



W. Larson Collection.
J. Scovil photo.

Topaz of Myanmar

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BY: CHRISTOPHER J. NOHL

TOPAZ OF MYANMAR

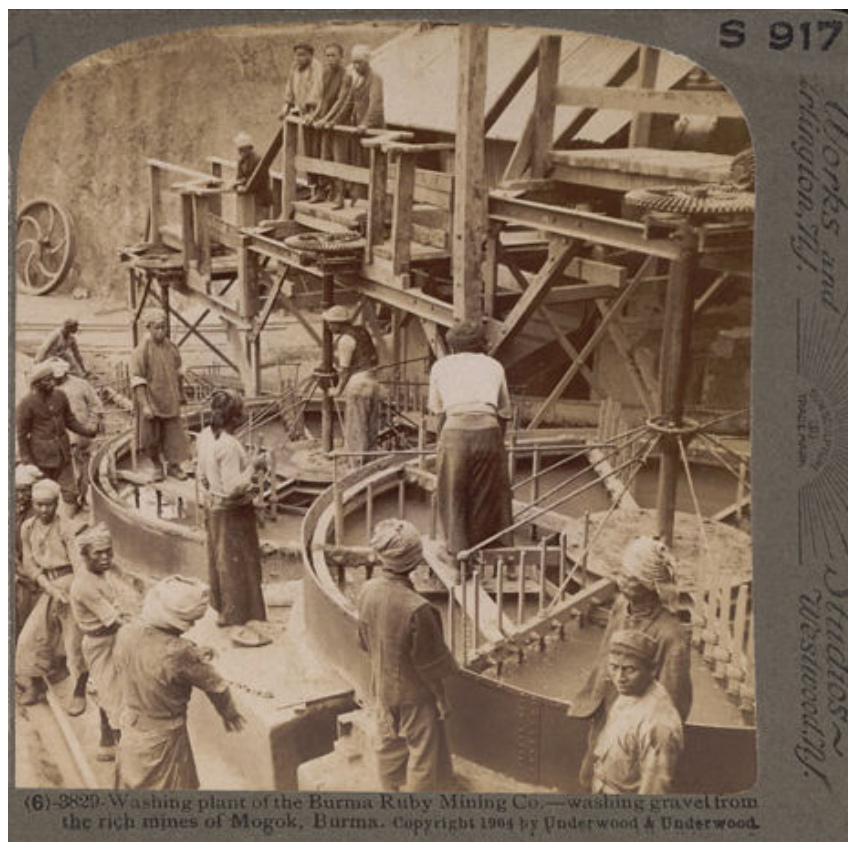
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Overview

It is ironic that when even the mineralogy initiate pictures fine topaz specimens he or she will almost never think first of Mogok, Myanmar, which is, of all gem producing locals, definitively the most legendary of all recorded time. The Myanmar we recognize has an identity so intricately linked to the largest and highest quality jadeite deposit on earth, the epitome of the very finest ruby, and blue sapphire with no peers but historical Kashmir, that to think of topaz in Myanmar seems to be straying off the beaten path. It is this ingrained identity bias plus the political and trade divisions with the West that have greatly muted availability and awareness of the fact that Myanmar not only produces the finest jadeite, ruby and blue sapphire being found on earth, but also world class topaz with sharpness, luster, color, and size, that very few other places in the world have ever matched. Moore's Compendium states "the topaz crystals [of Myanmar] are world-class." (Page 636)

In the West information about mineral specimen locals is not as available as it is for other locations. The primary sources of rich information are an incredibly

detailed and great article written by Tomasz Praszkiar and Marco Sacchi that appeared in The Collector's Newspaper: Minerals – Issue #4: 2012. It could not be more highly recommended to enthusiasts of topaz, Myanmar, or fine minerals and geology in general. The article describes not only the geology of the region but also provides a fantastic series of photos of a gigantic intact topaz-quartz-mica find at Sakhan-gyi in 2006. Great thanks are



(6)-3829. Washing plant of the Burma Ruby Mining Co.—washing gravel from the rich mines of Mogok, Burma. Copyright 1904 by Underwood & Underwood.



extended not only to the authors but also to the astute work of mine owner Saw Nuang U who had the presence of mind to extensively photograph the intact pocket and the subsequent process of extracting it which made for fantastic documentation of the find. Some of the photos are included herein. I would be remiss if I were not to mention the additional photographic documentation provided by the intrepid Federico Barlocher who so often goes the extra 3000 miles in documenting and sharing the mineral and gem wonders of the world. In my discussions with him whether via Facebook or in person, he never fails to communicate an infectious and special love for all things Burmese.

