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■ BY VERN GRANER

DORKBOT

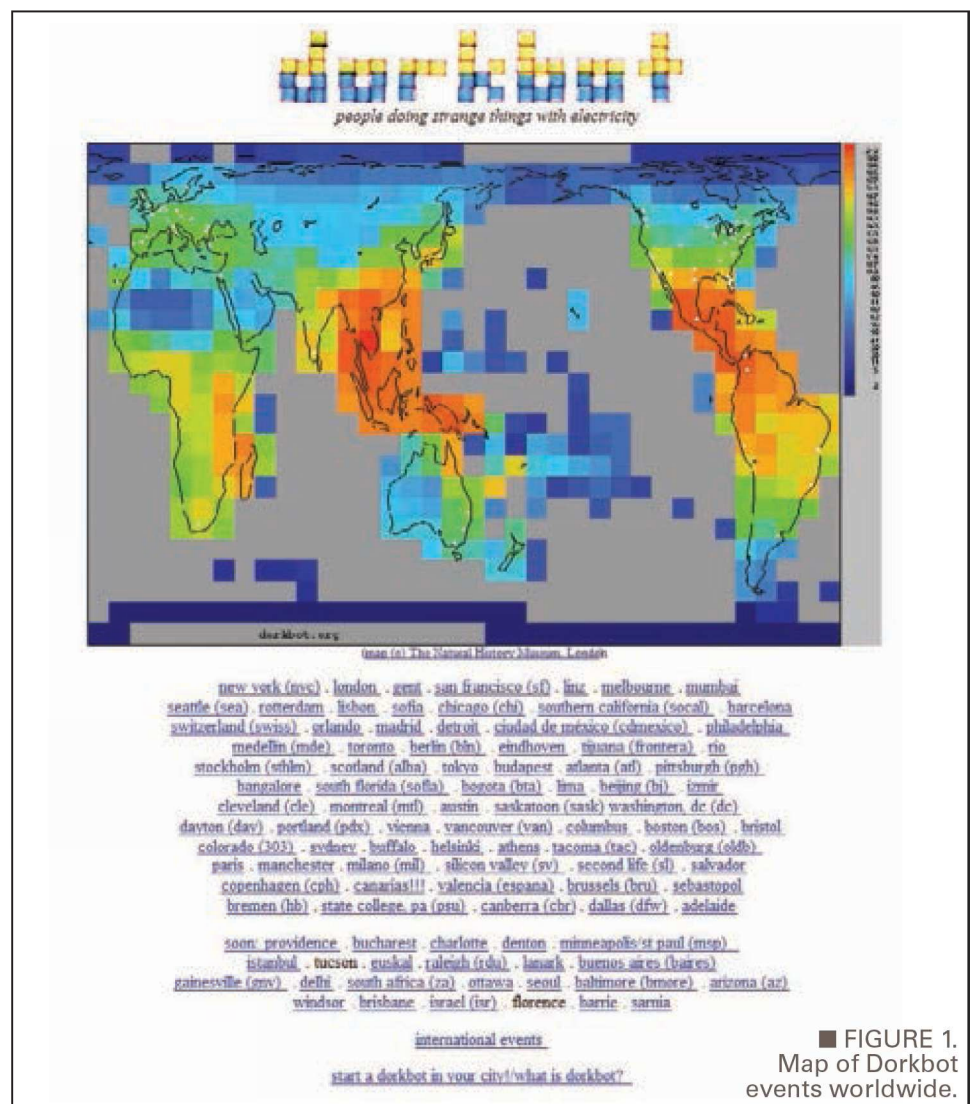
People Doing Weird Things With Electricity

SO, YOU'VE BEEN WORKING ON YOUR electronic masterpiece for a few weeks (months?) and it's finally finished, so ... now what? Where can you go to show off your little beauty, the child of your imagination, the fruits of your labor? How about Dorkbot?

Dorkbot's motto is "People doing strange things with electricity" and from what I've seen, I'd say that's a very accurate description. Founded by Douglas Repetto of Columbia's Computer Music Center in the fall of 2000, Dorkbot has spread across the world providing a framework for display, collaboration, and celebration of all things tech (Figure 1).

On a sultry, summer evening in June 2006, David Nunez, Rodney Gibbs, and Rich LeGrand pulled off the first Dorkbot Austin "Cafe Mundi" — a cute and quirky East Austin restaurant and hangout. When I arrived, there was a video projector pointed at a big screen on one side of the parking lot and a small PA system for the presenters to use. In a matter of moments, I got a general impression of what Dorkbot Austin was all about. There were projects and people, devices and drinks, music and madness. It was a contagious carnival atmosphere with artists, electricians, programmers, musicians, the curious, and the chaotic all coming together to show and tell about their creations while networking with other self-confessed "dorks" (Figure 2).

