International Institute for Information Design **SIONPUS Ienna** 20-21 June 2024

The 20th edition of the VisionPlus Informaton Design Conference was held on 20 - 21 June 2024 in Vienna, Austria.

In six thematic sessions with speakers from 14 countries on 4 continents, this years' programme was an exciting mix across a wide spectrum of information design applications. Talks range from practical project work and research, to teaching practice, culture and science.

Topics:

Government / civil society Healthcare Culture Science & technology Methods Mobility



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DAY 1

SESSION 1: Government/Civil Society 1

Chiara Fioravanti (National Research Council of Italy): 'Explaining administrative procedures to migrants: the role of intercultural mediators in the information design process.'

Klaas van der Veen (Information Designer, The Netherlands): 'Fieldwork-based visuals – Closing the gap between scientific information and real life.'

Mihály Minkó (Information Designer, Hungary): 'A Case Study of Visualizing Public Broadcast News.'

Q&A discussion

SESSION 2: Government/Civil Society 2

Katrin Beste (Information Designer, Austria): 'Finding your way to a new job – wayfinding for the Austrian Jobcenter.'

Andrew Barker (Information Designer, UK): 'Using qualitative data to inform design decisions in government.'

Q&A discussion

session 3: Healthcare

Chris Thornton (University of South Australia) [Presented by Myra Thiessen and Indae Hwang]: 'Medical Information Design.'

Sara Goldchmit (Universidade de São Paulo, Brasil): 'Information design for health education in hip and knee osteoarthritis. Communicating actionable strategies to reduce pain and enhance quality of life through videos.'

Mandar Rane (IDC School of Design, Mumbai, India): 'Exploring design of icons for motorised ICU beds.'

Q&A discussion

SESSION 4: Culture 1

Tingyi S. Lin (National Taiwan University of Science and Technology): 'Diverse needs, various behavioural patterns, and one way to show.'

Diana Frank (Information Designer, Germany): 'Changing Communication in Product Teams Using Semantic (Visual) Modeling to Efficiently Define or Refine Products and Services.'

Q&A discussion



Chiara Fioravanti National Research Council of Italy

Explaining administrative procedures to migrants: the role of intercultural mediators in the information design process

ABSTRACT

Information materials targeted to recent migrants in Italy were created as part of the TEAMS project, an Italian project funded by the European fund for Asylum, Migration, and Integration (AMIF) from 2018 to 2023. The materials, made available through a dedicated web portal, were meant to explain immigration administrative procedures and how to access public services. They consisted of both textual and illustrated information sheets and visual process diagrams.

The design of these materials was carried out using the participatory method according to the Human-centered approach: stakeholders and groups of target users were therefore involved throughout the different design phase and the information was then redesigned on the basis of their feedback.

A specific type of stakeholder, intercultural mediators, played a key role in this process. Mediators with migrant backgrounds who work for the state assisting citizens from different countries were consulted through questionnaires and focus groups during the scenario analysis and the prototypes evaluation phases. They were asked to provide recommendations on information formats and to evaluate language accessibility, intercultural comprehensibility of visual elements and images and their appropriateness for a multicultural society.

The co-design with intercultural mediators provided crucial input to make the language, graphic elements and images designed more effective and appropriate for users from different cultural back-grounds, as well as insights for future activities.

This experience also offered the opportunity to reflect more generally on the role of intercultural mediators in information design processes. As they are considered "bridges between cultures" their involvement can contribute to the goal of a "design for all" and to more inclusive communication necessary in today's diverse societies.

BIOGRAPHY

<u>Chiara Fioravanti</u> is a researcher at the National Research Council of Italy, specifically at the Institute of Legal Informatics and Judicial Systems (<u>IGSG/CNR</u>). She holds a background in Science of Communication from the University of Siena and a PhD in Information Society with a focus on Information Engineering from the University of Florence.

Her research centers on the <u>Dissemination of Legal Information</u>, particularly focusing on communicating the law and public information to vulnerable audiences. She is involved in areas such as Plain Language, Easy Language (part of ELIN - Easy Language International Network), Visual Communication, Intercultural Communication, and the Human-centered design approach in the legal field, known as Legal Design.



