

Reflection: It's What you Eat in Taco Shells

Thomas Kerlake

"You are correct! That was indeed a clip from the Beatles' "Hello, Goodbye". You've won yourself a CBC swag bag. So what are you doing this summer Thomas?"

"I'm conducting a heuristic evaluation of lime kiln human computer interfaces."

"Oh...that's...so what's that about?"

"Well..."

It wasn't the first time I've tried to explain what my practicum was about to a confused audience. But hold on a second, why was I calling in to radio shows? Why was I working at home? Why was I sitting at my computer in my underwear? What kind of practicum was this? Allow me to walk you through my 2008 BAA Psychology practicum; a journey of proportions most epic.

I found a placement with a German engineering company called 'Andritz Automation' and began by discussing with my supervisor what kind of work I would do for them. I was interested in human factors work, so we agreed on two reports: an evaluation of a kiln's computer interface, and a booklet for engineers that introduced them to good interface design. These booklets would give the engineers a grounding in interface design and a chance to see how it applied to one of their own interfaces.



Engineering firms are busy places and the local branch of Andritz literally did not have room for me. But my supervisor found me a laptop that included the interfaces they built and a simulator which ran them as though they were wired into an actual plant. This was how I found myself working at home, like a consultant or contractor.

One type of software Andritz produces is human-machine-interfaces (HCIs). These HCIs are often custom made for a particular plant and they allow the plant operators to control all the ins-and-outs of lime processing. Now when I first saw what these interfaces looked like (the child of "Tron", "Lego" and spaghetti), I realized I had a challenge ahead of me. I was looking at an entire plant: every fan, conveyor belt, valve and switch was in front of me. Thus, I hid under the blankets of my bed for awhile.

But I soon got on with it. I pulled names, texts and sources from old courses of mine, "Human Factors" and "Cognitive Ergonomics" and the structure of two booklets took shape. Part of my motivation came from enjoying applied psychology: someone would actually use these things—and they weren't a psychologist!

More motivation came through a surprise: I could be creative with this project. In trying to solve the problem of a screen's poor contrast and legibility, I recalled a friend of mine who was working on a cartoon. He was working with something called "colour theory". Armed with just a name, I headed off to the library and was chuffed to find a book all about it. A few days later, I had a new colour scheme that improved the screen considerably. These little successes led to an unfamiliar but comfortable sensation of being useful.

Yet, like the archetypal hero's quest, success didn't come without trials. I would face two large ones. The first I was prepared for: engineers are not psychologists so I would need to avoid jargon and keep it brief, given their tight schedules. The second challenge was more insidious: doubt. What did I know about lime kilns? By what authority could I claim my suggestions were correct? This was assuaged however when my supervisor delightedly described how a particular graph I cited would solve a common operator error. Excelsior!

Amongst these challenges and successes, something else arose. I began to worry how I was projecting myself, psychology and specifically its human factors branch to these engineers. I wanted to ensure they thought I was doing my best and that psychology had something useful to say. Was I developing a sense of professionalism? Does it wash out?

In the end, I got the booklets in and the practicum was wrapped up. I was pleased that I completed all my work, made something useful and found solutions to troubles that I met. Now I'm continuing on in human factors with an honours thesis supervised by Kevin Hamilton and Richard LeGrand.

What comes after that? Sleep.

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