The English language author most ensconced in Myanmar is without a doubt Ted Themelis. A great abundance of information can be found in his books documenting his discoveries and collected knowledge from many decades living as an expatriot in Myanmar. There is no other source I have ever seen that contains more succinct or detailed information on the heat treatment of

sapphire and ruby as well as extremely exhaustive detail regarding many hundreds of mines throughout Myanmar. In the Special Limited Illustrated 2008 Edition of his Gems & Mines of Mogok, Ted documents more than 22 mines that produce topaz in Myanmar (whether in alluvium or in situ).

From Ted we learn that in Myanmar topaz is known as *htat-tayar* (meaning, “hundred layers, or “broken into slabs along basal cleavage.” In Mogok itself, topaz is called *u-tha-pyar*. (Themelis Page 313) Ted advises that in Myanmar topaz crystals of many kilograms are fairly common, with some being completely free of inclusions. He states that natural color light blue topaz rough crystals over 20 grams are common. To prove the former point the reader’s attention is directed to a pale orange-brown cut topaz of 241 carats from Sakhon-gyi in the collection of the American Museum of Natural History in New York and to a 365 carat pale brown topaz gem from Mogok in the Royal Ontario Museum. Federico Barlocher provided to Ted Themelis a Mogok topaz of a fine sherry color weighing 217 carats. Rutilated topaz is known from Myanmar but is rare. Pink and yellow topaz are also seen from Myanmar deposits occasionally but are much more rare and smaller than the colorless, light blue, brown-orange, brown and sherry colors.

Occurrence

Topaz can be found in Myanmar in both alluvium and in pegmatic deposits. Cited locations include: Bernardmyo (mainly Panlin, Lay-tha-apyataw, and Kyauk-sin), Pingu-taung-pyant, Hta-yan-sho, Kyi-ni-taung, Dattaw (middle area), Nga-yant-inn, Shan-konzan, Gurkha-konzan, Dattaw-pyant, Ohn-bin-ywe-htwet, Le-U-le-taw, Lin-yaung-chi, Shwe-pyi-aye, Pazun-seik, Pan-taw, Yadanar-kaday-kadar, Sakhon-gyi, Thit-seit-kone, Kabaing, and finally Kin.



Geological Origin

Despite the occasional occurrence of a fine gem crystal in alluvium the vast majority of fine topaz specimens are found in situ in what is referred to as the Kabaing Granite. The Kabaing Granite is a gray biotite microgranite which intruded country rocks during the Miocene Epoch 5.3 to 23 million years ago.

A fantastic topaz posted by Phillipe Russo on the Mindat message board in August of 2008. Phillipe writes:

"Some of the best Burmese topaz crystals come from Baw Mar and Sakhan-gyi near to Mogok. They are far superior to the Chinese ones (Gaoligongshan, Yunnan) in terms of color, luster and gemminess. Actually, a lot of the "Chinese" topaz in the market have Burmese origins, the same applies to tourmalines. I attach a picture of the best single crystal specimen found last year. It measures 11.5 x 6.0 cm and weighs 1.1kg. It has some black needle inclusions – schorl?"



ABOVE:

A giant Sakhan-gyi topaz of some 20 kg. Photo by Federico Barlocher.