Explaining administrative procedures to migrants: the role of intercultural mediators in the information design process

Chiara Fioravanti National Research Council of Italy

CONTEXT

Creation of information materials targeted to recent migrants in Italy, meant to explain immigration administrative procedures and how to access public services. Project funded by the European fund for Asylum, Migration, and Integration (AMIF).



INTERCULTURAL MEDIATORS' EVALUATION

Intercultural mediators were asked to evaluate:

- ✓ Language accessibility
- ✓ Intercultural comprehensibility of visual elements and images
- ✓ Design appropriateness for a multicultural society

DESIGN METHOD

The information design was carried out using a participatory method according to the Human centered approach.

A specific type of stakeholder, intercultural mediators, played a key role in this process. Mediators were involved during the scenario analysis and the evaluation phase to preassess prototypes before evaluating them with the target group.





CO-DESIGN WITH INTERCULTURAL MEDIATORS

Their input, recommendations and insights can contribute to the goal of a "design for all" in today's diverse societies.



Klaas van der Veen Information Designer, The Netherlands

Fieldwork-based visuals - Closing the gap between scientific information and real life

ABSTRACT

Scientists and other academics are trained to use specific language, and be precise. A great advantage when doing research and discussing it, but a hindrance when communicating with a bigger audience. Scientists & science communicators often overwhelm readers and can't resist complexity. I make hybrid text-illustration-infographic products to open up science to anyone. I always start by reassuring the scientist that I'm NOT going to kill their subject by flattening it. And I do 'fieldwork'.

Geopark Schelde Delta tries to gain UNESCO status. They need a friendly communications product to reach out to 'normal' people. The geology inside the park is huge but quite invisible. The client has everything. Storylines, icons, 3D visuals, animations, video and a lot of beautiful pictures.

At first, I didn't know what to do. Later, I saw the problem. "The problem is distance", I told the client. "All text and images stay at a safe distance, they are neutral".

To solve this, I proposed to get intimate with the landscape. I visited most Geopark locations on foot (600km in 20 field days) and conducted interviews with people (fishermen, birdwatchers, farmers) who directly feel the geology, and profit from it.

- It was a leap of faith. Would it work?
- It was VERY subjective, hard for the client.

Result

- 12 short stories, about people interacting with peculiar geology
- 12 illustrations of landscape/people/nature
- fictuous viewpoints to show things that can't be seen together in reality
- finding the ingredients of the illustrations was very hard
- 8 pages with diagrams explaining the geology of sand, clay, wind, tides and human waterworks

It was very hard to find the right ingredients and style for the visuals. On March 27, the UNESCO Global Geopark status was awarded to the client. I like to think my work made a small contribution.

BIOGRAPHY

<u>Klaas van der Veen</u> specializes in transforming complex knowledge into accessible and engaging information. With a foundation in electrical engineering and math, he later pursued studies in art and design to satisfy his need for both understanding and expression.

Klaas primarily works with knowledge-driven organizations, which often produce information that is precise but inaccessible to broader audiences. He acts as an extension of communications teams, creating short, visually appealing, and engaging content. He employs skills in interview, writing, poet-ry, illustration, design, and typography to distill complex projects into concise, beautiful, and energet-ic formats. His goal is to engage readers and ensure they understand the information presented.



Fieldwork-based visuals – Closing the gap between scientific information and real life

Klaas van der Veen

Information Designer, The Netherlands



Beautiful world, big challenges

We can get on top by putting our minds to it.

- Scientists each research a tiny fragment of the world. They aim for complete & precise information. This is **good**, it brings science to a higher level. However...
- **The reader is overwhelmed** by those big documents and endless web-pages. Cutting back on the information will frustrate both
- scientists and communications people. And: a big Word-doc shrunk by 50% is still a big Word-doc.

How to succeed in informing 'normal people'?

4 Solution: start from the other end

Imagine a screen, sign or book that will engage your audience. Prototype it. Let's introduce the audience to the scientific side by starting right where they are.

