and the logic of *Go* – with a little luck in the shuffle of the deck. In *Magic*, fictional creatures and their strengths are represented on cards. As in games like poker and pinochle, some cards trump others. But unlike those games, there is no standard deck, so players can buy and trade cards to build their creature collections and better their chances.

Each player – each wizard – begins the game with 20 life points. Although there are as many ways to play *Magic* as there are cards, the object is for players to use the creatures on their cards to defeat an opponent’s menagerie. The game ends when one wizard loses all life points.

Even though he is something of a mythic figure among *Magic* devotees, Garfield never stops challenging himself to find something to like in everything. He believes the first impulse one feels to dislike something can be willed to be otherwise, which means we have control over what we like and what we don’t. With that in mind, he will eat anything once –



Wizards of the Coast

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sometimes more than once – and will keep trying something until he grows to like it. So he’ll dine on natto (pungent, fridge-ripened beans, slightly bloated and covered in spider webs of slime) and those black, fermented, thousand-year eggs.

Like the endings in the games he loves, Garfield himself is the outcome of strategy and luck. The strategy? Being open-minded and going after new experiences. And the luck? Finding the math card in Penn’s deck. Suddenly, that magical mix landed him in a career he never thought he’d be lucky enough to have. Somehow, he must have played his cards right. ■