Make a Smart Thing
A Humanities Physical Computing @UVic Challenge

During our workshops thus far, we've followed the "listen and repeat" model: I've showed you how to author a sketch, build a circuit, make stuff blink, and so on. You've then mimicked the demonstrated procedure, turned the power on, and said, "Neat!" Now it's time to change the trajectory, away from foundations and toward building something that responds to a particular problem or possibility. And to make it fun (or so I hope), I'm framing this as a challenge, which I recommend you engage in groups (of two or three), not individually.

Hypothetical Scenario In a magical turn of events, you've acquired some new space (e.g., on campus or in your apartment). In order to spice up your everyday living, you've decided to use physical computing to automate a behavior that will frequently occur in that space. The recipe for your smart thing—or your automated behavior—will somehow involve an Arduino board.

Learning At this juncture, you don't need to know how, exactly, to make your imagined device. That's the point of the workshop. Still, you should be able to leisurely build it by 2012's end, using the upcoming HPC workshops for time, space, and materials. (Regarding materials, odds are I will have the parts you require, or I will be able to (help you) acquire them. More below.)

Questions of the Cerebral Sort What will be the automated behavior? Why are you automating it? What problems or possibilities are you engaging? How will automation alter your relationship to objects, space, and other people? To what effects, and under what assumptions?

Questions of the Practical Sort What parts are required? Do you have them? How can you use already existing or discarded materials? Who has already built what you are imagining? Is code available? A tutorial? Will your smart thing need to be tethered to a computer? How will it (if at all) keep a log of its actions? Will it require maintenance? Will you actually use it?

Generative Constraints Please use whatever Arduino board(s) you have in hand. Keep things simple. Avoid too many parts or complicated programming. Pick something fun or new to you.

I'm Participating I'll be building a variant of this smart thing: http://dandydev.net/blog/burglar-s-doom-an-arduino-project (but without the security rhetoric).

Reward Through replication, the Maker Lab will adopt the smartest of things and—after a year—let you know how it went (including perks and possible revisions).

Resources I recommend the following for ideas: http://bildr.org/, http://arduino.cc/playground/, http://makezine.com/arduino/, and https://vimeo.com/groups/arduinoprojects.

Timeline Before Friday, July 6th at 2 p.m. PDT, email me your idea, the parts required, and a URL for a similar project (perhaps one you wish to replicate).

On Wednesday, July 11th at 4 p.m. PDT, we'll meet and share your ideas. We'll then commence making them happen during the summer and into the fall.

Questions or quibbles? Email Jentery at jentery@uvic.ca.