5 <u>Fieldwork</u> to select the content

There's way too much information available. Fieldwork is a method to select the right content:

- a) Prepare. Read everything.
- b) Go and see for yourself. Take plenty of time.
- c) Interview experts on site (so the expert will use plain language). Re-phrase & discuss.
- d) Write & visualise. Choose exciting details and interesting viewpoints. Aim high.
- e) Check with scientists and users & adjust if needed.

6 Reader happy, scientists happy ;-)



Mihály Minkó Information Designer, Hungary

A Case Study of Visualizing Public Broadcast News

ABSTRACT

Editing television news programs is a complex task. The daily flow of breaking news is channeled according to television's editorial principles. These principles determine the order and the duration of the news; however, these are rarely accessible. Hence, investigating a technique for identifying simple patterns in news articles could bring important value.

Public television in Hungary is an important information source as it reaches large numbers of the wider public [Terestyéni, 2007]. The most popular news media are owned by the local government rendering it an unreliable source of knowledge.

Through this work I aim to unpack the local news editing strategy found in Hungary to raise awareness over the channel's editorial strategies. My research consists of three steps: capturing the data using annotations which involved viewing the news items and annotating each with data; the second, was designing the visualization that best suited the content; and finally, the implementation of the visualization using the Processing programming language. My findings illustrate an alignment between the news output and the government's narrative. I discuss the opportunities and challenges of the data collection and editing process and visualization choice.

BIOGRAPHY

Mihály Minkó is a lecturer, design researcher and practitioner at the Moholy-Nagy University of Art and Design. He works at the frontiers of data visualization. In addition to creating digital representations of data, he also creates physical data installations for museums and the urban environment. In his work, he is committed to using data visualisation to shed light on hidden processes in society and make them visible.



A Case Study of Visualizing Public Broadcast News

Mihály Minkó

MOME, Data Visualization Researcher, Hungary

Introduction

Structuring the news is a responsible and important task of the news editors and news media. In case of public news this editing should be based on serving the public with unbiased information. In Hungary recent years the public media became a propaganda asset of the government. The aim is no longer to provide unbiased information to the public, but rather to keep on the agenda and frame the issues that the government considers important. Just by watching public media evening news, one can have a feeling of this, but is it possible to uncover a hidden editing principle in public news media and visualyly support the reasons of propagandistic means of it? This case study tries to answer that question.



Results

The collected and annotated items cover 30 days in 2019, from 1st of September until 30th of September. Results show that positive news were most of the time associated with the government (94,8%) and negative news were associated with the opposition (46,2%) or the migration crisis (42,2%). The individual news items very often started with something negative from abroad. This means that 21 times out of 30 the evening news started with negative items. Out of the 21 negative news stories 18 were related to events abroad.

Evening news item



Data and methods

I watched all the evening news broadcasts of the M1 public service channel that was aired in September 2019 and annotated each news item according to a predefined set of categories.

These categories are the following: 1) the news item dealt with a topic of foreign or domestic interest; 2) the news had a positive, negative or neutral connotation; 3) the topic of the news was related to Fidesz (current governing party), the opposition, the issue of migration or other issues; 4) when the news started and when was it finished; 5) after collecting the raw data using the start and end times, I calculated the duration of the news. Using this method, I collected and annotated 713 observations. After annotation I visualized the data using the Processing visualization framework.

All news overlayed





Katrin Beste Information Designer, Austria

Finding your way to a new job – wayfinding for the Austrian Jobcenter

ABSTRACT

The 2019 briefing was to create a new wayfinding system for all 120 jobcenter locations in Austria (AMS, Arbeitsmarktservice). This system should consist of a manual, describing the parameters which would enable employees to create the appropriate signage without any further expertise and help.

Starting point was an analysis of the existing wayfinding system – of which there were several in place. So the real analysis started from a different angle: Which information does one get before he visits a jobcenter? How does the organization want new visitors to behave? What does one have to know on site? And, even more exciting: How does the AMS want to be seen, which image do they want to achieve? How do they want visitors to handle their new situation? How do they want them to feel?

