

Impact Sample

For 'Playing Inspiration: What possibilities and advantages, result from the development and appropriate application of creative methods of Research?'

From the **Chapter 3: Autonomation**, Using Computing to automate research.

As an experiment for the proposed methodology for the book we conducted a trial presentation where four students were encouraged to create *flow* between one another's projects on the theme on Autonomation.

The students involved included Reuben Ewan, Robbie Henderson, Tommy Dykes and Fionn Tynan-O' Mahony.

Project 1: Strawberries Reuben Ewan



Strawberries are a product of Design Informatics. This sentence may at first seem unfathomable (strawberries are a product of nature) but if we were to further analyse mans unique ability at this moment in history, to have strawberries at his beckon call for whenever he so desires, we may yet return to the original sentence with our faith restored. I think strawberries are a genre busting example of what Informatics is and how it permeates everything in modern society.

So it is mid march and the strawberries in our supermarket our a reverberant red, despite them being out with season by 6 months.

In Britain we can now eat strawberries all year round

“they come from Israel in mid winter, Morocco in february. Spain in spring. Holland early summer, england and scotland in august and the grooves of San Diego between september and christmas. There is only a 96 hour window between when the strawberries are picked and the moment they cave into attacks of grey mould”
Alan De Botton

This form of logistics is a powerful example of what Informatics can achieve. Strawberries on shop shelves al year round. I think thats why there could be an exciting vision for design informatics. I’m sure we could do something even more interesting than moving strawberries all over the globe all year round.

Project 2: Compression Robbie Henderson

(Taking off from where ruben leaves with strawberries.)

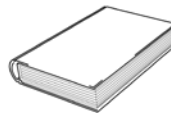
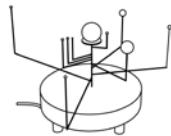
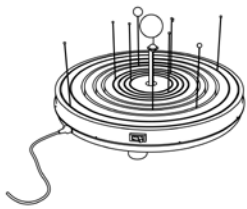
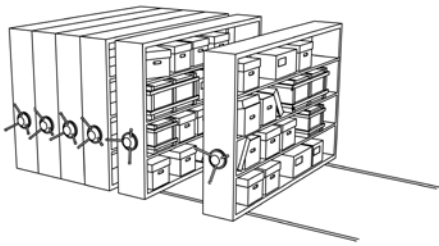
There are dozens of breeds of strawberries however we only recognize one; Elsanta. This is due to supermarkets consolidating their stock and streamlining their range. Because of this compression we remain ignorant to the actual variety. This shows that the politics in this kind of selective compression has a real effect on us.

My topic is 'Compression' the pro's and cons of making things more manageable.

COMPRESSION



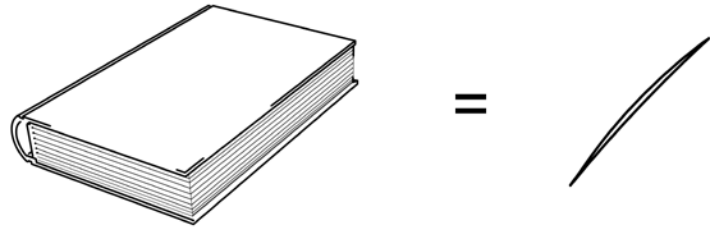
Robbie Henderson MA



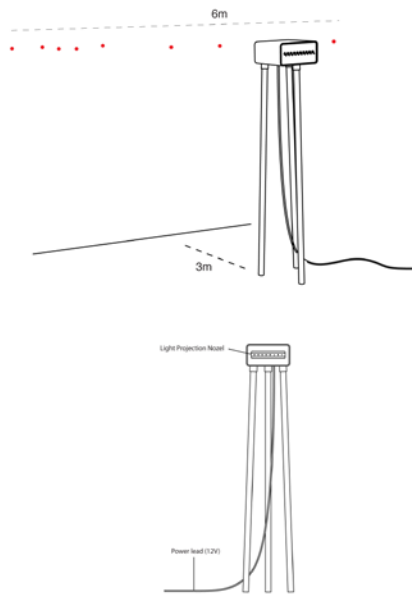
The focus is on physical compression how the information is 'literally' stored and/or shown.