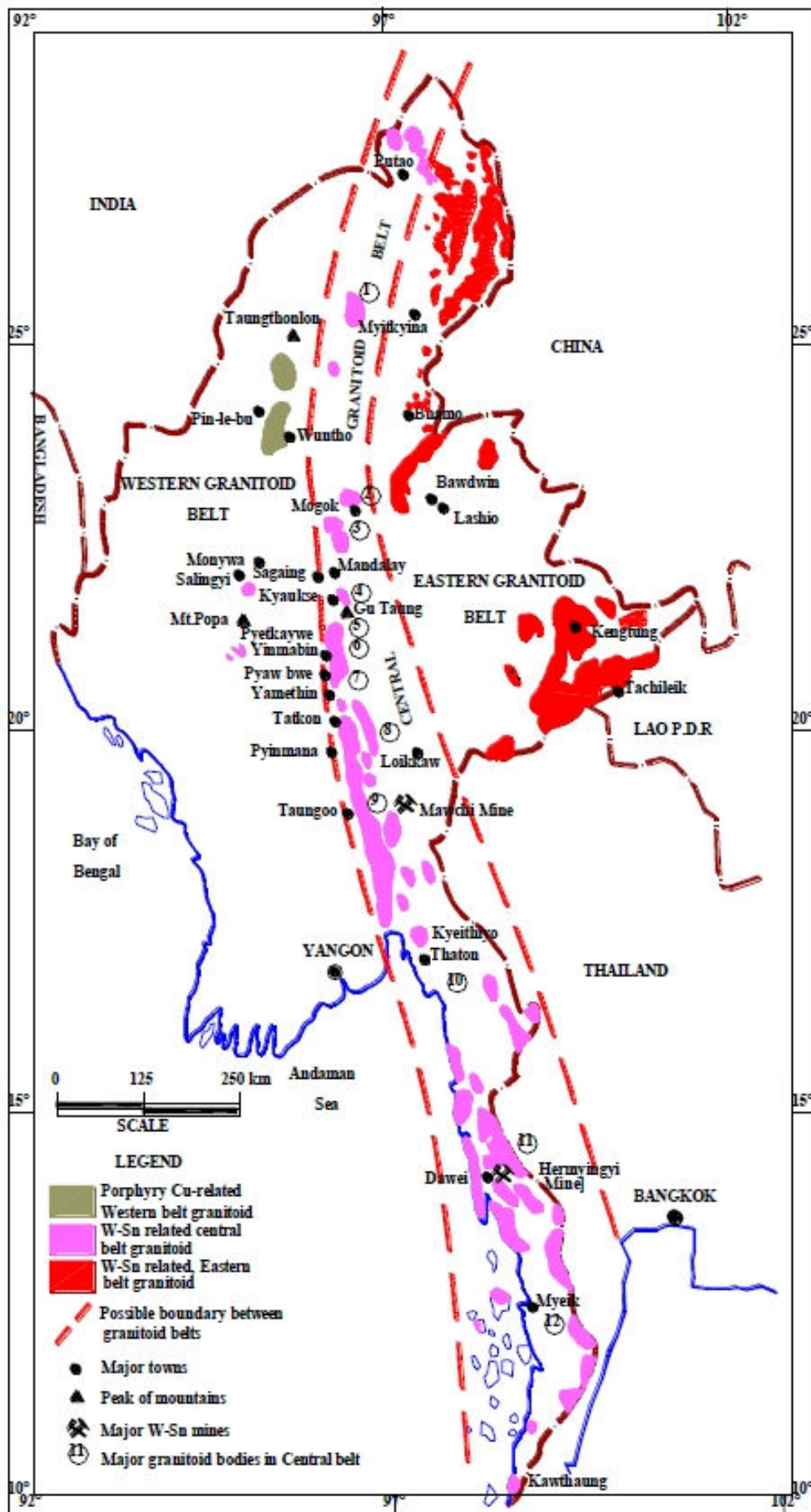


LEFT:

A view looking 82 feet down the main shaft of Sakhan-gyi where the fantastic discovery of 2006 was made and documented by mine owner Saw Nuang U, and visiting Federico Barlocher. If you look closely you can see a mine worker down below. Bamboo is used to reinforce the walls of the shaft against collapse.