So in the end the solution was not only a document explaining which sign to put where, but a wayfinding manual including the following aspects: a thoughtful wording approach, a friendly and convenient typeface including a set of pictograms, a reduction in complexity, a change of point of view from displaying internal hierarchy to user centered needs. From 2022 onwards, the new wayfinding system started being implemented step by step to jobcenters around the country.

BIOGRAPHY

<u>Katrin Beste</u> is a studied nutritional scientist and graphic and information designer, based in Vienna. Since graduating from the New Design University in St. Pölten, she has been working at <u>d-licious</u>, where she designs and plans wayfinding systems. Pictograms and site maps in particular meet her desire for abstraction and simplification.

She also works independently, e.g. for Wiener Linien or together with Veronika Egger, and also on a voluntary basis, most recently as co-founder of the association for the "Conference for Information Design". Together with Andreas Koop, she founded the small publishing house "Edition Emil", for which she also writes. Thanks to her 12 years of experience in marketing and sales at a large corporation she adds conceptual and analytical expertise to all her projects.

She is currently WRR of IIID for Austria.



Finding your way to a new job – wayfinding for the Austrian Jobcenter

Katrin Beste

d-licious, Information Designer, Austria

Wayfinding Manual for AMS Arbeitsmarktservice

incl. new typeface, pictograms, arrows, colours, and content; based on user centered design approach.

Since 2022 ongoing rollout in all 120 jobcenter locations in Austria.









Andrew Barker Information Designer, UK

Using qualitative data to inform design decisions in government

ABSTRACT

This presentation stems from my experience as a user researcher in UK Government, and the challenges getting people to accept qualitative data.

The UK Government is understandably keen to ensure that the decisions it makes are based on robust evidence. To this end civil servants are provided with ample opportunities to maintain and develop their data skills. However, much of the discourse still assumes that 'data' refers principally to numerical (quantitative) data. As a user researcher, I collect both qualitative and quantitative data, and I use one or the other or both depending on what question I am answering. However, when I present the data to my colleagues – to the people who use that data as evidence to drive their decision-making – I often encounter resistance to accepting qualitative data as being as good as quantitative data.

I have worked to help civil servants to understand qualitative data through persistent advocacy with the people I work with day-to-day, and I have delivered training on how to use qualitative data. Two webinars that I delivered last autumn have now been viewed by over 500 civil servants.

This presentation reflects on what I have learnt about helping people to understand qualitative data.

While the subject that I propose is not directly about design itself, it is about the evidence that informs design decisions, and a key issue therein that many designers encounter when discussing design decisions with clients – namely a scepticism about or resistance to evidence that isn't statistically based. It is a persistent problem that isn't often the focus of discussion. I'd like to put that issue in the spotlight.

BIOGRAPHY

Dr Andrew Barker's career spans many aspects of user-centred design and information design. He has designed for print, digital, and environmental settings. For several years he was Design Manager at Penguin Books. Several of the books that he has designed have won Book Design and Production Awards, and in 2007 his redesigned T-Mobile bill won a Design Effectiveness Award. In 2019, he completed a PhD in the Department of Typography and Graphic Communication at the University of Reading, in which he compared people's interactions with information across print, digital, and environmental settings.

Since then, he has focussed on behavioural research, investigating how people interact with information. He has worked with a variety of clients and is currently a behavioural researcher in UK central government. Andrew is chair of the <u>Sign Design Society</u>. He curated and chaired their recent symposium on inclusive design for wayfinding information. This year saw the publication of Sign Design Guide + : Andrew's complete update of the guide that has been for more than twenty years the industry standard reference to inclusive design for wayfinding information. And earlier this year his case study of the redesign of Penguin Classics was published in French (La typographie des Penguin Classics, Bureau Brut Publishing, Toulouse).



Using qualitative data to inform design decisions in government

Andrew Baker Information Designer, UK

Using qualitative data to drive design decisions in government.

So, what are qualitative and quantitative data?

Quantitative data seems easy: how much, how many. Quantitative data is objective – isn't it? Qualitative data is everything else: all the non-numeric stuff. Words, images, sounds, objects.

