

## **All That's Gold Doesn't Glitter<sup>1</sup>** Shimshon Stüart Siegel, Parshat Tetzaveh

*Parshat Tetzaveh is dedicated in honor of Bernard Klein, by the Weintraub Family.*

The Torah portion *Tetzaveh* continues the instructions for the building of the *Mishkan*, or Sanctuary, which were begun in last week's portion, *Terumah*. The *Mishkan* is the center of the Israelite camp, the locus of the Divine Presence on earth, and the precursor of the Temple in Jerusalem. Appropriately, the instructions feature a long list of rare metals, fine skins and fabrics, precious gems and gold. A lot of gold. In the Torah portions *Terumah* and *Tetzaveh*, gold is mentioned nearly 50 times — far more than any other material.<sup>2</sup> Gold covers most of the *Mishkan* and its furniture, including the Holy Ark, which is topped with two solid gold cherubs. The *Cohen Gadol* (High Priest), who leads the service of the *Mishkan*, is draped in gold: gold chains, gold bells, gold rings, gold settings for precious stones; there is even gold woven into the fabric of his garments.<sup>3</sup> A solid gold headplate crowns the ensemble.

Such a finely adorned sanctuary and spiritual leader would not be out of place in our own time. Our society has a passion for gold and jewelry. We mark significant life transitions with jewelry. We regard finery as a symbol of sophistication, love and inherent worth.

But today, behind every gold ring are literally mountains of toxic waste and trails of destruction. According to the US Environmental Protection Agency (EPA), hard rock mining, which includes, although is not limited, to the mining of gold, releases almost half of all toxic pollution in the US, with a clean-up cost in the tens of billions of dollars.<sup>4</sup> Gold mining utilizes toxic chemicals, releases harmful elements previously bound up in the rock ore, and consumes massive amounts of water. Here are just a few examples of problems associated with gold mining:

The planet's bulk gold deposits have nearly been depleted, so many of today's mines use a process known as heap leaching. To produce one ounce of gold, at least 26 tons of ore must be mined from the earth, and then a cyanide-solution is poured over the mound to separate the gold from the rock so the miners can collect the remaining microscopic gold particles.<sup>5</sup> Cyanide use is effective and cheap, but accidents have happened, affecting wildlife and river systems in the vicinity of the mine.<sup>6</sup> In 2000, a mine reservoir in Romania broke its dam, causing a toxic waste spill that polluted a tributary of the Danube River. That accident, the second that year, was described as the worst environmental disaster since the 1986 Chernobyl nuclear reactor accident in the Ukraine.<sup>7</sup>

The United Nations Development Programme's Global Mercury Project states that between 30%-40% of all man-made mercury pollution in the world comes from small scale or “artisanal” gold mining, a situation the Project describes as “of grave ecological significance.”<sup>8</sup> The mercury is used to separate the gold from the ore, and is then volatilized off to purify the gold; the mercury is then disposed of, often into the local streams. Up to 1000 tons of mercury a years are released annually from artisanal gold mining.<sup>9</sup> The severe impact of mercury releases from mining camps goes beyond streams into soils, vegetation, and also the contamination of fish, making it a major contributor to the long range transport of mercury throughout the world. Exposure to mercury by the indigenous populations who practice artisanal mining of gold is a major issue for native tribes in the Amazon Basin, in Africa, Indonesia, Philippines, Laos, and China. Estimates say there may be over 10 million people involved in artisanal gold mining, up to 500,000 women and children directly mining gold and being exposed to mercury. There is little or no provision of health services to miners or their families.

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Injustice. Pollution. Poison. Waste. This is the legacy of today's gold. And yet the Torah prescribes the clothing of the Cohanim “*L'kavod ul'tifaret*- for honor and splendor.”<sup>10</sup> The exquisite golden appointments of the Cohen Gadol and the Mishkan concentrated the power of the world's gold on a singular aim — creating a space for G-d's presence in the midst of humanity. It would be impossible for this sacred craftsmanship to be done with dirty gold. In fact, the Mishkan was made entirely of reused and recycled materials. As we see in the Torah portions *Terumah* and *Ki Tissa*, the Children of Israel donate the materials for the Mishkan as part of a process of spiritually rectifying and elevating the wealth taken from Egypt.<sup>11</sup> Through the building of the Mishkan, we learn that all of our possessions should be sourced and used conscientiously, especially the most precious.