At the time of this writing, there



■ FIGURE 1. Map of Dorkbot events worldwide.

have been 15 such events in Austin since that first summer night, averaging a little over one every other month. Most of the events have been at Cafe Mundi; the exceptions

being the South By Southwest (SXSW) festival events that were held in downtown Austin and one special event held at the Austin Children's Museum. Though most of the events

■ FIGURE 2. Dorkbot Austin at Cafe Mundi.

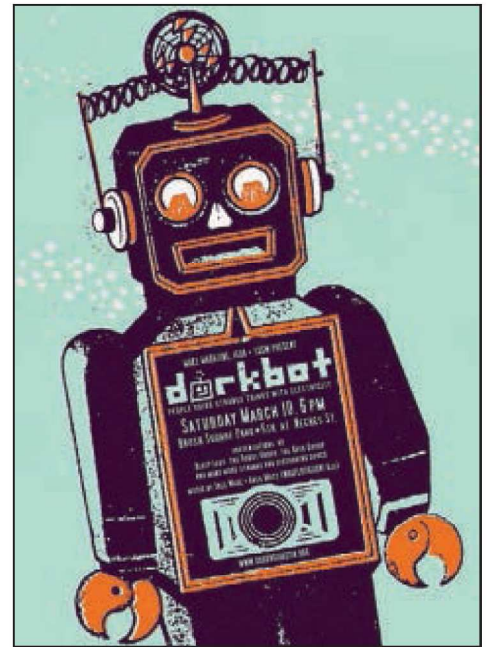
have been privately organized and funded, some have been sponsored by such big names as South by Southwest (SXSW), *Make Magazine*, Amaze Entertainment, and the International Game Developers Association (IGDA) (Figure 3).

Due to the nature of a Dorkbot event, the main facilitators have changed as new folks become interested and some of the early movers and shakers have moved on to other projects. Though David Nunez and Rich LeGrand are no longer working with Dorkbot Austin,



the current Dorkbot Austin crew of Rodney Gibbs, Luke Iseman, Chase Hammock, and Nick Pietraniec have stepped in to make sure the event lives on.

I did get a moment to chat with



■ FIGURE 3. Dorkbot poster by Noel Waggener; subculturepress.com.

THERE'S NO DORKBOT IN YOUR CITY? MAYBE YOU SHOULD START ONE!

Some things to consider:

What is Dorkbot, exactly? Each Dorkbot event is different and is driven by the needs and interests of people in the local community. But generally, the main goals of Dorkbot are: to create an informal, friendly environment in which people can talk about the work they're doing and to foster discussion about that work; to help bring together people from different backgrounds who are interested in similar things; and to give us all an opportunity to see the strange things our neighbors are doing with electricity. Dorkbot isn't really a forum for formal artist talks or lectures, but rather a chance for diverse people to have friendly conversations about interesting ideas. The organizers of Pixelache 2008 asked Douglas to talk about Dorkbot's "organizational strategy." Here's what he had to say:

■ **Frequency:** How often will you hold meetings? Some Dorkbots have meetings every month, others just a few times a year. It's a lot of work putting the meetings together, and in smaller cities it can be difficult to schedule enough speakers. You don't want to burn out!

■ **Locale:** If you are in a smaller city or town, you might want to consider

collaborating with people in other nearby cities/towns. Maybe the Dorkbot meeting can travel to a different location each month, or maybe you can all pool your resources for a couple long-form meetings each season.

■ **Venue:** Is there a place to hold the meetings? It can be very convenient to have the meetings in the same place each time. Often, an art gallery or performance space will be willing to donate their facilities for the occasional meeting. If you know someone connected to a university, you may be able to get a space through them. It doesn't have to be a fancy space!

■ **Equipment:** Do you have access to presentation equipment? At the least, you'll probably need a video projector, a small sound system, and a network connection. A laptop computer can also make things easier on the presenters. As with the venue, it's best if you can use the same equipment at each meeting. It can be very stressful trying to track down a video projector the day of a Dorkbot meeting! Often, the venue you use will have A/V equipment you can borrow.

■ **\$\$\$:** Dorkbot is a non-\$-oriented organization. Dorkbot meetings are

generally free events, so you need to be careful about spending lots of money to produce them! Several Dorkbots sell beer and/or food at the meetings to help cover their costs. Make sure you talk to the venue before selling anything. Dorkbot.org donates web space, email lists, etc., to the local Dorkbots, so there is no administrative cost associated with setting up a new Dorkbot.

