

INFO-GRAPHICS Session 03

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Broadening access to justice with information design

Legal design / Visual communication / Access to justice

Law is often seen as a complex and inaccessible system, in which decisions on the rightfulness of actions do not necessarily come with an understandable explanation for all parties involved. While this may have been mostly true in the past, today it is not accepted anymore. Ever since the exploring of design possibilities started about ten years ago, the legal sector has increasingly recognized the positive effects of reconnecting law to society at large using a new discipline referred to as 'Legal Design'. The two authors of this proposal started about seven years ago within the legal field to support two different renowned Dutch law firms in their attempts to make legal design a valuable asset to their daily practices. Our work journey and visual results are a testimony of the effect information design can have to make legislation and law better understood among those who are no law experts (see also Meuwese & van Weelden, 2022). With our presentation we aim to give an insight in how we work together in expert teams to translate complex legal information into accurate and clear visual communication. Several actions have been taken (mainly in legal education) to skill the future law expert in sharing legislation knowledge with non-legal parties. There are three outcomes of this changing mindset we would like to mention here. Firstly, there is what is often called access to justice, which tries to improve information sharing by relocating the power of expert legal knowledge – usually located within a small group of experts – to communities of people who are affected by decisions from this 'power'. Secondly, there is the goal of creating more human centeredness within legislation. Law experts and legislators should have more insight in the parties involved in the process of legislation, so that decisionmakers can share more information with all those involved. With more accurate and effective decisions, the practicality of legislation might be improved. This is of great importance for example for governmental institutions who aim to bridge the gap between citizens and

legislation (see also Pope & Treni, 2021). Thirdly, law firms thrive when their clients are provided with solutions which not only see to the legal problem but also to their specific needs.

All this requires an understandable and accurate insight in complex processes within legislation, which can be achieved through visualization. Visualizing complex information to present this in a clear and accurate manner has been explored by information designers in the field of media first, but slowly moved on to other more commercial fields. Legal design is the collective name for a broad exploration of legal experts and design expertise into the possibilities of design thinking, visual law and communication. While some initiatives mainly focus on design thinking and creating ways for law people to think outside the box and become more user-centered, other initiatives pick up where design thinking stops and focus on the possibilities of visual communication and ways to advise clients and citizens with visual language (see also Gillespie, 2022). This latter approach not only involves law experts but also design experts like information designers. Making this work often needs the coaching of legal design advisors who can connect minds of solution-seeking law experts with the minds of solution-exploring designers, creating one unified (visual) language.

This is where we enter the field of legal design. Our expertise surpasses design thinking and focuses more on visual communication to deliver solutions which are accurate, user-centered and understandable due to proper use of information design. Our goal is to develop legal design, and legal visual communication in particular, in such a way that the discipline in the long run will revolve around accurately communicating complexity in teams of legal and design experts, facilitating better exchanges of points of view and experiences and creating a more accessible legal field.

We will take the audience through the process of how to get from a complex information request to a clear visualization while working with experts in the legal field. The presentation will mainly consist of us discussing case studies, highlighting the research phase, methodology and examples of information design as produced in the last five years within a big four accountancy firm and a renowned Dutch Law firm. With backgrounds in communication science and media visual communication, we are experts in design thinking and take a human-centered approach to research and create highly complex infographics, data-visualizations and visual explanations (see below for some examples).

Enrico Bravi

The Water Cycle Project: visualising water balance

data visualisation / water cycle / mapping

Research Question

How can the relevance of a complex systems such as water cycles be visualised and communicated effectively to different stakeholders, with different needs, in different locations? How can the visual display of quantitative information about water balance best enable understanding and generate awareness about our influence on the water cycle, to support citizens and decision makers to make changes towards sustainable solutions? Which tools and which kind of visual narratives should be adopted?

Context

The water cycle is a complex system that includes many different processes: in short, it shows the continuous movement of water within the Earth and atmosphere, through a certain region and period, including human influence on the system. Nested within the global water cycle are the specific situations in any given region and time period. For instance, the water cycle moving (and being moved) through Central-Europe in a dry summer is different than the water cycle through Middle-East in a wet year, and different still than the water cycle through East Africa over a decade. Humans are an intricate part and a major driver of how water cycle manifests itself. Understanding its dynamic and our influence within it—both globally and regionally—empowers our capacity to address the challenges and opportunities on the path towards achieving sustainability and resilience. Agriculture is globally our largest influence on the water cycle, accounting for 80% of human water consumption, and along with households and industrial water use, our lifestyles and consumption behaviours potentially compromise the quality and availability of water in regions creating our food and products. Climate change manifests itself in the water cycle. Water plays a central role in planning for both mitigation of and adaptation to climate change. Water security is also essential for pathways of development and peace and pivotal for achieving many of the Sustainable Development Goals developed by the United Nations.

