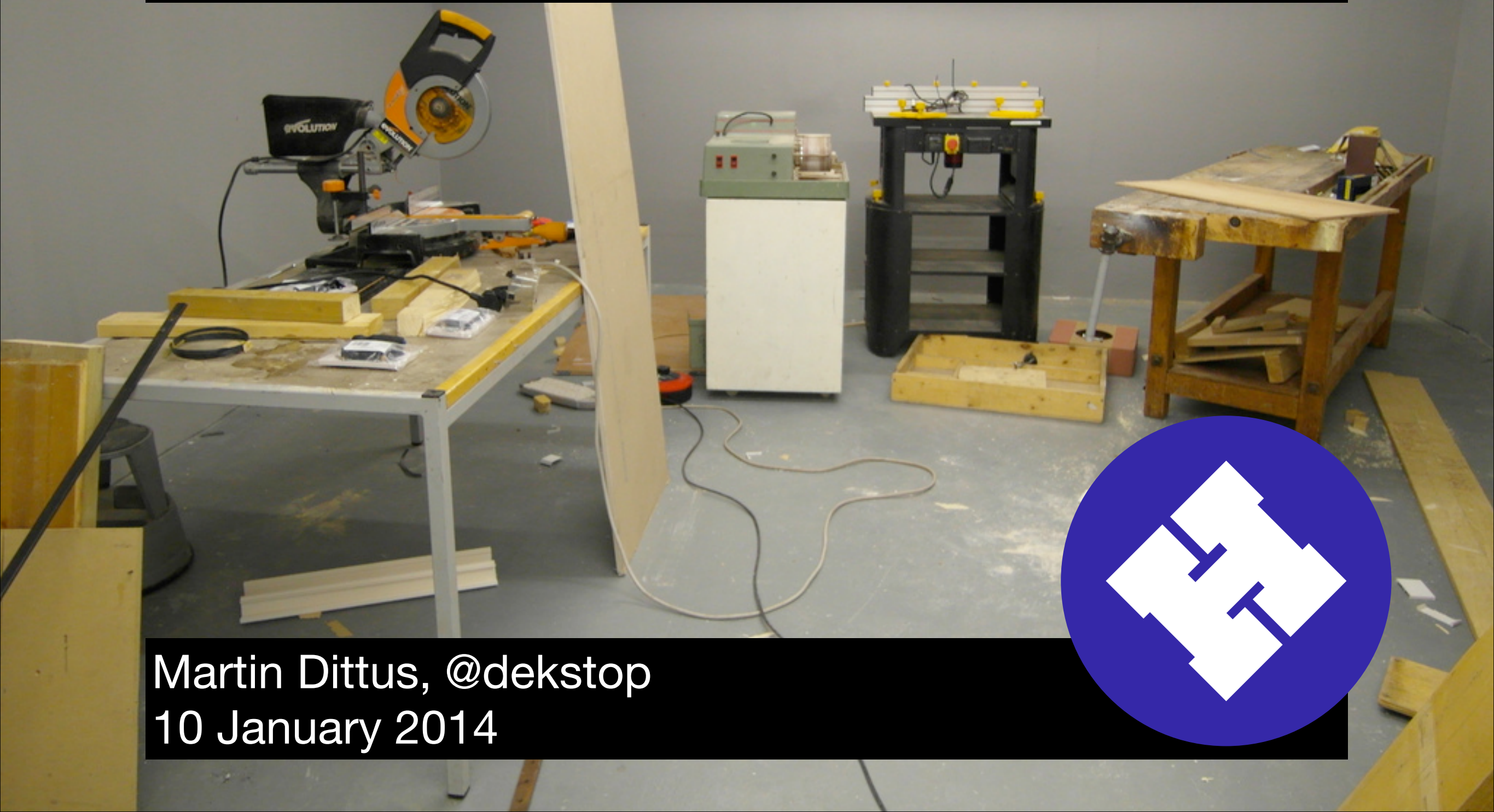


“Open” Hardware Projects at the London Hackspace: The Highs and Lows.



Martin Dittus, @dekstop
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In the world of hackers and makers we don't talk about “**transparency**” very often, although we do actually care about it a lot. The closest word we have is “**open**”.

“Transparent” as “*open to public scrutiny*”...

transparent | tran'spar(ə)nt, tra:n-, -'spe:- |

adjective

1 (of a material or article) allowing light to pass through so that objects behind can be distinctly seen: *transparent blue water* | *fine transparent fabrics*.

2 easy to perceive or detect: *the residents will see through any transparent attempt to buy their votes* | *the meaning of the poem is by no means transparent*.

- having thoughts or feelings that are easily perceived; open: *you'd be no good at poker—you're too transparent*.

- (of an organization or its activities) open to public scrutiny: *if you had transparent government procurement, corruption would go away*.

3 Computing (of a process or interface) functioning without the user being aware of its presence.

4 Physics transmitting heat or other radiation without distortion. *CFCs and water vapour are virtually transparent to incoming short-wave solar radiation*.

“Open” can mean a number of things...

- The development process is visible to the public
- The project invites contributions by “outsiders”
- Projects are explicitly published under an open software/hardware license which allows others to make their own versions

LHS Bikeshed

An immersive spaceship simulator



LHS Bikeshed

An immersive spaceship simulator



Produced at the Hackspace (in our car park), work happens in front of everyone's curious eyes. Code is on Github for simulation and hardware controllers. A very social approach to project work: always inviting others to **play**, making experiences, and then refining based on your observations.

