Art conservators

has treated everything from a 300- year-old Chinese screen to a 12-foot-tall gold-leafed Japanese panel covered with massive tears. Vardara, whose speciality is framing and gold leaf restoration, has handled 17th- century Russian icons and 20th- century graphic prints.

Here's what the three say about their craft:

PAINTINGS — Alkons, who works primarily with 19th-century American paintings, says his most common request is for cleaning, which runs anywhere from \$50 to \$300, depending on the painting's size and the kind of dirt. "You get a feel

for dirt," remarks Alkons, adding that when a sky looks green there's a good chance it's been yellowed by cigarette smoke.

Initially, he tries "innocuous" cleaning methods, such as dabbing with distilled water. But he warns: "I've seen half a dozen examples where people have ruined paintings by trying to clean them with water. Some glues and gessos used in sizing paintings are water soluble and can swell, causing the paint, in some cases, to pop off the canvas." If water doesn't remove the grime, Alkons resorts to an array of chemical cleaners and solvents.

Once a painting is cleaned, all its gouges, holes and divots are exposed. Such was the case with the four paintings lined up on his work table. One, an oval canvas with a pastel scene of two Chinese poling a junk across a river, was a mass of cracks and veins. It was an example of poor use of painting media, a common problem according to Alkons.

"We see a lot of paintings that have been poorly painted: inadequate stretcher bars, improper grounding or sizing of the canvas. This one was covered with a varnish that shrank faster than the oil paint and pulled the paint away."

To camourlage cracks, Alkons sets a painting on his easel and "in-paints," filling the veins without touching or painting over the original colors.

One of the more fascinating tools he employs is the radiograph, which produces an X-ray image of a painting. It pers into a painting's skeleton, exposing tricks and secrets not visible to the naked eye.

Alkons says there's a dilemma within the field over how much cleaning is enough. Should the patina of age be completely erased, often revealing wholly new colors, or should cleaning be more restrained, strictly limited to surface dust and dirt?

"We're accustomed to looking at a lot of imperfections in paintings," notes Alkons. "That golden glow of antiquity (the vellow cast commonly seen on

should minimally support the print in a way that's still beautiful but does not intrude on the art itself. A piece of really fine art should have as little superfluous materials around it as possible."

He considers the layman's cardboard backing, adhesive tape and mat boards to be the junk foods of framing. "The chemical construction of adhesives leaves a residue that can never be removed," he explains. "If you've ever gone looking at old prints, you'll see a deep brown stain around the print that matches the mat board. That's because the acids in mat boards migrate into the paper and are literally burning the paper."

That's why, he says, newspapers printed 100 or more years ago — before the advent of wood pulp paper — are often in mint condition.

The matting Vardara practices is completely

organic. He hinges a 100 percent rag-ping to a piece of art work with tabs of tissue that are adhered with rice-starch Across the hinges go strips of vegeta adhesives.

In most cases, he prefers Plexiglass glass because it doesn't break and is I enough for big artworks. Its disadvanta scratches and is twice as expensive as recommends cleaning with a feather special Plexiglass cleanser and cloth.

"If it's a valuable print — an investi expected to appreciate in value — it we rate if it's not matted or hinged prodeclares. "How fast depends on hum many hours a day the sun shines on dirty the air is. But if it's mounted on

and properly hinge hundreds of years."

Vardara, who bo gold leafing as a vote conservation dep San Francisco's I Museum, also repair or peeling gold leaf lamp bases and dobjects.

APER —"The great deal you can with paper," says Ka a former Boston a professor. "Unlike there are fewer cosm you can do." Paper tion is also a con newer field, accord kor, who says most o niques she employs v oped in the 1960s floods in Florence, an international pool vators devised neve tried methods to trea titudes of rare, wa documents and books

Most of what is her are family men the grandparents' certificate or Aunt watercolor - that a perate need of clea years of storage in dusty attic. Zukor, w white surgeon's c working, first atte cleaning, using sof non-abrasive erasers treated cloths and powders. If a stain is the paper is washed I ing in a bath of distill

Poor framing is major causes of da says, citing harmfu most cardboard I mountboards and tape — as well as t from glass that obreaks.

Other attackers fungus, and insects, the starch in glues a In the case of mold a the treatment de whether they're dea If inert, the mold spremoved by simply brushing them off the If still alive (and Zukeasy to detect), the be immersed in a fur



ABOVE: Jim Alkons, a painting conservator, holds an 1880s oil portrait—the relative of a Sacramento client—that was waxed onto a new linen backing. BELOW: Unless a painting is particularly grimy and requires chemical solutions, Alkons cleans by dabbing with a cotton swab dipped in water.