■ **Meeting Format:** Dorkbot meetings are rather informal. There are usually two or three presentations (about 20-30 minutes each) per meeting and sometimes very short "lightning" presentations from audience members. The specific format is up to each organizer to decide. You'll probably have to play with your format for a few meetings until you find something that works well in your context. One thing to keep in mind is that the Dorkbot format works best for informal, conversational presentations on a particular work or topic, rather than formal artist talks or lectures on a body of work. Thirty minutes isn't much time, so focused presentations work best.

What happens next?

If you think you'd like to start a Dorkbot in your city, contact Douglas at douglas@dorkbot.org for more information.



■ FIGURE 4. SXSWSX Dorkbot in downtown Austin drew a huge crowd. (Photo by James Delaney.)

Nick Pietraniec about Dorkbot to get his take on things. Nick commented, "I think fundamentally our goal is to provide a forum for our community

■ PHOTO 1. Nic Graner sports aluminum "slit glasses" by Brooks Coleman.



to meet, collaborate, socialize, brainstorm, and show off their work — this is probably a common mantra for most Dorkbot communities, but there's no central organization or mission. If you go to an event in London, Montreal, South Africa, or Dallas — it might look completely different."

When I asked him what it was like running a Dorkbot event, he responded, "Actually, 'running' probably isn't really the proper term. We're more 'facilitators' in that we simply solicit for presenters, coordinate the venues. When we reach a critical mass of folks interested in showing off their work, we send out the announcements, get the gear, and head for the site."

Though I haven't had the pleasure of attending a Dorkbot outside of Austin, the ones here have been a LOT of fun and are both very well attended and received. At the SXSWSX Dorkbot Austin, there was a



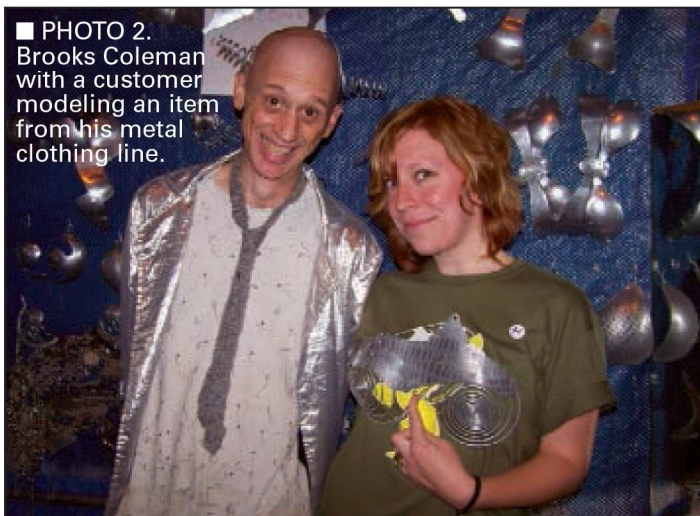
■ FIGURE 5. View from the stage at a Dorkbot Austin event.

huge crowd of people who came together to talk about tech, show off their electronic feats, and let their inner dork shine (Figure 4). Attendees are encouraged to bring finished items, parts and pieces, or even just plans or sketches. It's a good place to hang out and to network with other folks that have similar interests.

Experimental music, strange contraptions, and prototype systems breaking down on stage accompanied by small bouts of blue smoke make for an exciting day. Even the projects that flame out are enthusiastically applauded!

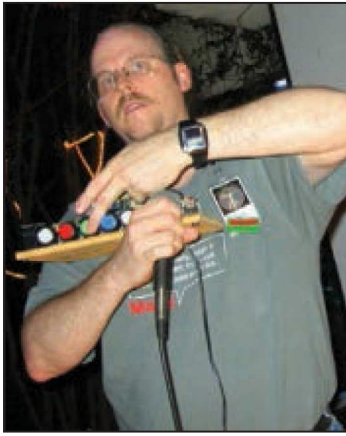
So, what is attending a Dorkbot like? To me, it felt something like a trade show — rock concert — nerd party — ham fest — science fair all at the same time. There's usually adult

■ PHOTO 3. Glamor Girl — a mixed-media EL wire lighted sculpture by Brooks Coleman. (Photo by James Delaney.)



■ PHOTO 2. Brooks Coleman with a customer modeling an item from his metal clothing line.





■ FIGURE 6. RoboSpinArt demo board for software development and proof of concept testing.



■ FIGURE 7. Vern Graner glues a servo motor back on the RoboSpinArt demo board moments before show time.