There are compromises in most cases of compression whether it is making something seem smaller in order to make it understandable (model solar system) or in storing large amounts of information to later be expanded (hard drive or museum stacks.)

One extreme theoretical form of physical compression is the 'Encyclopedia Wand' explained in Haruki Murakami's novel. 'Hard Boiled Wonderland and the End of the World,' Where infinite amounts of information can theoretically be compressed onto a toothpick.

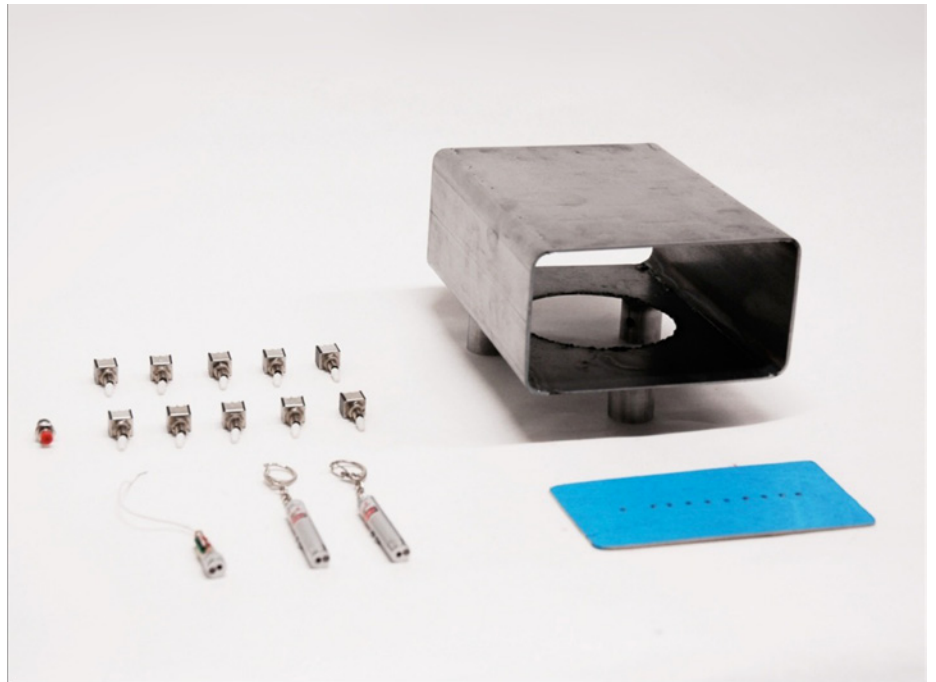


Solar System: Alternative Scale Model.



To highlight the compromises made through compression alternatives are being provided like the 'Alternative Solar system Model' which does not demonstrate the size and colour of the planets but shows accurately the distance between them.

Prototype construction of
'Alternative Solar system Model.'

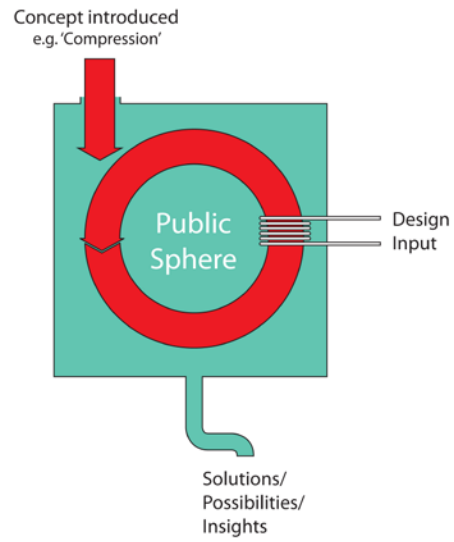


Noam Toran; objects for lonely men

There is precedent for this form of working. Other designers practice 'Critical Design' to comment on research findings or to highlight a subject hitherto undressed. (featured images: Noam Torans 'Objects for Lonely Men.')

I want to evolve this methodology and find a way to get feedback when exhibiting/deploying critical design in order to further useful products.