The Cohen Gadol's pure gold headplate bore the engraved slogan “Holy to the Lord.” Gold that originates in injustice and destruction and is used to satisfy individual desires does not reflect this holy potential. Such adornments serve our vanity, but do not promote our awareness of the Divine, or the unity of our world. The time has come to follow the Torah's example by ensuring that our gold is attained and used with a pure conscience.

The first step in any process of Divine awareness and environmental consciousness is education. The internet has a vast collection of resources on mining practices and problems. Notable sites include [www.earthworksaction.org](http://www.earthworksaction.org) and [www.nodirtygold.org](http://www.nodirtygold.org) (a cooperative project of Earthworks and Oxfam), which feature information and opportunities to take action to promote safer mining practices.<sup>12</sup> A concise list of mining accidents can be found on [rainforestinfo.org.au/gold/spills.htm](http://rainforestinfo.org.au/gold/spills.htm). Most large mining corporations (even those that use cyanide leaching processes) feature information on social and environmental concerns (for example: [www.newmont.com](http://www.newmont.com) and [www.barrick.com](http://www.barrick.com) ).<sup>13</sup> After researching the relevant issues, consider contacting local and federal government representatives to advocate for safer mining practices and corporate accountability. Alternative mining processes can be explored and supported, like those described at [www.habercorp.com](http://www.habercorp.com) <sup>14</sup>

As the truth about gold mining becomes too apparent to ignore, jewelry producers and retailers are taking steps to align themselves with ethical gold mining and acquisition. Most notably, Michael Kowalski, Chairman and CEO of Tiffany & Co., wrote a letter in 2004 to the chief of the US Forest Service, asking him to reverse Forest Service support of a proposed mining project in Montana.<sup>15</sup> Tiffany and other major jewelry retailers have signed on to an ethical gold campaign sponsored by No Dirty Gold.<sup>16</sup> The campaign suggests purchasing gold only from retailers who pledge to use ethical, environmentally safe gold.

Of course, even ethical mining leaves a mark on the earth. Recycling and reusing old precious metals and gems is the most environmentally friendly way to attain new, personalized jewelry. Companies like Green Karat ([www.greenkarat.com](http://www.greenkarat.com)) are dedicated to increasing the recycled gold jewelry market. There is also a grassroots movement of boutique jewelry artists who only use recycled materials. Many of us have collections of old jewelry from parents and grandparents that, all too often, sit in jewelry boxes or safe-deposit boxes. Recycling and reusing these beloved heirlooms creates precious new pieces that honor the memory of the past while promoting a viable and ethical future.

The ultimate challenge is the cultivation of a holy, honorable and harmonious relationship with gold. Let us reevaluate our perceived need for gold, and ask ourselves if the jewelry we buy truly reflects our values. As we adorn our gold, are we aware of the destruction it is causing the earth, as well as the

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villagers and animals living near the gold mines? As we celebrate our happiest occasions with traditional gifts of gold jewelry, are we linking our joy to G-d's joy over the fullness of the earth? As conscious Jews, we must start viewing our use of gold through the pure glimmer of the Cohen's golden headplate, and be sure that we are adorning ourselves not just in splendor, but with honor and holiness.

### Suggested Action Items:

- 1) Educate yourself by visiting the sites mentioned above, and sign on to the “No Dirty Gold” campaign at [http://www.nodirtygold.org/take\\_action.cfm](http://www.nodirtygold.org/take_action.cfm)
- 2) Reflect carefully when purchasing gold: is your purchase expressing your values? Contemplate recycling a family heirloom. For example, have your grandmother’s large gold ring melted down to create a wedding ring that fits your taste. Or acquaint yourself with Green Karat jewelry and consider buying from them.
- 3) Speak to others about what you’ve learned here. Many people are simply unaware of issues such as this.

