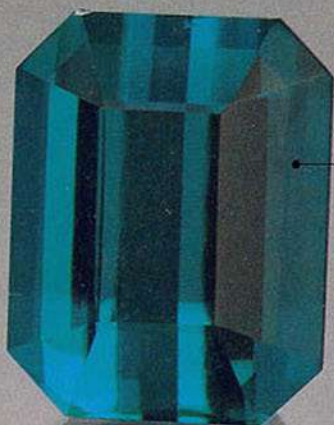


WHAT MAKES

A GEM

DESIRABLE?



“Why does this red tourmaline cost more than the ruby?” “What color of sapphire is best?” “Why can’t I find a two-carat tanzanite the color of this ten-carat one?” “Aren’t diamonds the rarest and most expensive gems?”

Perhaps it’s obvious that my favorite childhood book was *Tell Me Why*. Promoting colored gemstones has given me the opportunity to understand a lot of the public’s concerns, questions and misconceptions regarding colored gems. Collected here are some of the most commonly asked questions which I have tried to answer as simply and accurately as possible. If you would like to add to the list of questions, please send yours on!

What makes a gem desirable?

Several factors play a role in determining a gem’s value: beauty, rarity, durability, color and cut. If a gem is not beautiful, few people will desire it. We may be drawn by a gem’s beauty, but it’s rarity that gives a gem its exclusivity. The degree of cutting finesse makes the difference between a dull stone and a brilliant gem. Though color preferences are personal, there are, nevertheless, prices that correspond to particular colors. What may appear to the layperson to be subtle color differences can be translated into significant monetary differences. The gem may be beautiful, rare, intensely colored and well cut, but if it isn’t durable, it won’t endure to be passed down over the ages. The interplay of all these attributes determines the demand for a gem or its desirability.

Why is this rubellite (red tourmaline) \$2,000 and that ruby \$12,000? How are prices determined with colored gems?

Gemstone prices are determined like those of many other commodities: by supply and demand. Short supply and high demand equal high price; short supply and moderate demand equal lesser price, even for something that may be rare and/or of finer quality. Some gems, like ruby, are in limited supply and very high demand, so their price is high. Fine rubellite, though also in short supply, is not in as much demand, so its price is lower. A \$2,000 rubellite may be one of the finest examples of its kind yet it is available in an affordable price range.

The colored gemstone market isn’t controlled as the diamond market is. De Beers, the international diamond consortium, controls the diamond supply available over a certain time period while stimulating demand through marketing. Their market is therefore said to be artificially set, as they control actual output. There is no such centralized mining cartel controlling the supply of colored gemstones; their prices are an actual reflection of availability and demand.

A related factor is public awareness: a gem must be in abundant enough supply to create a demand. For example, prior to 1990, there wasn’t enough tanzanite to stimulate much public awareness. Then after a large yet limited find, a lot of tanzanite hit the world market at once, causing prices to drop and increasing public awareness. So presently fine tanzanite isn’t as abundant, but demand has increased. Consequently prices are increasing too.

Aren’t diamonds the rarest and most expensive gem?

Diamonds are not the rarest or costliest of the traditional gemstones. Rubies and emeralds



WHAT IF I SEE

FLAWS IN THE

STONE?

Upper: This 138-carat richly colored rubellite tourmaline is considered very unusual for its size, beautiful color and extreme internal clarity. Gem from Cynthia Renée Co.; photo by Weldon.

Lower: A particularly lush example of the blue-green tourmaline called indicolite. Gem from Cynthia Renée Co.; photo by Weldon.

Tell

A COLORED GEMSTONE

Me

QUESTION-AND-ANSWER GUIDE

Why!

CYNTHIA R. MARCUSON
CYNTHIA RENÉE CO.

are rare, and comparable gems of five or more carats can easily surpass diamonds in price.

I like the general look and size of this tsavorite. What do I do next?

Start looking at the gem more closely. By eye, evaluate the Four Cs—color, clarity, cut and carat weight. Then ask to examine the stone under a microscope.

What if I see flaws in the stone?

What may look like a flaw in a gemstone is actually an inclusion—a small amount of gas, liquid or mineral matter that is trapped in the stone as it's being formed geologically. While in diamonds, inclusions can detract from value, we hope to see inclusions in colored gemstones, as they confirm that the gem is natural, not synthetic, and can also indicate what part of the world the stone is from, a fact which sometimes plays a big part in pricing.

I want a flawless sapphire.

Since the presence of inclusions in colored gems doesn't detract from their value as it may in diamonds, what's more important to consider is the type and position of whatever inclusions there are and if their presence creates a structural defect that will affect durability. A diamond is mostly carbon. That's very simple. But most colored gemstones have long lists of chemical ingredients and, therefore, much more opportunity for internal inclusions to be caught up, leaving a trace of the gem's liquid past.

