

# COMPUTER BITS

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## Recycler Art

**Dead computer parts come alive ... by Bonnie Meltzer**      [www.bonniemeltzer.com](http://www.bonniemeltzer.com)

*Editor's note: Last month, Sally Clute talked about recycling old computer "bits" in the Willamette Valley. This month, Portland artist Bonnie Meltzer shows us the artist's way. Her work is displayed on this month's cover.*

What do canvas, oil paint, pastels, bronze, wood, watercolor paint, hard disks, resistors, and circuit boards have in common? They are all art supplies. In my artwork, circuit boards with their intricate patterns become the canvas, the background awaiting the "paint," and other computer parts become the shapes and forms that other artists make with more conventional art materials.

### Why?

Why do I spend my time scrounging Wacky Willy's, Scrap, and Da Lode Surplus looking for art materials? Is it that I am cheap or just plain odd? First, the answer to both questions is yes. Recycled computer parts are inexpensive and sometimes even free. But more important, I am a recycler. Ten-year-old yogurt containers find themselves in my garden, freezer and studio. Decades before we could pack the giant yellow bins for weekly pick up of recyclables, I would lug paper, bottles and cans to my car and deliver them to the depot. Recycling is in my bones. I like the idea that I am saving usable goods from the dump.

I don't heroically save these items from the garbage. My motivation is not recycling as an end in itself. How to *reuse* the obsolete computer parts is. What I like most is making a "silk purse" out of a "Silicon ear."

Computers are a source of inspiration for design and subject matter. The textures, patterns and sometimes the shapes of the boards are so beautiful they become part of an artwork just for those aesthetic qualities. Sometimes a part will suggest an idea. For instance, many boards look like faces. Other times the very fact that they are recognizable computer parts makes them usable as icons for making social commentary.

### Parts and Warehousing

Organizing a studio full of recycled goods is cumbersome at best. Steel shelving is stacked with 10-pound spools of magnet wire, cables, keyboards and circuit boards. The boxes and shelves are overflowing. A holding area for objects to be taken apart is quite small in comparison.

Gone are the days of computer dismantling, when my husband and I would spend winter evenings with a good movie, screw drivers, socket wrenches and, in the most dire circumstances, a sledge hammer. It is just too time consuming to take apart whole computers. The ratio of the remnants I would have to recycle to the goodies inside is too high.

So I concentrate on smaller parts like hard drives: taken apart with my new cordless screwdriver and its set of slotted, Phillips, square and star shaped heads, these are more manageable. Almost all the parts are usable and beautiful -- platters, read heads, motors and circuit boards. Some boards don't need much work and already look like Southwest native jewelry. Others need major magic for the transformation. These small parts find themselves on another wall of shelves stacked with see-through containers. Ready and waiting for my use are nuts and bolts; elegantly shaped pieces of metal that were once joined to larger computer parts, washers in a wide variety of shapes, materials and sizes; CDs; chips; and a bunch of elegant objects whose functions and names are unknown to me.

### Designing

My first step is to paw through my shelves and boxes to see what things tickle my fancy. I play with them like a child playing with puzzle pieces, arranging and changing the configurations of the individual bits until the parts fit.

A real-live working computer (Macintosh G3) makes the design process easier. I scan various computer parts and then cut, shape and assemble them in an electronic collage via Photoshop. Because the objects are actual size and I can print multiple pages, I can have a working drawing or a proposal to show a client. But the drawing is only an approximation of the final product. As the work evolves, new ideas are born -- and sometimes in the light of day a certain shape, color or texture just doesn't work or a better way presents itself. My Mac comes in handy again when it is time to show clients the proposal. I sent it via e-mail or add it to my website. To see the process of the artwork on the cover of this magazine from start to finish, check [http://www.bonniemeltzer.com/proposal .htm](http://www.bonniemeltzer.com/proposal.htm).

