Happy New Year?

Each new year brings the promise of renewal, of repurposed goals, and recharged zeal. And, as best typified by resolutions to exercise, very little in the way of staying power. It is simply a sad fact that the transition from the late months of one year to the early months of the year following is little more than show. Most people may feel that this time it will be different but in reality emotional resolution last only as long as the blood is warm.

Nonetheless, the staff at Blog Wyrm wishes the world a truly happy new year. We pray that people will become a little more forgiving, a little more trusting, and a little more concerned with others. It is in that spirit of true hope and optimism that we bring our first set of articles of 2021.

[Aristotle to Digital](http://aristotle2digital.blogwyrm.com/?p=1114) launches into the new year with an open-ended exploration of category theory. Hailed as a revolutionary approach that knits together much of mathematics, category theory seems to deal not with the usual underlying objects of mathematical reasoning (e.g. numbers, sets, vectors, etc.) but with the relationships that one may conceive between various collections of these objects.

It seems to be in vouge to be down in the middleman. This so-called superfluous member of society is often disparaged and maligned. The fashionable opinion is that the internet has finally allowed us to be rid of this parasite. But, as this month’s [Common Cents](http://commoncents.blogwyrm.com/?p=823) demonstrates, the functioning of a middleman is one we not only need but we find in almost every nook and cranny of the world wide web.

The physical world is filled with systems in which lots of independent variables are in play. Whether it is the fact that we live in three dimensions, or that the most common materials around us are governed by many different variables, such as temperature and density, our models of nature require us to think about more than one thing at a time. Unfortunately, the idea of partial derivatives, which are the most common way of taming these systems is one of the more difficult things for students in the physical sciences to internalize. This month’s [Under the Hood](http://underthehood.blogwyrm.com/?p=1490) tries to rectify that by presenting a ‘complete’ look at partial derivatives.