Methodical and didactical Approach

During the summer semester 2022, 21 bachelor students attending the Data Visualisation class (4. Semester), explored different visualisation strategies in order

to communicate the water cycle for different purposes and audiences. Three different kind of basins and sub-basins around the world were selected: the Salzburger Basin part of the Danube Basin (Europe); the Lake Victoria Basin, part of the Nile Basin (Africa); the Bhima Basin, part of the Krishna Basin (Asia). These were investigated in four analysis levels, in order to frame the complex subject matter and offer different approaches: Meta and Macro levels mainly introduced the bigger context on continental and international scale; the Meso layer focused on the sub-basin on a national and regional level, and finally the Micro level put the focus on smaller areas within the sub-basin. The students were divided in three groups; each group was in charge of analysing one basin. The necessary quantitative data was provided from an open-source hydrological model, selected and analysed with the help of water-related researchers. The work process was documented throughout the semester, including regular interactions and reviews with scientists and guests, workshops, excursions etc. A glossary with selected scientific terms was collected to additional support the communication between students and scientists. Different kind of maps and diagrams were developed for each level of analysis by each group. Short explanatory texts and legends were included by each student, to underpin and explain the visual elements, and reflect on the personal design process. The results were collected within a process documentation in tabloid format.

Goals & Results

The Water Cycle Project should facilitate communication and conversations between diverse groups, visualise the different water flows in different regions of the world and give a visual understanding of complex systems, allow citizens to explore their local water cycle, including where and when our influence becomes more impactful. The project encourages an open dialogue and learning across disciplines, between students and researchers to successfully understand, visualise and communicate complex information. But it should also enable citizens and scientists to discuss topics important both locally and globally and suggest models to empower change. Students were able to benefit from research-led assignments and became aware of the relevance, challenges and visual possibilities hidden in complex data-sets.

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Ian Mitchell

Resisting the Algorithm or Chartjunk? Field mapping using visual metaphor. A case study – the Blueprints of Dorothy

info-graphics / field theory / conceptual diagrams / mapping culture

UK designers Dorothy have been mapping the history of music culture through their Blueprint series for 10 years. Their prints have grown from the relatively simple presentation of loosely grouped genres charting a few hundred electronic music artists to the more complex visual mapping of the history of dance music culture – drawing the dots between scenes, sub genres, clubs, record labels, artists and moments spanning 50 years and many continents. These blueprints are primarily commercial artworks, designed and sold for their aesthetic quality. Formally they all use a circuit diagram associated with the music or culture to act as a visual metaphor and a structural framework for the mapping to follow. The approach might be critiqued as contrived and restrictive, placing artistic preference over informative design (akin to what information design critic, Edward Tufte, would call “chartjunk”) yet recently their blueprint model has been appropriated by Google

Culture and Arts as the interface to their immersive online exhibition Music, Makers & Machines. So, is there more at work in their approach? Does the circuit diagram act as a creative framework much like the use of a grid in page layout and exhibition design, as codified by Muller-Brockmann? How well do the blueprints narrate the entangled history of a cultural scene which is hybrid in its very nature where most things are linked in some way to everything else? What is the significance of the hand/mind/bias of the designer of these maps in comparison to more algorithm-driven data visualisation?

Dorothy's Blueprints can be situated within the context of a rich history of visual mapping and conceptual diagrams. In the art world the interconnected flow of art movements and collective creativity is often visualised in diagrammatic form, from Barr's chart of modernist art history for MOMA's Cubism and Abstract Art exhibition catalogue of 1936 to the same museums interactive diagram for their show *Inventing Abstraction: 1910-1925* in 2013. Similar approaches have been taken to chart the field of music, from the traditional focus on the lineage of band line-ups in Glen Wellard's *Rock Family Trees* to Jeremy Deller's *The History of the World* – a field theory inspired diagram of the social, political, and musical connections between house music and brass bands.

In fact, the field theory of French sociologist Pierre Bourdieu is a useful lens through which to examine visual maps and conceptual diagrams of this type. In *Distinction* (1984), he proposed a way of graphically mapping social fields to explain the way members of different social classes may relate to culture. His basic methodology has been adopted by academics as tools to understand and chart a variety of other cultural or artistic production including the music industry (Cooke, 2020), media and journalism (English, 2016), alternative press (Baines, 2016), and artistic movements (Grenfell & Hardy, 2003). Although these field mappings prioritise sociological or ethnographic concerns and rarely consider the visual maps as the outcome or conclusion to their research, they do present interesting ways to visualise in two dimensions the (often) complex mapping of people, artifacts, spaces, and organisations across space, time, and concepts. For instance, Grenfell & Hardy (2003) in their mapping of the Young British Artists (the YBAs) use an approach derived from Bourdieu's *The Rules of Art* (1996) to present both synchronic and diachronic context in the same diagram – reflecting a key feature of Dorothy's Blueprints. Similarly other metaphors from cultural theory, such as Deleuze & Guattari's (1988) rhizome model, by challenging the tree as a metaphor for knowledge, can further support the decentralised approach to visualising networks. It should be noted though, that field theory as prescribed by Bourdieu follows a strict methodological approach to the collection, sorting, and coding of

data, in contrast to what may be considered a more intuitive and reflexive approach taken by Dorothy, which raises the further question of whether field theory (and other methods) could or should inform the design process of their Blueprints?

This paper will present an exegesis of the design of Dorothy's Blueprints, placing their work in the context of a history of visual mapping and conceptual diagrams, whilst exploring and repurposing ideas related to Bourdieu's field theory as tools to further the visual analysis of their work, and will be supported by interviews with Dorothy's designer-in-chief.

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