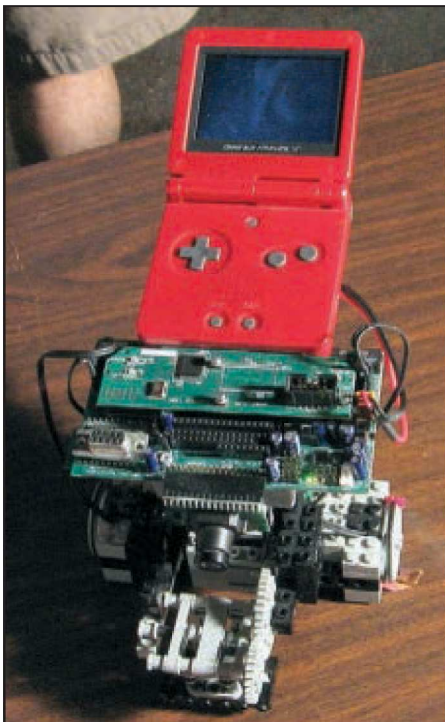


■ FIGURE 8. Kym Graner operating the RoboSpinArt machine at Dorkbot. (Photo by James Delaney.)

beverages being consumed (which certainly adds to the festive nature of the event!) and kids running around having fun and beeping/zapping/blinking things everywhere (Figure 5). At the Austin shows I've attended, the "master of chaos" David Nunez was usually scampering about trying to make sure the next presenter was ready to go, introducing each new segment, and generally making sure everyone has what they need and has a good time.

In addition to being just a heck of a lot of fun to attend, Dorkbot has

■ PHOTO 4. A Gameboy SP powers a small LEGO-based robot.



been a wonderful venue for The Robot Group to test out and demonstrate some of our newest designs. It has provided a sympathetic and knowledgeable audience for some of our more notable projects

such as the RoboSpinArt machine (*Nuts & Volts*, January '08) and the Power Flowers (*Nuts & Volts*, July '08).

The first time I presented a concept project, all I had to show

Q&A ABOUT SELF-ORGANIZATION: DORKBOT AN INTERVIEW WITH DOUGLAS REPETTO

"I generally try to stress that each Dorkbot is autonomous and some of them are quite different in form and spirit from one another. So, it's difficult to make very general, overriding statements. Of course, journalists live for general, overriding statements, so sometimes it's a hopeless cause ..."
—Douglas Repetto, Dorkbot creator

What are the aims of the project you are involved in?

Dorkbot has only a motto: "People doing strange things with electricity." Different groups have interpreted the motto in different ways. When I thought of the motto, I purposely made it broad and inclusive so that it would interest many different kinds of people doing different kinds of things. Artists, inventors, scientists, engineers. The exciting thing to me is to learn about strange things that creative people are doing around the world, with no regard for genre, style, school of thought, area of expertise, etc.

How is the project organized?

It is mostly dis-organized. We have a server at the Computer Music Center at Columbia University (where I work). That hosts many of the Dorkbot websites (but not all). We

also run many (but not all) of the mailing lists from the server. Other than that shared web resource, each Dorkbot is more or less completely autonomous. Very early on when there were just three or four Dorkbots, I decided that the best thing to do would be to give up any control I might have over the other organizations. At first, I was worried about other people using the name in ways I didn't like, or organizing meetings in ways I didn't agree with, but I quickly realized that if I really wanted to be inclusive I would have to let go and let other people find their own way. We have a Dorkbot-overlords mailing list, and we exchange occasional messages between the various people who run all the different Dorkbots around the world. But even that is very low volume. I think that the main thing that has given Dorkbot an identity of sorts is the website and the motto. People see that it is not super self-serious. That it is informal and friendly. That it is about creativity. I think that is enough.

The above interview excerpt courtesy of "Pixelache 2008 Helsinki." To read the rest of the interview, point your web browser to <http://tinyurl.com/3sewrq>.



■ PHOTO 5. "Professor Conrad" (a.k.a., Marvin Niebuhr) adjusts one of the instruments from his Screaming Babyhead Band. (Photo by James Delaney.)

was a bunch of sketches and a development board (Figure 6) for the RoboSpinArt machine that was hastily glued back together moments before I was scheduled to talk (Figure

7). When I was done speaking, I got a hearty round of applause and was then peppered with questions about the demo board and how I envisioned the final project taking shape. When we brought the finished machine back for a later show (Figure 8), the crowd was very enthusiastic and many folks came up to ask



■ PHOTO 6. The SanDraw kinetic sculpture by Rick Abbot and Paul Atkinson. (Photo by James Delaney.)

about details of the mechanisms and how we had solved some of the problems mentioned in the first presentation.