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<sup>1</sup> J.R.R. Tolkien

<sup>2</sup> Exodus 25-28, multiple verses

<sup>3</sup> Rashi on Exodus 28:5, explained in Exodus 39:1-5

<sup>4</sup> 1998 statistic cited in the EPA's “Mine Waste Technology Annual Report 2005”

<[epa.gov/hardrockmining/annual/annual2005/introduction.htm](http://epa.gov/hardrockmining/annual/annual2005/introduction.htm)> See also Jane Perlez and Kirk Johnson. “Behind Gold's Glitter: Torn Lands and Pointed Questions.” *The New York Times*, October 24, 2005

<<http://www.nytimes.com/2005/10/24/international/24GOLD.html>>

<sup>5</sup> EPA Office of Solid Waste. “Technical Resource Document: Extraction and Beneficiation of Ores and Minerals, vol 2- Gold.” EPA 530-R-94-013 / NTIS PB94-170-305. August, 1994

<sup>6</sup> See <[http://www.mineralresourcesforum.org/technical/cyanide/cyanide\\_facts.htm](http://www.mineralresourcesforum.org/technical/cyanide/cyanide_facts.htm)>

<sup>7</sup> “New toxic spill hits Eastern Europe.” *BBC News*, Friday, 10 March, 2000, 23:59 GMT.

<<http://news.bbc.co.uk/2/hi/world/europe/673544.stm>>

<sup>8</sup> UNDP-GEF Project Writeup. “Global Mercury Project- Removal of Barriers to the Introduction of Cleaner Artisanal Gold Mining and Extraction Technologies.” <[www.undp.org/gef/05/portfolio/writeups/iw/globalmercury.html](http://www.undp.org/gef/05/portfolio/writeups/iw/globalmercury.html)>

<sup>9</sup> This fact and the remaining facts in this paragraph are from the report “Mercury Releases from Artisanal Gold Mining, Industrial Scale Gold Mining and Metallic Smelting,” USEPA, Office of Solid Waste, December 2006.

<sup>10</sup> Exodus, 28:2

<sup>11</sup> Exodus 25:2; Exodus 30:12-16

<sup>12</sup> The US government has been slow to take up the issue of toxic gold. Gold mining is still regulated by the antiquated General Mining Law of 1872, “which declares mining the best use of public land, gives miners access to that land for bargain-basement prices, and makes no mention of a cleanup.” Until recently, the EPA got their environmental impact information directly from the mining corporations. A 1997 EPA report on sources of mercury did not even mention gold “because, the report's authors said, an 'industry representative' had told them mercury was not a problem.” Yet by 2005, the EPA had asserted that the Goldstrike mine near Elko, Nevada, singlehandedly contributes 1% of America's airborne mercury pollution. See Kirk Johnson. “A Drier and Tainted Nevada May Be Legacy of a Gold Rush.” *The New York Times*, December 30, 2005.

<[nytimes.com/2005/12/30/national/30gold.html?ei=5088&en=2010c05139b57058&ex=1293598800&partner=rssnyt&emc=rss&pagewanted=print](http://nytimes.com/2005/12/30/national/30gold.html?ei=5088&en=2010c05139b57058&ex=1293598800&partner=rssnyt&emc=rss&pagewanted=print)>

<sup>13</sup> The author can not vouch for the accuracy or fairness of claims made on any of the above sites, whether those of environmental groups

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or those of mining corporations. Thorough research and critical analysis are recommended.

<sup>14</sup>At the time of this writing, this author has not done enough research into Haber's process and environmental and humanitarian record to specifically endorse the Haber, Inc., or its methods. Rather, Haber is presented here as an example of potentially lower-impact mining processes that exist or are in development. A report on Haber can be found on the independent database SEC Info:

<<http://www.secinfo.com/d13A33.za.htm>>

<sup>15</sup><[http://www.earthworksaction.org/20040324\\_tiffany.cfm](http://www.earthworksaction.org/20040324_tiffany.cfm)> For more on Kowalski, see

<<http://knowledge.wharton.upenn.edu/article.cfm?articleid=1074&CFID=21866637&CFTOKEN=63678471&jsessionid=a830341a1b82b7f2b715>>

<sup>16</sup><[http://www.oxfamamerica.org/newsandpublications/press\\_releases/press\\_release.2006-02-12.2148390041](http://www.oxfamamerica.org/newsandpublications/press_releases/press_release.2006-02-12.2148390041)> Also see

<http://www.nytimes.com/2006/04/06/fashion/thursdaystyles/06gold.html?pagewanted=1&ei=5088&en=53bbb09a570c290a&ex=1301976000&partner=rssnyt&emc=rss>>