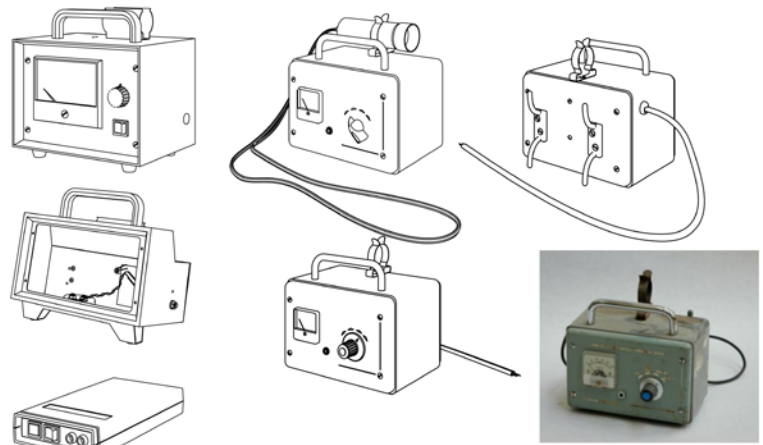
Critical Engagement Engine



Noam Toran; MacGuffin Library

Similar studies focus on the meaning behind objects, what they tell us upfront or what they mean to us personally or to whole cultures. (featured images: Noam Torans MacGuffin Library.)

My investigation is also looking into using objects as storage for information; taking ambiguous objects (geiger counter boxes) and having individuals imbue them with meaning.



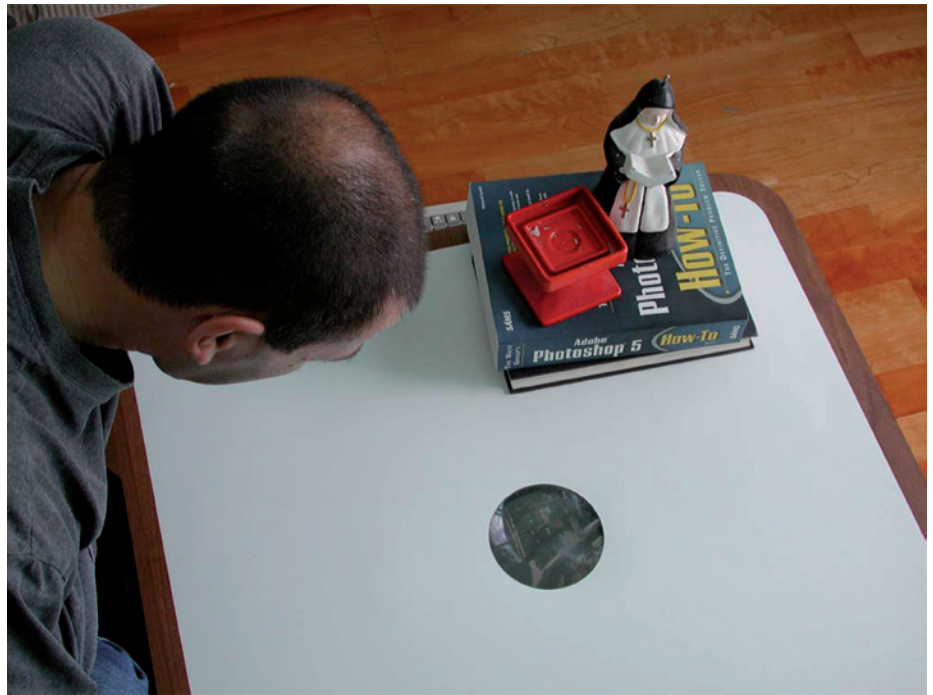
Objects = compression of information/purpose

Project 3: Decompressing Ideas Tommy Dykes

The stories that emerge while discussing a designed object can provide insights that inform the design of further products.

Often within interaction design or HCI, working prototypes are deployed ‘in the wild’. Basically, given to participants for a period of time in order to test a system or answer a research question.

My work builds on the practice of deploying prototypes that have no fixed purpose. For example, the Drift table by Bill Gaver and his team, this was used to explore the idea of ludic engagement within the home through the deployment of an ambiguous working prototype that encouraged people to tell stories about the objects use.