## **Making It**

And now the real work begins. I lay everything out either on a big table or hang up the foundation parts on my studio wall. I don't discard traditional media and techniques: I embellish the computer parts with paint. But in addition I cut, sand, drill, glue, screw, bead, sew, crochet, and anything else that is needed for the individual piece.

But wait: there's more. I also incorporate manipulated digital images by heat transferring them on to copper sheets (circuit boards). Unfilled, drilled circuit boards are my favorite substrate. The holes give me an easy way to use embroidery, beads or sew on parts. Undrilled boards, especially thin ones, heavily patterned with circuitry patterns are a close second. I paint these and then sand lightly to expose the slightly three-dimensional copper. In other words, I treat the circuit board the way I would any backing material, coloring it and emphasizing the patterns in it.

## **Building Metaphors**

The artwork on the cover, *Connectivity*, was commissioned by all 22 members of the inaugural graduating class of the Executive MBA Northwest and Beyond class as a gift to the University of Washington. The 54" wide x 44" high x 4" deep construction hangs at the Seafirst Executive Education Center in Seattle. The class's directions to me were to make an artwork that expressed the professional and personal experience of going through that intense MBA program. Because computers are so basic to *any* business, computer parts were a very logical choice as a basic material.

The general shape of *Connectivity* is that of a building. This seemed a perfect metaphor for the point of the MBA program, which is building a business, building a career and building a life. The noun "building" gives us the office building, the factory, the place where business is done. But "building" is also a verb meaning to create by forming, combining, or altering materials. Another meaning is to take or serve as the basis for establishing, founding, grounding, shaping, molding, or fashioning something.

To add to the building metaphor I used boards that look like buildings, or building parts like windows and doors. The domes on top of the towers are hard drive platters, new small ones and an antique 14" one. Crocheted copper magnet wire net was used to symbolize the Internet, while plugs, cords, cables and connectors are the obvious symbols for connecting, making connections, seeing connections. The netting and the braided cable meandering throughout the piece add visual interest and are compositional devices to connect the visual elements of the work. The little black squares (chips) -- the windows of the building -- contain portraits of some members of the class.

Only when the work was hung did I realize I made an edifice similar to the Portland Building. Even that could be interpreted as yet another layer of meaning, because quite a few of the participating graduates reside in Portland.

## **Virtual Tour and Web Visits**

You can see [Connectivity](#) and other artworks on my website. But you may be able to see these and other works in the "flesh."

*Portland Open Studios* is a wonderful opportunity for the public to visit artists' studios in them in Portland metro area. A wide variety of artwork, processes and materials are shown including several artists using digital media. I participated last October and hope to participate again. Save the dates: east side studios will be open **October 13 and 14** and west side ones **October 20 and 21, 2001**. See the Portland [Open Studios](#) website for more information about the event, the artists and the application process.

Mark your calendars for another event, too. Metro, the government agency responsible for garbage and recycling, will have another Made from Recycled Fair on December 7, 2001. I am already signed up to show the bolas and pins I make -- highly expressive faces made from computer parts. Perhaps other artists working with defunct computers will also be there.

October is a long time away. I can't wait! And if you can't wait, you can e-mail me at the address below to set up a studio visit appointment.

## **Resources**

If you don't already have a basement full of used thingamabobs and doohickeys you can get them at:

Wacky Willy's (<http://www.wackywillys.com>)

Cascade Electronics (<http://www.cascadesurplus.com>)

I buy all kinds of interesting parts at Scrap (503/294-0769). They don't have computer parts per se, but this nonprofit organization gathers surplus from businesses and industry to sell at low cost to teachers and artists. Scrap is interested in finding computer manufacturers who have waste from the manufacturing process...the parts left over from stamping or cutting out a shape, little things that are found in great quantities and that have no real purpose except to creative people who like to transform junk into art.

*Bonnie Meltzer, Artist Crazy About Computers, has been tying creativity and computers together since 1974. Also an educator, she uses her Mackintosh for her own work and designing websites for other artists. You can reach her at [bonnie@bonniemeltzer.com](mailto:bonnie@bonniemeltzer.com)*