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Why Smart People Buy Cubic Zirconia Engagement Rings



(Photo by Noam Galai/Getty Images)

By [Richard Muller](#), Professor of Physics at UC Berkeley, author of [Now, The Physics of Time](#), on [Quora](#):

Originally, the value of a diamond was set by its beauty, the wondrous colors that came out, especially in sunlight.

The value of a diamond today is set by the fact that it is expensive.

The color of a diamond and its sparkle is due primarily to its “dispersion”, that is, the fact that the colors of sunlight are separated by refraction in the diamond, so as it moves, different colors make it to your eye, even with tiny changes in orientation. Now there are artificial stones that have a higher dispersion, and are therefore (in the original sense) “more beautiful”. These stones (cubic zirconia is the most famous) are now denigrated as having “too much color”.

Why wouldn't you want a stone that was more beautiful than a diamond? The common reason is that cubic zirconia is cheap. Give someone an engagement ring of cubic zirconia and you are not demonstrating your willingness to be extravagant for your love. Diamonds are valued because of their cost.

These days, manufacturing of artificial diamonds has advanced, and you can buy a real (but manufactured) diamond for under half the price of a “natural” diamond. So jewelers look for the tiny flaws that characterize a natural diamond. To me this is totally ridiculous. Again, it indicates that the value of a diamond is no longer in its beauty, but in its rarity. And the rarity is kept high by the diamond merchants who severely restrict the market.

I've been told (although haven't independently verified it), that from time to time a new natural diamond mine is established by a person who is not part of the diamond cartel. The cartel then lets that person know that he had better not dump his new abundance of diamonds onto the market. If he does, then the cartel will flood similar (in color, defects, etc.) diamonds and cause that style to have little value. The cartel keeps the price up by keeping diamonds rare. They are not rare in their stocks, only in the marketplace.

When I taught optics at the University of California, Berkeley, I enjoyed making this point, and bringing in large (several centimeters in size) cubic zirconias cut in the classic shape of diamonds. I suggested to my

students that, when they get engaged, they not “waste” money on an expensive diamond ring, but show their high level of education and intelligence by giving a cubic zirconia ring. I’m delighted that, over the years, I got several emails from former students telling me that they did exactly that.

I’m old enough to remember when pearls were highly prized. But the culturing of pearls was mastered (putting little seeds into captive oysters) and that caused pearls to lose their luster (figuratively, not physically). I expect that will soon happen in the diamond market. The cost of manufacturing true diamonds will drop and the value of your heirloom will be only in its sentimental value, not in its monetary value.

The good news is that vapor deposition of diamond coatings is developing so rapidly that soon we will have scratch-proof glass (coated with diamond), scratch-proof cookery, and scratch-proof everything. There are a lot of diamonds in our future, and they will be cheap.