Another example is an object from Dunne & Rabbie’s placebo project. The aim of this work was to explore people’s perception of invisible electromagnetic fields within the home, again, through ambiguous objects that encourage discussion around this subject.

These projects used deployments with no fixed purpose, as an end point – with no further development. Instead, my work considers them a starting point for iterative prototypes that allow you to better understand a potential end-user – in order to design user-centred products.

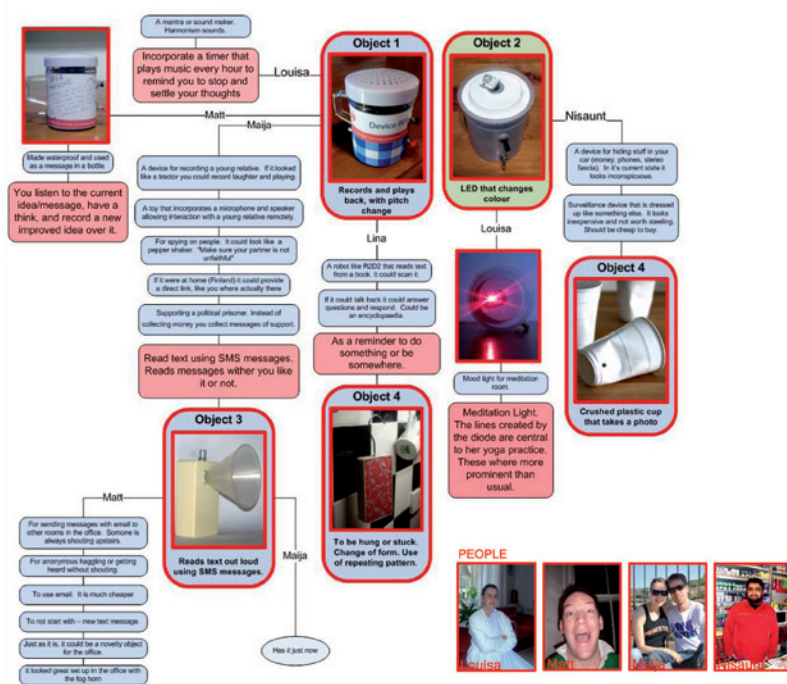
In a paper on the subject, Bill Gaver clearly highlights that these objects can encourage conversations with participants, involving, “how they work, how they could be developed and what they mean”...

Basically, I argue that the insights derived from these deployments can be used to develop further objects and in doing so you can begin to understand a users experiences, opinions or interests...

Essentially it becomes a type of co-creation, were participants are given something undefined, and so are forced to explore a context of use, directly suggest an idea for further development, or provide inspiration to the design process, all through the use of working prototypes.



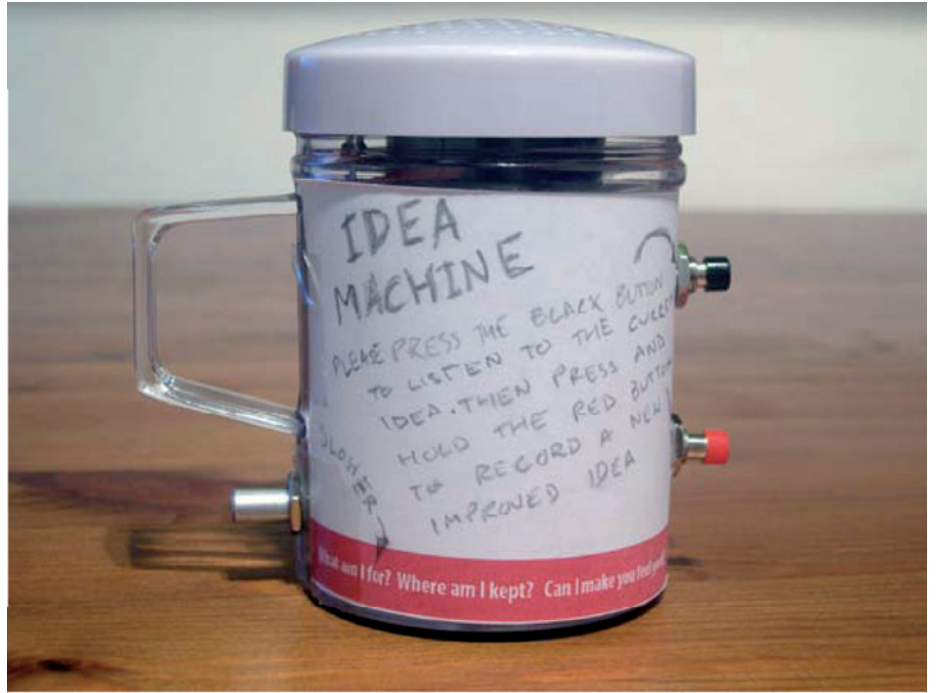
People, people, people....