<http://www.flickr.com/photos/russss/9284345468>

LHS Bikeshed

An immersive spaceship simulator

A never-ending project: it already “worked” a year ago, but is still constantly being refined. The act of making it, and how it is being made, becomes a purpose in itself: a **stimulating social experience**, a never-ending opportunity to hone your skills, to entertain and impress others.

<http://lhsbikeshed.tumblr.com/>

<https://github.com/lhsbikeshed>

<http://www.flickr.com/photos/russss/sets/72157634215443761/>

<http://www.youtube.com/watch?v=WjpQexdcybs>

<http://www.flickr.com/photos/russss/9284345468>

Hoxton Owl

A programmable effects pedal



Hoxton Owl

A programmable effects pedal



Funded on Kickstarter, the first pedals are being shipped now. The software is open source, published on Github under an open license. Held an **open competition to write audio plugins**, the winning entries are shipped with the pedal.

<http://hoxtonowl.com/2013/11/final-enclosures-have-arrived-innovation-in-music-2013/>

Hoxton Owl

A programmable effects pedal

Kickstarter backers received regular progress updates which set clear expectations. Showed different design stages, from prototype to end result. A community forum encourages **close interactions between developers and users**. Held a community vote on the most **desired features**. Even published their budget!

<http://hoxtonowl.com/>

<http://www.kickstarter.com/projects/marser/owl-programmable-effects-pedal>

<https://github.com/pingdynasty/OwlWare>

<https://github.com/pingdynasty/OwlPatches>

<http://hoxtonowl.com/2013/11/final-enclosures-have-arrived-innovation-in-music-2013/>

Hackspace Infrastructure

Coolbot, doorbot, notification boards, ...



And many others...

(Impossible to keep track.)

Jasper's Net-O-Meter, Elliot's Spacensus, Hackspace monitoring tools,...

Websites of members with many more examples:

<http://www.nanode.eu/>

<http://www.electriclelaboratory.com/>

<http://www.arachnidlabs.com/>

<http://www.section9.co.uk/>

E.g. Ben's Hackspace burger experiments:

<http://www.section9.co.uk/posts/2011-01-23-cookbot.html>

<http://www.section9.co.uk/posts/2013-04-28-Hackspace-Burger-Part1.html>

<http://www.section9.co.uk/posts/2013-05-10-Hackspace-Burger-Part2.html>

<http://www.section9.co.uk/posts/2013-05-21-Hackspace-burger-finale.html>

<http://www.flickr.com/photos/daniel-sikar/7846548022>

Hacking, tinkering, play.

Process is as important as outcomes.



http://www.flickr.com/photos/fishies_go_pook/8054241726

Three hypotheses about transparency in design...

1. Transparent design processes have **many positive side-effects**

They can foster more intimate relationships, engender trust, they allow others to learn, ...

2. Transparent design processes can **improve the quality of your work**

They encourage dialogue, early feedback, ...

3. Transparency in design is hard: **it can break you**

Transparency in design is hard: **it can break you**

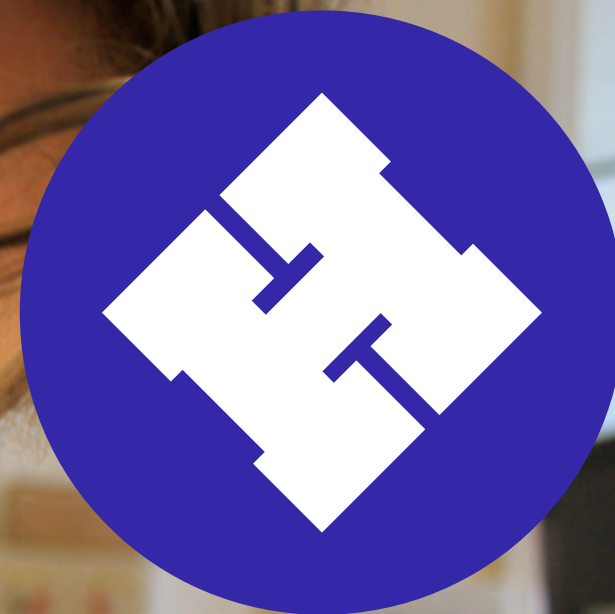
Is transparency always constructive? Do we need to be able to justify every decision? Transparency as surveillance: when openness becomes a mechanism of control.

The **tyranny of choice**: too many opinions are slowing down the process. (We call this “**bike-shedding**”, aka Parkinson's law of triviality.)

This is **especially problematic for creative work**, where a single mind with a unique perspective can be powerful; where artistic expression is rarely improved by reviewing it in a focus group.

Thank you.

@londonhackspace



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@dekstop

<http://www.flickr.com/photos/chaoticeunoia/7842835108>

Worth pondering first: what are your project's aims?

Is “transparency” simply something you can add to and omit from a project? To what extent is this simply about practical (procedural, contractual, ...) concerns, and to what extent is it also a fundamentally personal ethic?

What are the expectations of a “transparent” designer towards their audience? How are they supposed to respond? How will they actually respond?

To what extent is “transparency” also about **changing how decisions are made?**