The fact that the folks behind Dorkbot don't really run Dorkbot so much as set the stage for it to happen makes for an interesting dynamic since there are none of the typical trappings of a managed event. The folks who show up are the ones who get up and talk. The presenters swap places with the audience and there is plenty of opportunity for interaction and collaboration. In order to be featured at Dorkbot, all you have to do is sign up via email and tell the Dorkbot folks what you'd like to do — kinda like a grown-up

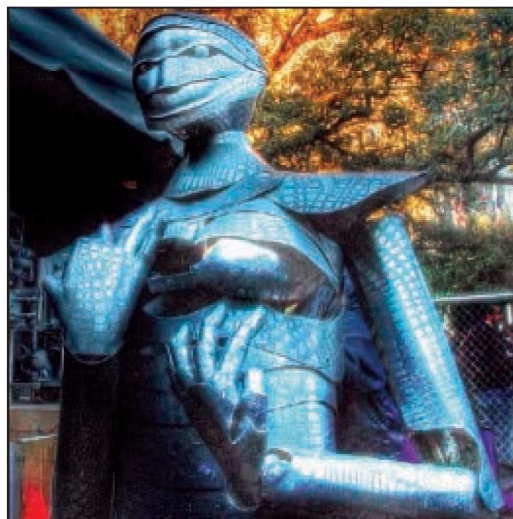
RESOURCES

- Dorkbot: <http://dorkbot.org>
- Dorkbot Austin: www.dorkbotaustin.org
- Cafe Mundi, Austin, TX: www.cafemundi.com
- The Robot Group: www.TheRobotGroup.org
- The Thereping: www.thereping.com
- The RoboSpinArt Machine: www.robospinart.com
- PingPongPrinter: www.youtube.com/watch?v=8Ep5OC3E02I
- Poster artwork by Noel Waggener: www.subculturepress.com
- Workbench Design Contest: <http://forum.servomagazine.com/viewtopic.php?t=8180>

■ PHOTO 7. A ceramic, wood, and light bulb sculpture by Denise Scioli.



■ PHOTO 8. "Gator Girl" animatronic sculpture in aluminum by Brooks Coleman. (Photo by James Delaney.)



■ PHOTO 9. Paul Atkinson checks out the POV display at Dorkbot SXS.W.





■ PHOTO 10. Bob Comers robot made from PVC pipe and recycled "kiddie car" motors and wheels.



■ PHOTO 11. Sami Graner interacts with a "Biomechanical" by "Professor Conrad" (a.k.a., Marvin Niebuhr).



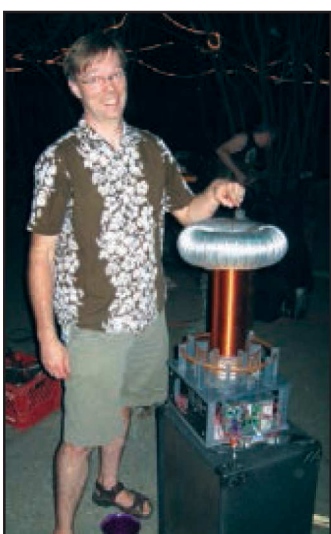
■ PHOTO 12. The Ping Pong Printer with its new ball-feed hopper by Rick Abbot.

version of "show and tell." You would think this free-form method of (non? dis?) organization would lead to chaos, but every Dorkbot I've attended has run surprisingly smooth.

If this sounds like something you'd like to do, but there isn't a Dorkbot scheduled in your city, you can start your own Dorkbot. All you need to do is send an email to Douglas Repetto (his email address is on the main **Dorkbot.org** website). He'll set you up with a mailing list and a link on the main site, and you're off! If there is a Dorkbot near you, you should make a point of at least attending if not signing up to present something. What better way to meet folks than to stand up before a small crowd of other tech geeks just like yourself and talk about your project?

I'd like to close this month by thanking everyone who has sent in an entry for the Workbench Design Challenge (see the Resources section for a link to the contest details on the *Nuts & Volts* web forum). I look forward to handing out the prizes! And, if you happen to find yourself at

■ PHOTO 13. Edwin Wise and his homebrew Tesla coil.



■ PHOTO 14. Gray Mack with his balloon-based light sequencing system.



Dorkbot Austin, look around for me there.

Otherwise, you can always reach me via email at vern@txis.com if you have any questions or comments. **NV**

I'd like to say a special thank you and goodbye to one of the founders of Dorkbot Austin, David Nunez. A good friend and long time collaborator with The Robot Group, we wish him Favorable Chance and Deity Velocity in his endeavors out east!

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