I have been using a type of evolutionary diagram to represent this process. It shows iterations and emerging ideas as a quick overview.

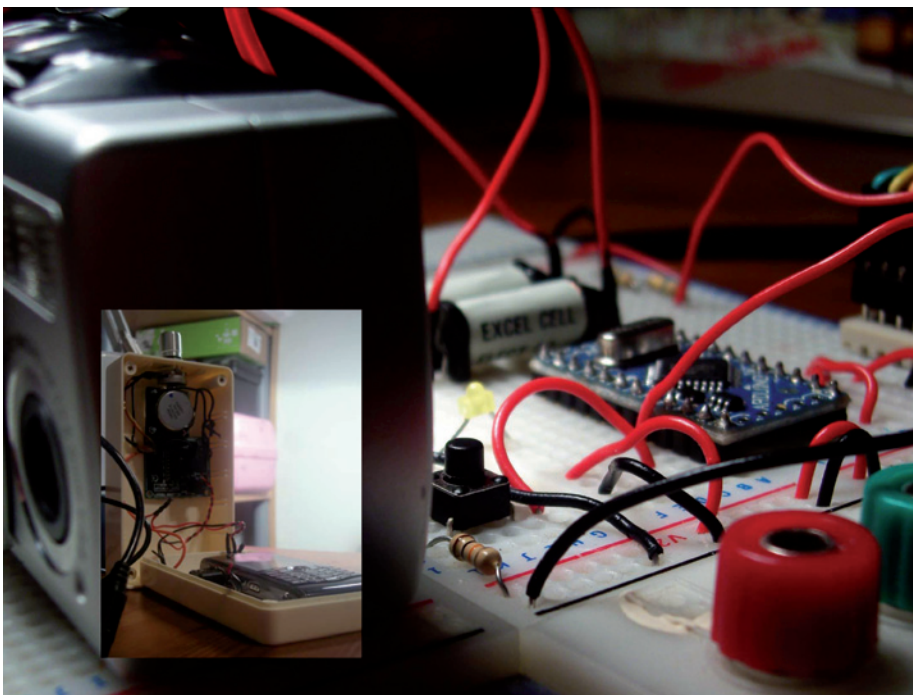
This iterative process started with a simple object. I decided that it never mattered where I started because people would be able to suggest what to do next, and by iteration, objects would become more complex and interesting. Essentially, they would take on their own user fuelled evolution. This object was simply a sound recorder kit integrated into a parmesan shaker that was given a label to encourage people to define what it could be for.

Iterations from this object have led to a variety of insights.



