

D&D, Teaching Mathematics, and Beautiful Code

The big news of last week, at least in certain circles, is the death of Gary Gygax, creator of what was in my youth the hugely popular game Dungeons & Dragons, in the view of many a predecessor and inspiration for the modern computer gaming industry.

- [New York Times Obituary](#)
- [London Times Obituary](#)

Of course, online comics have had a field day with this, with some of the best tributes to Gygax that the medium can deploy. My personal favorite is *xkcds*:

- [Ultimate Game](#)

A deeper reflection on the history and influence of D&D can be found in Paul La Farge's 2006 essay in *The Believer* (from *Grand Text Auto*):

- Paul La Farge, [Destroy All Monsters](#)

Slightly closer to home, I came across this wonderful essay over the weekend, a critique by Paul Lockhart of current K-12 mathematics education in the US. The bottom line is that we fail miserably to teach mathematics in a way that highlights how interesting it is. For too many students, mathematics is drudgery and symbols manipulation without rhyme or reason. Part of the problem is that culture as a whole does not readily see mathematics as art, something that becomes obvious as soon as one really starts understanding the subject. For instance, most characterizations of proofs as given by mathematicians are couched in terms of aesthetic value judgments, by far the biggest hurdle in most standard maths undergrad curricula. (The answers to the question "But what is an acceptable proof?" I asked during my first year at McGill in retrospect shared much in common with answers to the question "but what is a nice painting?".)

- Paul Lockhart, [A Mathematician's Lament](#)

In a wonderful happenstance of synchronicity, I also came across the following blogpost by Kathy Sierra over at *Creating Passionate Users* (dated from almost two years ago, so nothing recent), about aesthetics in program development. It has been my personal belief for a while now that software development is very much like architecture, half technique and half art, and a well-developed aesthetic sense is in fact necessary for writing maintainable and correct code.

- Kathy Sierra, [Code Like a Girl](#)

Which leads to the obvious question: are we messing up CS education the same way we are messing up Maths education, and for similar reasons?