Flawless colored gemstones may bring a disproportionately higher price due to their extreme rarity. If there are no inclusions, I sometimes wonder if the gem is natural and not artificial. Some gems, such as emeralds and red tourmalines, are allowed inclusions. Others, such as aquamarine and kunzite, should be clean or they will bring a much lower price.

Why are there flaws in this red tourmaline and not in the green?

Due to the geology of the gem deposit and crystal chemistry, red and pink tourmalines are rarely found without inclusions, and green tourmaline is typically eye-clean. It is not known exactly why this is. It is just one of nature's mysteries.

The last Empress Dowager of China requested the intermediate, included grades of pink tourmaline as they more "readily showed nature's handiwork and clean gems could be made by man."

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Peridot's beauty tends to be for more sophisticated gem palettes. Gems from Cynthia Renée Co.; photo by Weldon.

Which color is best?

Color preferences vary with the individual. What moves one person may not stir another. Nevertheless, there are trade standards for preferred colors which translate into varying prices. Buy the color that speaks to you, but buy from a professional who is familiar with the colored gemstone market, has your interests at heart and can advise you accordingly.

Diamonds are graded according to absence of color. Colored gemstones are more complex, and several colors may be present in one gem in varying intensity. What may seem like slight differences in these colors may have a great impact on price.

What color of blue is best in sapphire?

Darker is better...to a point. A sapphire can become too dark, or oversaturated, in color. I advise staying away from the "inky blues," but there is a range of beautiful blues and, like selecting a mate, the choice is very individual. I tend to like a slightly lighter blue while my partner wants a blue to be as dark as it can be without being inky. We're both right.

For years, uninformed salespeople have been telling the public that dark is good because that is what is most available to sell. Let your heart decide—Which is prettier: a sapphire that is a bright blue or one reminiscent of ink? I want a blue sapphire to be blue and not mistaken for black onyx.

So it's not always true then that the darker the stone, the better?

Only to a point. It's like turning the contrast control on your television. Darker makes for a clearer picture until it becomes too dark and eventually unrecognizable.

What about some stones being treated?

No gems, whether colored, diamond or pearl, come out of the ground looking like they do in a piece of jewelry. Faceting gems is a part of the enhancing treatment that goes into bringing unformed gems to market standards. Sometimes we go a bit further with this fashioning process and subject the gem to heating, irradiation or other permanent color enhancement techniques.

Have you ever seen a red sheep, white flax or a purple cow? I haven't either, yet we consider crimson wool, white linen and blue suede to be natural materials. For centuries gemstones have been processed in bringing them to the Jeweler. Sapphires have been heated since Marco Polo's time. If we didn't heat sapphires, there would be very few available and their prices prohibitive. It's only when these treatment processes are used in misrepresenting a gem that they are considered a problem.

But isn't tanzanite semiprecious?

Precious and *semiprecious* are outdated marketing terms which in no way reflect the rarity, or preciousness, of a particular gemstone. Trying to create higher prices for ruby, sapphire and emerald, marketers described them as precious to the general public, thereby relegating all other gems—even though some might be more rare and beautiful—to the semiprecious category. Compare a top-quality five-carat tanzanite, which is very rare, to a mediocre emerald, which isn't anywhere near as rare or beautiful. How can one be precious and the other semiprecious? We refer to them all simply as colored gemstones.

Isn't a synthetic a "natural" gem?

Synthetics mimic the chemistry of a natural gemstone found in nature. But, they are not the same as the naturals which form over the vastness of geologic time and of which we have a finite supply. Since synthetics are made in laboratories, rarity does not figure into their value.

Spinel— isn't that synthetic?

Spinel can be an incredibly beautiful gemstone! Probably because it was one of the first gems synthesized, people don't realize it also occurs naturally. In Great Britain's crown jewels, the Black Prince's Ruby is really a spinel. Before the science of gemology evolved, spinel was often confused with ruby. Though their chemical compositions are similar and they

often are found in the same deposits, spinel can be much brighter than ruby—some of the red ones look almost battery-powered! Think of ruby as red velvet and spinel red satin. But spinel isn't just red, it's also typically seen in various shades of pink and rose and blue, though the blues do not mimic blue sapphire as the red mimics ruby.

As a gemstone dealer, I feel spinel's low price does not reflect its great beauty and rarity.

If spinel is cheaper than ruby, why aren't there more of them?

A spinel will be less money than an equivalent quality ruby, but fine spinels aren't easy to find. With gemstones, prices are set by supply and demand: low supply and high demand equal high prices, as in ruby. Low supply and low demand equal lower prices, as in the equally rare but less expensive red spinel.

Why don't you have any alexandrite?