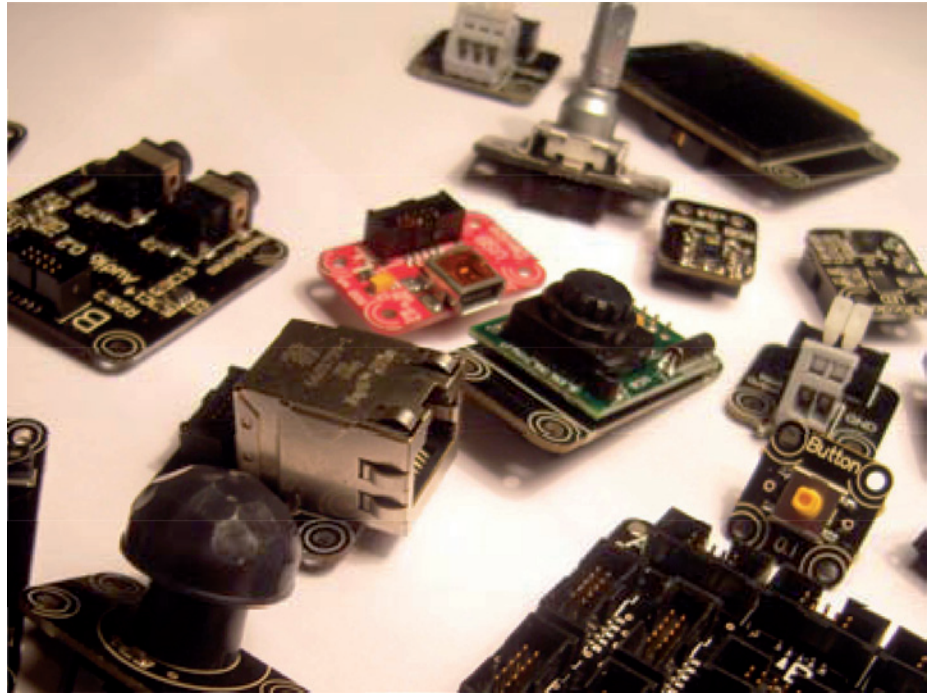
For example, it has led to a device that reads text and email out loud in a computerised voice. This was used by one participant to stop people shouting up stairs in his office – simply by emailing. He also considered this a means of communicating how you feel, within a public space such as an office or a studio, without the discomfort of having to speak up.

A couple of objects down the line it also became the 'noise box' – as defined by a participant. This introduces its user to random influences, such as, music, information and books when it knows she is around. If she is interested it also provides a little information about its source so she can go and find out more about it - do her own research. Another participant described it as a companion when you are in the house alone.



Were I have been hacking existing objects such as cameras and phones to get things working.

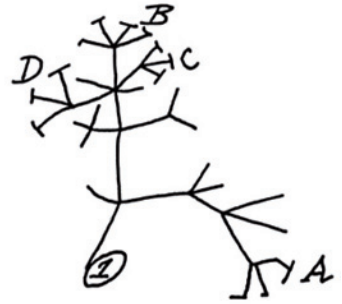
Microsoft has kindly donated a .net gadgeteer rapid prototyping kit. The kit contains a variety of hardware modules, such as, screens, cameras and various sensors that are designed to allow for fully working prototypes in hours rather than days. Basically you just plug in hardware, do a bit of coding, then deploy to participants...



Project 4: Design by Darwinism Fionn Tynan-O' Mahony

Design by Darwinism

An Evolutionary Design Process by Malin Kallmann
[presented by fionn]



Ok so Tommy had been talking about public engagement and the deployment of prototypes with no fixed purpose to inspire ideas and generate potential products.

Last year, an MA student named Malin Kallman did a project which also engaged the public but in a different manner.

