but is it washable?

dan mackinlay inspects ANAT's interactive wearables

ON FEBRUARY 27 THE HAIL-CLOGGED GUTTERS OF THE AUSTRALIAN NATIONAL UNIVERSITY'S SCHOOL OF ART GAVE OUT. IMPROMPTU WADING POOLS ACCRETED AMONGST THE VENT-PIERCED ART DECO ROOF, SAGGED, SEEPED, THEN DRAINED, BATHTUBS FULL OF DIVERTED STORM WATER FUNNELLING THROUGH LIGHT SOCKETS AND AIR VENTS INTO CORRIDORS, WORKSHOPS, STUDIOS...LIGHT TABLES, PROCESSING EQUIPMENT, COMPUTERS, CAMERAS AND ENDLESS FOLIOS OF STUDENT WORK WERE STEEPED INTO ONE ICY MIXED MEDIA GAZPACHO.

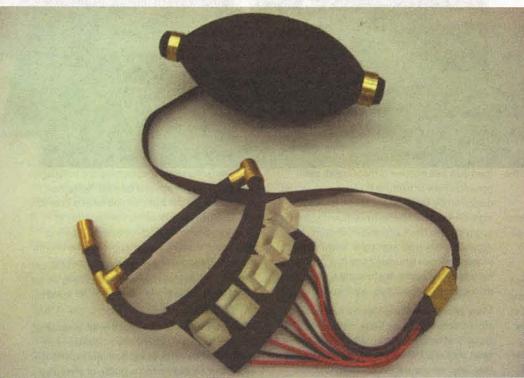
And so it came to pass that decades of careful technology acquisition were rendered nothing but an insurance claim in the course of an hour. Not many media can handle that kind of rough treatment (the sculpture department was noticeably smug in the aftermath), but new media art in particular seems prone to disastrous malfunction at every variation in ambient humidity or operating system version number. ANAT's WearNow symposium and reSkin workshop, hosted at the ANU in the month before the catastrophic storm, faces that risk, exploring the new hybrid field of "wearable technology": electronics robust enough to carry the sophistication and subtlety of technological installation in the rough and tumble of every laundering.

In the WearNow symposium, which followed on from the 3 week practical lab titled reSkin, Los Angeles designer Elise Co carried the flag for the water-resistant team, presenting Puddlejumper, a raincoat whose surface lights up in response to embedded water sensors. Like much of the work on display here, not being quite as high tech as you'd think, this piece has negligible digital processing power. It's simply a raincoat with some wires in it. You might even say that was the whole point, that's what makes this design elegant. We could call Elise's corner of the ring 'industrial design.' It's a corner I would put her in with well known cyberpunk object designer Susan Cohn, also presenting-although Cohn could also be filed under 'craft.'

The most pertinent missed conversation, for me, is the one about the intersections between "wearable technology" and the do-it-yourself movement. The majority of the works being presented don't involve a huge amount of high technology; if anything is driving wearables as a medium right now it is not the invention of any new technology per se but the plummeting affordability of so many old ones, and the upsurge in disseminating the skills to use them. Internet-based collaborative skillsharing of High Team as she unwraps her foot from the such as Instructables and MAKE magazine pop up in the workshops more than once; huge sensors. "You don't. It's not waterproof."

asm, adorned concept sketches spilling out of their sleeves, with unfinished LED-specked breadboards taped to their bodies. It's messy, unfinished, and unapologetically half-arsed, but it doesn't claim to be otherwise, and there are enough great ideas amidst the crazy ones to fill the butcher's paper of a hundred brainstorm sessions. Highlights: Elliat Rich's breath activated transpiration vest...Danielle Wilde's splendidly undignified hula hoop musical leotard...the High Tea With Mrs Woo/Keith Armstrong collaboration, a contraption to transpose the impact of one person's foot binding to spidery electrical actuators pressing another's hand...

