
Personal Crunchology: Data Obese Futures and Statistical Fortune Telling

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Abstract

Considering both the massive rise in public and private data as well as the recent rise in data driven research methods, this design work critically reflects on the personal impact of data leaping into all aspects of our lives trying to uncover uncanny and playful implications of a data obese future.

Keywords

ACM Classification Keywords

General Terms

Introduction

By using web-services and computational devices we pile up data about various aspects of our lives. Notions such as the Internet of Things suggest that all things around us will soon be producing data. Others might use this data to sell us more stuff but how will we relate to our quantified selves? What impact will this mass quantification have on our private lives? How does obsessive self-tracking influence our physical and mental health? What might happen if we apply methods of pseudo objectification, which we know from business to the everyday? Will we use the same kind of

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predictive modeling currently used in areas such as marketing, risk management and climate research? How much do we believe in computational predictions and how many decisions do we want to delegate to machines?

These and other questions were asked as the basis for a design project called *Personal Crunchology* carried out at the Royal College of Art in London. What are the killer apps of personal informatics and to what extent do we want to integrate those into our lives?

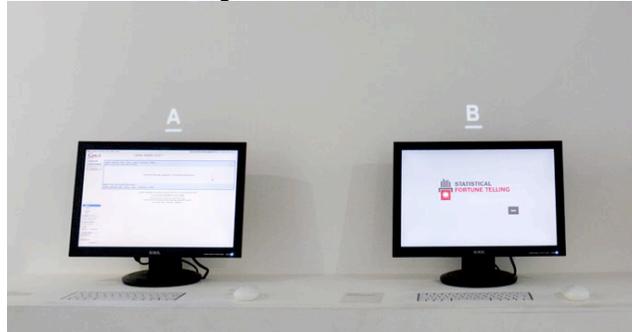


figure 1. Installation Personal Crunchology in the exhibition at the Royal College of Art



figure 2. Personal Future Report printout

Statistical Fortune Telling

Current applications in the field of personal informatics heavily rely on visualization while the amount of computational processing involved is often very limited. What if we start feeding our personal data streams into predictive computer models reflecting various aspects of our lives?

This was the main question that led to the creation of a speculative digital service called statistical fortune telling. This application provides 'predictions' based on personal data. It connects to a users Facebook account and utilizes real data to generate a personalized 'future report' which can then be posted back to Facebook or (in the exhibition context) be taken away as a printout.

These *predictions* were based on data acquired from the London Data Store and followed the typical live areas used in fortune telling: Love, Fortune, Crime, Education etc.

The installation wasn't meant as a demonstration of our rather simple computer model but merely as a cultural probe into new applications around personal data. Building an experiential prototype where a person could actively use this 'future' technology enabled direct emotional reactions rather than logic reasoning towards this technology. Hopefully provoking some of the questions mentioned in the introduction.

Personal Futures

Future Studies as a discipline does not try to predict but mainly map out the territory of plausible futures [1]. Passig[2] on the other hand refers to future-time-span as an important cognitive skill which needs to be trained from a young age. So the question provokingly asked with this design project was: Can we use

computers to help us think about our personal futures more usefully?
 Over the years we have built ourselves computational prosthetics for all sorts of cognitive tasks. Calendar applications help us *plan* a future, todo apps help us *remember* our tasks and there is even software which is supposed to help us *meditate*. One of the computationally modeling software packages meant for business cases already came with an example model to quantitatively model 'work-live-balance'. So why not create software that supports us in exploring alternative futures, imagining them, calculating the risk of specific future events or nudging us towards a more exciting live by keeping the 'risk level' at a previous set 'optimum'?

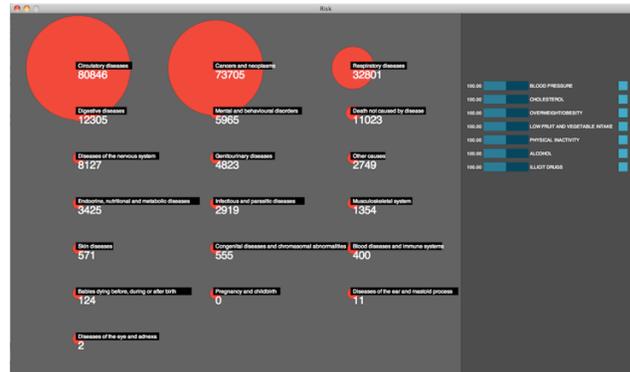


figure 3. Prototype 1: Personal Health Risk Model

Design Process

The project went through several iterations (figure 3-8). The first focused purely on visualizing health risk, driven by actual data (figure 3). Further some ideas about configuring personal risk models and having a simulation doll were explored (figure 4,5).