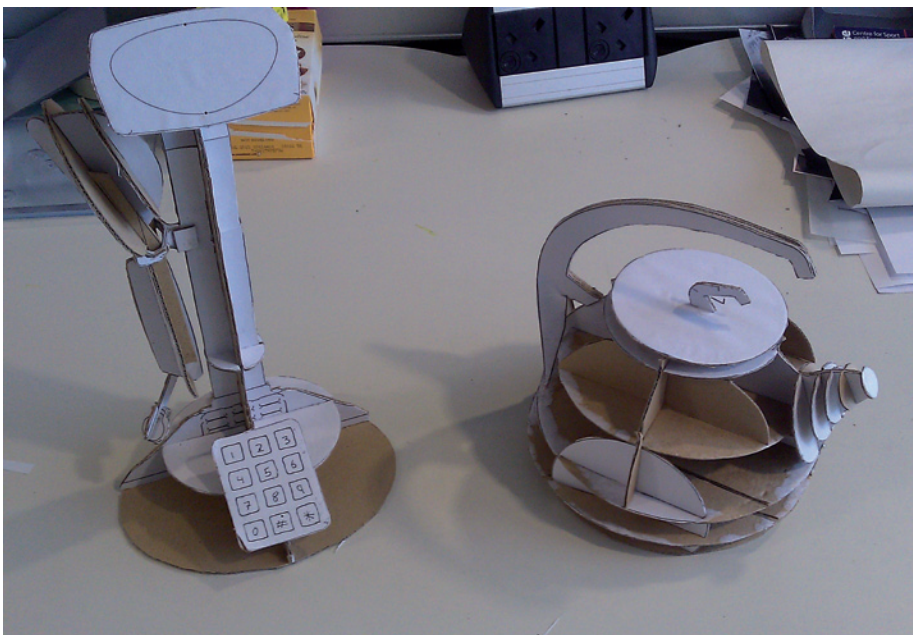
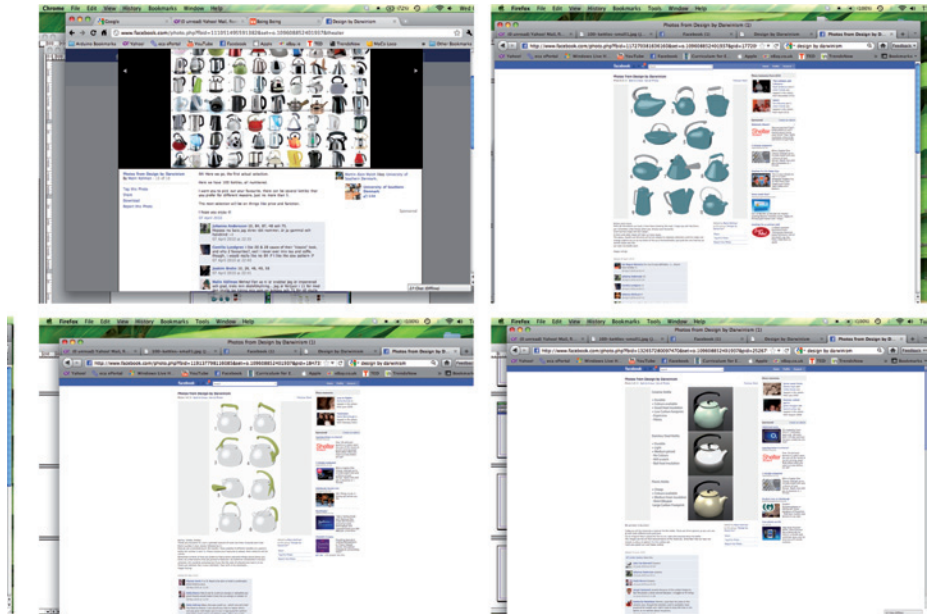
Malin developed a design process based on Darwin's theory of evolution, which she called design by darwinism. This process had three main avenues for design progression; natural selection, survival of the fittest and mutation.

Using this process she engaged the public by presenting ideas and asking for their opinion. The ideas would be all based around a single theme but would all have slight variations. The public would engage by choosing their favourite idea and thus the ideas with the majority vote progressed to the next generation of evolution. This was the natural selection and survival of the fittest stage. At each generation the ideas would be several variations of the parent idea, essentially the offspring of the previous generation. This was the mutation stage. As the process evolved, going through numerous generations, the ideas became more specific and the idea as a whole neared a final product.



Malin engaged the public using different methods. She set up a facebook group, wrote a blog, held public events, sent out cultural probes and eventually through the help of an informatics student set up a website.

This is an example of a kettle she designed. Here you see a number of the stages of evolution. First, 100 kettles, then 11, then 7 with handle variations, then the final three which led to the these.



These are prototypes of the final product. The one on the left is a concept for a phone which went through a similar process.

And these are rendered versions.



Beagle



Ceramic Electric Kettle



Tellingbone



HP Cordless Telephone



As I said with the help of some informatics student, namely a group called Codeus, she developed a website which showcased another version of her design process. An evolutionary algorithm. The algorithm presents four versions of a candlestick and asks you to pick your favourite. Once you have done that, it generates another four mutations based on the candlestick you had previously picked, and then you pick again, and again, until eventually, after 30 mutations you have an evolved product which is most suited to you based on your choices.