Alexandrite is an extremely rare gemstone that is very difficult to obtain in sizes over one carat. It is rarely found in finer qualities, so I choose not to stock it. I buy fine alexandrite when I see it; it's just that I rarely do.

I want a two-carat tanzanite the color of my ten-carat one.

Think of the ocean. A cupful of seawater is much lighter than the whole sea, isn't it? The mass of the sea concentrates the dark color. It's the same in many gemstones; larger size helps to concentrate the color. I'll get you the finest color two-carat tanzanite I can; but it won't exactly match this fine larger one.

How can a small aquamarine cost more than a big one?

Look at differences in color: the one-carat gem is probably darker in color than the eight-carat stone. Since a one-carat aqua in the very dark color is quite rare, it is \$800 per carat. The eight-carat aquamarine, in a lighter color that is more readily available, is \$80 per carat. So there are two choices: a gem rarity representing the finest of the fine, but in a smaller size so the price is affordable, or a less expensive, yet larger, aquamarine that is very nice but in a color that is not as rare.

What's the difference between blue topaz and aquamarine?

Though both are very pretty, fine aquamarine is a gem rarity. Topaz is turned blue in a laboratory using a very safe and permanent irradiation process. Since the topaz can be turned blue artificially and we get aquamarine at the whims of nature, the supply of blue topaz is very high, keeping the price low.

There's something for everybody: a natural rarity at a higher price that may increase over time, or a pretty gem that you can wear right now, available at a lower price. It's like buying the original painting or the print.

How is your tanzanite different from \$50-per-carat stones I saw on the shopping channel?

Gemstones come in different grades. The largest quantities available are in the lower, or commercial, grades. The finest grades are the most difficult to find. Consequently, a mass merchandising campaign cannot offer the top grades. I select the finer qualities and offer them at fair prices.

How can tanzanite be rare? It's everywhere!

Contrary to popular belief, tanzanite is found only in a limited area of the African country of Tanzania. Ruby, emerald and sapphire are found in many countries throughout the world. Though tanzanite was first discovered in 1968, many people are just becoming aware of it due to an unusually large find that hit the market several years ago. This has been a period of relative abundance; most tanzanite on the market is of a very commercial quality, and finer qualities are scarce.

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Upper: Quenched heat: Combining the coolness of "minty" green tourmaline with "hot" pink tourmaline provides an intriguing tension between hot and cold.

*Jewelry from Cynthia Renée Co.;
photo by Weldon.*

*Middle: Bicolored tourmaline from Afghanistan set with platinum and rose gold. Jewelry from Cynthia Renée Co.;
photo by Weldon.*

What color of tanzanite is best?

Tanzanite can be a violet-blue, even purple, or pure blue depending on how the gem is handled during the cutting stage. Which color is best is a matter of personal preference. Tanzanite is a very passionately colored gem and everyone seems to remember it, once experienced. I am attracted to the violet-blue colors which, for me, heighten the sense of the exotic. True blues seem to be preferred by sapphire fans. In pricing, a rich, highly saturated color free from gray is the primary consideration. All things being equal, the violet-blue and blue colors command similar prices. Of course, the color of a two-carat tanzanite will be lighter than a seven-carat.

I heard tanzanite's not hard enough for rings.

Tanzanite makes a beautiful ring, but like emerald or opal, one has to take a little more care when enjoying it in a ring. Behave as you do when wearing a nice silk blouse: you enjoy wearing it, while paying extra attention to your actions.

SOME Ring design also
GEMSTONES I plays a part in your
enjoyment of tan-
zanite; some designs
SEE ARE SO provide more pro-
tection for the stone
than others.

There is a difference between hardness and durability. Tanzanite is hard enough but is susceptible to thermal shock, meaning it can crack when extreme cold or heat is applied quickly. Don't take your tanzanite ring from the kitchen's cold water to the hot oven. In fact, if you take all your jewelry off at home, it will last much longer.

Hardness is not the same as durability. Jade is not hard, yet it is very durable because of its internal structure; topaz is hard but, due to its cleavage, is not as durable.

I'm going overseas and will buy a gem there.

Don't spend more than you can afford to lose! It's a romantic idea to go

overseas with the fantasy of bringing back a beautiful jewel at a bargain price. It's the Marco Polo syndrome, but think about it: You're buying a commodity about which you know next to nothing, for significant money, from a stranger 5,000 miles from home who probably comes from a culture with a long tradition of trading. Who has the advantage? How do you know you are not buying a synthetic, misrepresented or fraudulently treated gem? You can generally buy at a better price in the United States from a reputable Jeweler who is offering a properly represented gem.

You mean you can't tell a real gem from synthetic by just looking?

No, this is a tremendously complicated issue and is getting more so by the day. I wouldn't believe anyone who said they can give you a definite answer through sight alone. Even the most experienced gem dealer can be fooled.