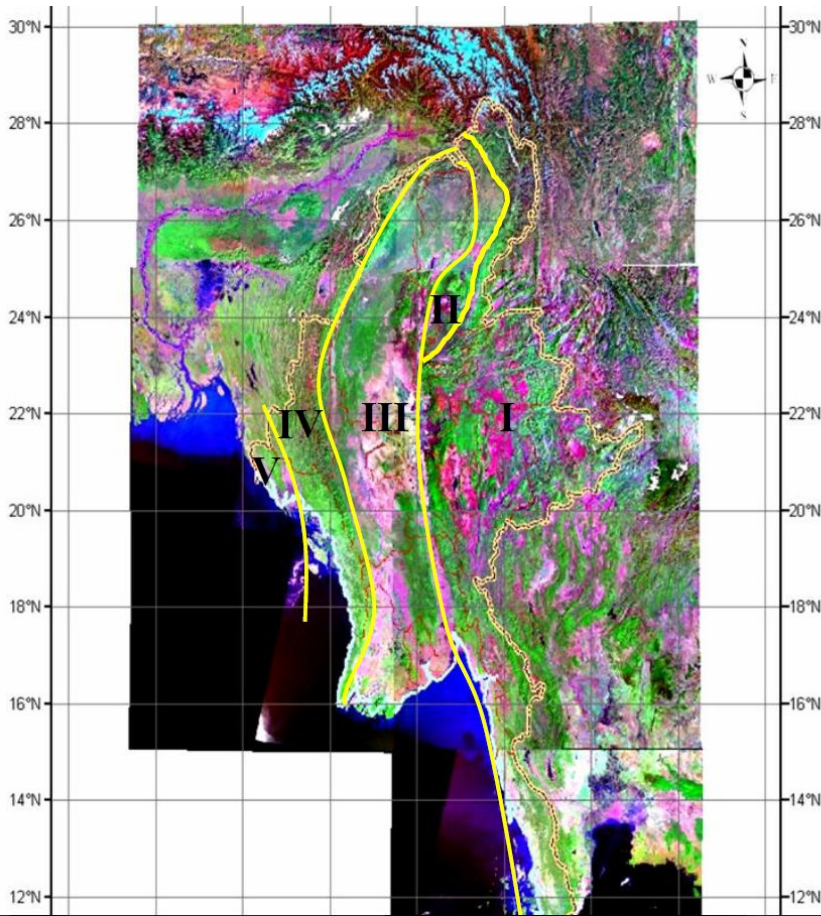
Federico Barlocher photo.

DISTRIBUTION OF GRANITOIDS





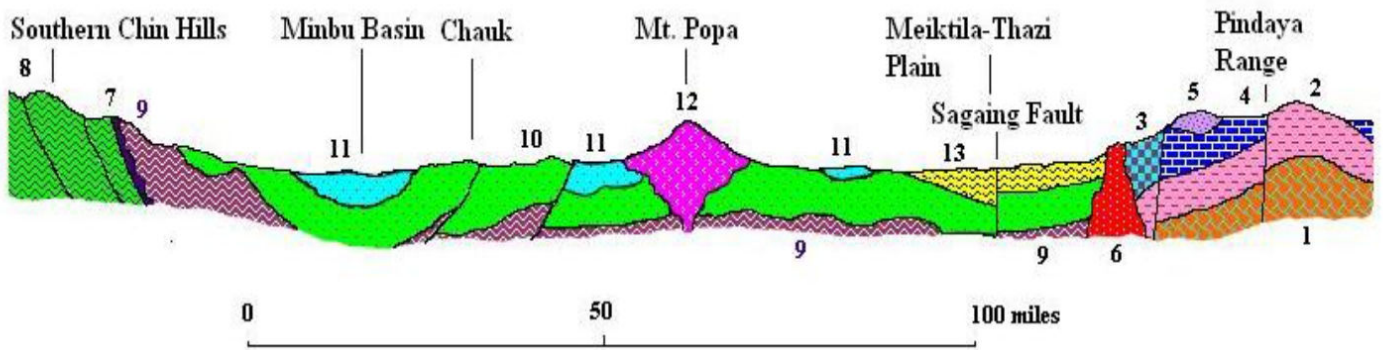
Miner sitting in the huge pocket filled with monstrous quartz, feldspar, mica and topaz crystals. Saw Naung U photo.



From East to West.

- I. The Eastern Highlands
- II. Upper Irrawaddy Province (Tagaung- Myitgyina Belt)
- III. The Central lowlands
- IV. The Western Ranges
- V. The Arakan Coastal Belt

GENERALIZED GEOLOGICAL CROSS-SECTION ACROSS MYANMAR, APPROXIMATELY ALONG LATITUDE 21° N (Vertically Scale greatly exaggerated)



- 1_ Chaung Magyi Group; 2_ Lower Paleozoic units; 3_ Lower Carboniferous units; 4_ Plateau Limestone
- 5_ Jurassic Units; 6_ Mesozoic granitoids; 7_ Upper Cretaceous-Paleocene ultrabasic rocks; 8_ Miocene-Eocene flysch
- 9_ Eocene molasse; 10_ Pegu Group; 11_ Irrawaddy sandstones; 12_ Upper Cenozoic Volcanics; 13_ Alluvium

Dr. U Thein, 1992



+A Fine Topaz x with Quartz - Myanmar
 Mineral: Topaz on Quartz Locality: Baw Mar
 near Mogok, Myanmar Size (cm): 3 x 3.5 x 2 cm
 Size class: miniature Weight (gram): 28 gram
 Association: with Quartz Description & Other
 notes: ...



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