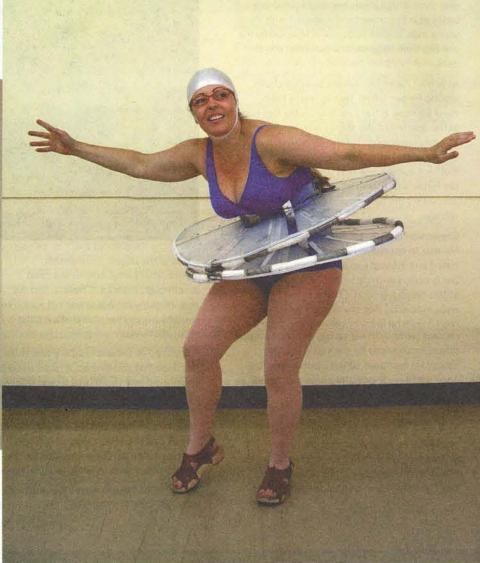
"So how do you wash it?" I ask Rowena Foong delicate wiring of bandage wrapped pressure



In the 'technologist' corner, CSIRO's Robin Cranston has a load of speculations about the properties and potentials of future nano-technologically produced materials that will hypothetically revolutionise textiles as we know them. Most of his subject matter is as yet outside the powers of cheap mass production, existing largely in electron microscope screen shots. Damn pretty ones, mind. Joey Berzowska and High Tea with Mrs Woo hold the 'fashion' corner which would, for argument's sake, put SymbioticA's Oron Catts in the 'high art' camp.

Stephen Barrass' background paper quilts these pieces together. His is a neurobiologically motivated talk unifying the low and high technology works under the protective umbrella of augmented reality. The skin is a sense organ, his argument runs, and the tactile experience of wearable objects places them in the camp of your general hyperreality experiences. Insofar as ideas of augmented reality interfaces are a re-invention of 'virtual reality' and bionic human machine hybridisation that we envisioned for ourselves in the 80s when trying to imagine the present, the intimacy of wearables places them closer to the latter; wearable technology is a cybernetic intervention in your own direct sensory experience. To paraphrase, bionic interaction has been with us all along, and we call it fashion. Only now we notice that it's technology because it stops working when the batteries run out.

It's a noble attempt at unification in a singularly patchy situation. But a bold unifying idea is one thing; for the speakers themselves to engage is another. ANAT's background papers are excellent and comprehensive, including articles by most of today's speakers, and free to boot. But what we want from the symposium is more than background briefings: we want dialogue between the amazing authors of all these papers. Instead, we get show and tell sessions whose diverse notions blend into a turbid soup of dot point presentations. Some firmer steering from the offtimes tepid panel chairs might have been in order, or perhaps a less conference-like format for the whole symposium, to free us all from the spectatorial paralysis more suited to watching Beyond 2000. It jars to use such a staid, uninteractive format for a conference on the most interactive technology imaginable.



community generated open source code of the Arduino circuit board, and when those run out there is a basket of plastic toys by the door awaiting circuit jamming. All manner of formerly technical specialised knowledge is becoming democratised and communal, and knowledge is being shared in all directions as artists from different fields get with the new media rhetoric and hybridise their artforms.

This do-it-yourself-then-tell-everyone-else is the trend whose effects suffuse the workshop—the blogging generation is turning their media-making prowess on the physical world. The reSkin Lab is bang in the middle of that movement-promiscuously multi-artform and multimedia, and multi-aesthetic, spanning industrial design, craft and good old fashioned high art. The laureates of this workshop stalk sleeplessly around with a damn good idea of precisely how easy (or not) all this newly accessible technology is. And for three weeks they have ruled the Art School like the coolest kids on summer camp, descending on the final exposition in a surging wave of lurid enthusi-

portions of the works created are driven by the Participant Somaya Langley confirms: "Nothing here's washable." And so we all stumble off down the road for dinner, praying for dry weather.

> Australian Network for Art & Technology: reSkin, Wearable Technology Lab, Jan 15-Feb 1, Australian National University: WearNow Symposium, ANU Gallery Feb 2, National Museum of Australia, Feb 3; presented by ANAT, the Australian National University School of Art, the Centre for New Media Arts (CNMA), Craft Australia

reSkin: www.anat.org.au/reskin

Arduino physical computing: http://www.arduino.cc/

Instructables: http://instructables.com

Make: http://makezine.com

Images: left - Embracelet, Jonathan Duckworth (with Catherine Truman); righthipDisk, Danielle Wilde (demo 3), photo Cinnamon Lee