

# Opening Open Data

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Andreas Koller  
Royal College of Art  
Information Experience Design  
London SW7 2EU United Kingdom  
Email: [andreas.koller@network.rca.ac.uk](mailto:andreas.koller@network.rca.ac.uk)

**Abstract**—My contribution to the workshop could be to add the perspective of a graphic and information designer, data visualisation expert, maker and inventor. This paper briefly outlines my viewpoint on Open Data, mainly arguing that it is important to put it in a human context. I think that designers are a significant part of the Open Data movement. I outline which tools should be provided to them in order to make meaningful and relevant Open Data applications.

## I. INTRODUCTION

In the so-called information age, the human perspective is neglected easily. The much-quoted overwhelming data stream and the notion of data as the new oil removes all human factors from the equation and emphasizes only the technical and economical aspect of data. However, if we want to make the Open Data revolution happen, people have to understand the value and utility of data in their daily lives. Data must be accessible and usable for the broader public and be put into a human context. This can be done by including designers into the discussion and provide them with the necessary tools to provide their contributions.

Designers and artists can offer new perspectives. Their viewpoint is a fundamentally different, as they are concerned about how this data connects with people and the stories told within the data. They have the methods to make data visible, understandable, tangible and experienceable. But we need to provide them with the right tools as well.

## II. WHY DO WE NEED DESIGNERS IN THE OPEN DATA DISCUSSION?

Agreeing with Jer Thorp, I'd like to argue that designers can help that the following issues are understood by the public:

### A. Data Ownership

In order to make open data relevant and of benefit to society, people need to understand data ownership. It is mostly their personal data that is being dealt with and by providing "tools to store, visualize, and explore their own data" (Jer Thorp) they can understand the value and utility of data.

### B. Data and Ethics

The rights of the people from whom the data is being extracted need to be defined and widely understood. People need to have control over what is stored about them, and easy access to their own data, data relevant to them and data collected by the governments.

### C. Data is not the new oil

The metaphor of data as the new oil doesn't recognise the fact that collecting, sharing, interpreting and understanding data must be a human-centered process and not profit-oriented. Data in itself is a completely different resource than oil, as it belongs to the people who create and own the datasets with their everyday actions. Treating it the same way as oil, exploiting it with no regard to environment, societal benefit and humanity, will not make data a revolutionary matter, but another marketing or surveillance tool and a way to control and oppress people.

Open Data is the step away from this commercial exploitation of data, but this has to be communicated and made available to the public in an accessible way, and this is where designers enter the stage.

## III. DESIGNERS, STEP FORWARD

Open Data is a way to enhance transparency and strengthen democracy, and designers and artists can provide tools to foster this and make it a benefit for society by helping to:

- reveal patterns
- show underlying structures and trends
- provide critical perspectives
- make discovery playful
- make data accessible and immersive
- and much more.

Therefore I would like to emphasize the importance of connecting open data specialists, programmers and technicians to the design community.

"As we proceed towards profit and progress with data, let us encourage artists, novelists, performers and poets to take an active role in the conversation. In doing so we may avoid some of the mistakes that we made with the old oil." (Jer Thorp)

#### IV. TOOLS FOR EASY ACCESS TO OPEN DATA

My goal is to enable designers to get working with Open Data. Designers have a different skillset than programmers or technicians, therefore the tools created for them must be simple to use. It is important to make it as easy as possible for designers to access open data portals. This can be achieved with easy to use libraries and examples for environments like Processing, openFrameworks or vvvv.

Processing is “an open source programming language and environment for people who want to create images, animations, and interactions” (<http://processing.org>). openFrameworks is “an open source C++ toolkit for creative coding” (<http://www.openframeworks.cc>). vvvv is “a hybrid graphical/textual programming environment for easy prototyping and development” (<http://vvvv.org>). These are the most commonly used tools in the design field and build on a large and strong community, and I would suggest to provide tools for these platforms first.

With these tools, designers can create applications for the broader public to explore the deeper meaning of data through interactive web-based visualisations, interactive installations or visualisations for print publication.

What needs to be provided for designers is:

- code libraries to easily access Open Data portals that do not require any sophisticated programming knowledge
- low-level examples for a steep learning curve and quick first results
- clearly arranged list of data catalogs or data search engines that can be used and which provide a standardised format and are supported by these libraries

#### V. CONCLUSION

Similar to projects like Gapminder (<http://gapminder.org>), which makes it possible to visualise datasets easily, playfully rearrange and explore them, the aim should be to open up Open Data to the people through applications. By providing these Open Data interfaces to designers, they can create these applications that makes it possible for everyone to turn data into useful information and finally knowledge and insight.

#### REFERENCES

- [1] . Thorp, *Big Data Is Not the New Oil*, Harvard Business Review, [http://blogs.hbr.org/cs/2012/11/data\\_humans\\_and\\_the\\_new\\_oil.html](http://blogs.hbr.org/cs/2012/11/data_humans_and_the_new_oil.html), November 30, 2012, retrieved March 3, 2013.