But I bought this in India from a family of miners. I must have gotten a deal!

With an Italian accent, my sales would triple! This is the lure of accents. Just because you feel you are buying closer to the source does not mean you are getting a "deal."

What is my best protection against misrepresentation and fraud?

To purchase from a knowledgeable and stable professional. Buy in your "own back yard" from someone with whom you have established a relationship and who has your best interest at heart. Ask questions and become informed but realize that book knowledge doesn't equal trade knowledge. Colored gems are especially complex and not understood by everyone.

What's the difference between morganite and pink ice?

"Pink ice" is the marketing term for a manmade cubic zirconium, which does not occur in nature. There is a mineral called "beryl"—green beryl is emerald, blue beryl is aquamarine and pink beryl is called "morganite," after J.P. Morgan,

the American financier. Morganite is a natural rarity; pink ice is made only in a laboratory crucible.

But morganite's so pale!

Yes, morganite's a *delicately* colored pink. But, when it's well cut, it absolutely glows in subdued light. Set this gem on your hand and move it out of the light—see how it dances?

Some gemstones I see are so lively!

That's no accident. Very careful attention was paid to the angles on the gem's bottom so that when light enters from above it completely turns around and sparkles back to you. That's why you can't see your hand through a lightly colored gem—the light doesn't go completely through it but is refracted back out. Some gems have what's called a window, where the light isn't completely bent and you can see your fingers through them.

So, I don't want any gems with windows?

I try to get the most perfectly cut gems possible. But I have to operate within the constraints of what is found in the market. Sometimes it is realistic to have perfectly cut gems; other times not. Most gems are from Third World countries and cut under conditions more primitive than Western technological standards. When these gems are very rare and/or costly, sometimes we have to overlook slight cutting irregularities.

You mean I have to accept a slight window in a fine imperial topaz?

Topaz rarely comes out of the ground in a perfect state. Imperial topaz is mined in Brazil, and a small window is acceptable for a Brazilian-cut gem. When mounted in jewelry, the window will not be nearly as noticeable. To turn a rare beauty aside because of a small window is like tossing aside Cindy Crawford because of her mole!

I want a more unusual shape in green tourmaline than the emerald cut.

It's not an accident that you usually

see green tourmaline in the rectangular emerald cut. Each gemstone behaves differently in light. Most green tourmaline when cut in other than the rectangular emerald cut reacts by adding unattractive yellows and browns to the green. The emerald-cut has very steep ends on the bottom which prevent the unattractive secondary color from showing. Gems aren't like fabric—we can't just cut any shape we want to!

Why is this so expensive? It's garnet!

Many people think of garnet as a small, dark, cheap gem found in Granny's boring jewelry. Garnet can be very inexpensive, but in the larger sizes and with the addition of pinks and purples, the price increases. An eight-carat rhodolite garnet is quite a find!

Can you determine where stones come from?

Sometimes we can track the origin of the gem with certainty. Other times, gems in their rough form are sent to cutting centers where they are cut and redistributed according to quality. Colors and internal characteristics are indicative of certain localities, but we can't always be certain.

The finest rubies come from Burma, right?

Yes, Burma produces some extraordinary rubies, but not all Burmese rubies are fine. Geology knows nothing of our geopolitical boundaries. Thailand, neighboring Burma, also produces some fine rubies, as do other localities around the world. I purchase gemstones on the basis of beauty and value, not birthplace.

Are cabochons just cut out of cheaper material?

Cabochon is the domed rounded cut most often seen in opal and jade. Since the cabochon doesn't have facets that can call attention to inclusions, more included rough material is generally used in its fashioning. Yet many fine gems are cut in this style, and some people prefer them. Cabochons are very European, sophisticated and sensuous: a rounded, full shape offering a bold dose of color. Their appeal

is more of a subtle inner calling than the sparkling screams of a faceted gem.

Isn't citrine the same as topaz?

It's true they sometimes have similar colors, but they are very different gemstones. There is a strong demand for both. Citrine is readily available and, therefore, inexpensive. Topaz, particularly in the orangish and red shades, is much less abundant and, therefore, pricier. They are different gems for different people—one preferring a beautiful, durable and quite affordable gem, the other a more costly rarity. ■

In addition to operating her own business of selling fine colored gemstones to the jewelry industry under the name of Cynthia Renée Co., Cynthia R. Marcusson is a popular speaker/educator and author on the subject of gems and gem promotion. If you have questions on gemstones you would like answered, you may write to her at Cynthia Renée Co., P.O. Box 1763, Fallbrook, CA 92088, Tel: 619-728-5150, Fax: 619-728-2636.



Roses in the snow!

A fine large ruby set off by diamond's iciness.

Photo by Weldon for Cynthia Renée Co.