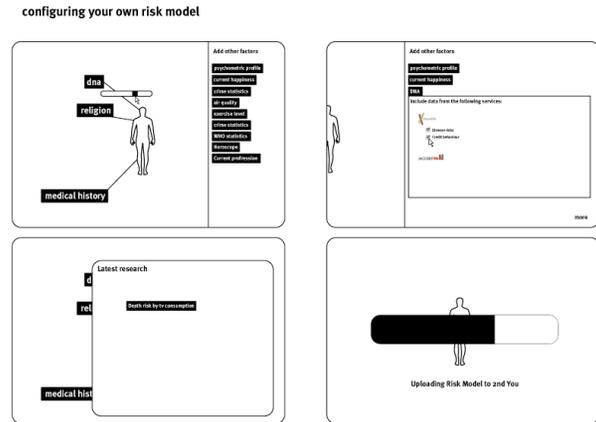


figure 4. Sketch: Personal Modeling Software

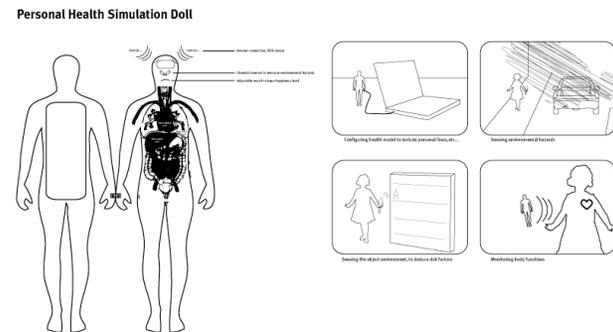


figure 5. Sketch: Personal Health Simulation Doll

After this an iteration was tested, that suggested a computer model based on inputs about personal preferences towards random things such as bananas, bacon, pandas and writing (figure 6). It let visitors select a 'simulation' (figure 7) and gave an output graph (figure 8). This was accepted by many visitors as believable and already provoked strong emotional reactions such as fear and happiness in some.

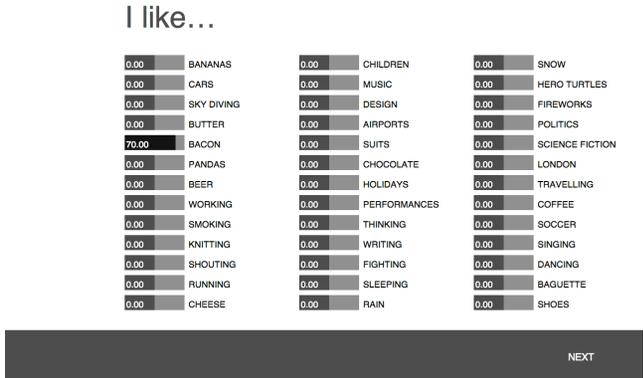


figure 6. Sketch: Personal Health Simulation Doll

Conclusion

Working with speculative software prototypes seems to be a great way to probe emotional reactions to emerging technologies. It opens a way of exploring possible implications of e.g. personal informatics applications without having to build the actual technology. It sparked discussions around how much crunchology we want in our lives and how much we want to trust the numbers instead of our gut feelings and natural instincts.

Please select simulation



figure 7. Sketch: Personal Health Simulation Doll

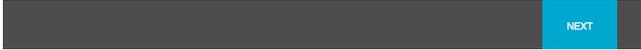
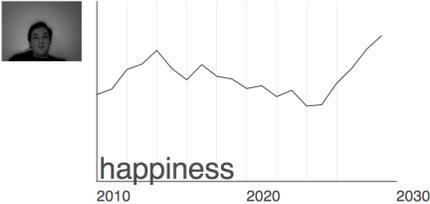


figure 8. Sketch: Personal Health Simulation Doll

Acknowledgements

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References

[1] Dator J. What Futures Studies is, and is Not. University of Hawaii, Hawaii Research Center for Futures Studies; 2007.

[2] Passig D. Future-Time-Span as a Cognitive Skill in Future Studies. *Futures Research Quarterly*. 2003;19(4):27-48.