Why am I giving this talk? Where I work, when people say "data", they are often only thinking of quantitative data. This really annoys me. I've been on a mission in my work to make people more aware of qualitative data, and its usefulness. I get the impression that people are uncomfortable around qualitative data (how does it work? what do I do with it?) So, I want to show you some of the ways that I help people to get to grips with qualitative data. Some of the ideas that I use to persuade people that qualitative data is a useful resource for driving evidence-based decisions.

Tell me more about qualitative and quantitative data? "Qualitative data sounds difficult to work with." Hmmm, really? It's used widely in applied settings such as the criminal justice system. Think about evidence in court cases: witness statements, police interviews, pre-sentence reports, evidence presented in court, victim impact statements. These are seeking to establish objective facts. Much of that is qualitative (rather than quantitative): it is made up of written or verbal statements, photos, recordings, objects. And people make decisions based on this qualitative evidence. This also raises the issue of whether qualitative data is objective. Qualitative data is objective, it can tell us facts. But it can also be subjective in that it can give us insight into 'lived' experience'. But quantitative data can also be subjective, or prone to multiple interpretations. Who hasn't heard of this book: How to lie with statistics. So, which type of data can we rely on? It's not a case of either/or. Qualitative + quantitative. Mixed methods that use both can be effective. One can be used to triangulate (and validate) the other. Or, one can be used to give breadth (quantitative) while the other gives depth (qualitative). Breadth and depth are

both useful. "Isn't qualitative data just anecdote?" Well, no: that's qualitative data when it's collected with insufficient rigour to mitigate bias. You must make sure that your qualitative data is collected properly. Just the same as for quantitative data. "But how do you analyse qualitative data?" Typical methods tend to be language-based. You look for themes: things that some of the items of data have in common (a theme). It can involve a lot of reading, re-reading, and then reading again. It can be useful to have several people doing this, bringing different points of view. For very large bodies of data, there are digital tools that you can use (e.g. NVivo, MAXQDA). And doubtless AI, soon. Qualitative data is different to quantitative data in how it deals with **the quantity** of data that you need to collect. More does not necessarily mean better in terms of the amount of qualitative data you need. There are different schools of thought on this subject. But basically, when you've stopped hearing anything new, then you've got enough.

What questions are best answered by qualitative

data? Questions of "why?" Questions of "how?" Lived experience insight. Behaviour insight. E.g. how do people find out about citizenship requirements? E.g. why do people still use this service (when we've made better replacement services)? Key challenges: what questions to ask, how to ask them. But take a step back: think about what approach to use, in order to get the data best suited to answering your question. Talking to people (in groups, one-to-one) is one approach, but there are others. E.g. ethnographic/observational, diary keeping, surveys, drawing/making. Oh, and one final thing: you did have a question that you were answering, didn't you? It makes it so much easier to know when you're done: you've answered your question (using qualitative data). My rule of thumb: the research question should be no longer than a single simple sentence. If your research question needs to be longer, then maybe it's more than one piece of research.



Chris Thornton

University of South Australia

Medical Information Design

ABSTRACT

Reporting adverse drug events (ADEs) to regulatory authorities is crucial for monitoring medicine safety and the ongoing management of patient healthcare. However, low rates of reporting persist worldwide among consumers and healthcare practitioners because reporting methods are often perceived as complex, confusing, onerous, hard to access or time consuming, particularly if symptoms appear mild.

This paper examines the progress of ReMedi, an interdisciplinary, government funded project in Australia, the ambition of which is to produce an online platform that members of the public and healthcare practitioners can use to report ADEs quickly and easily, and data from which regulators will use to manage and improve medicine safety. As with previous research that has attempted the same (Yellow Card, UK, MedWatch, USA and WEB-RADAR, EU), the challenge faced by the ReMedi team is how to increase incidents of reporting and improve public perception of, and trust in the system.

By applying a co-design methodology and principles of user experience design throughout its fouryear term, ReMedi is working to build value into its outcome such that it motivates and incentivises user interaction and return, rather than simply extracting user data. ReMedi has currently completed its first phase of stakeholder engagement and here we provide reflections on the value a co-design approach brings to working with diverse partners in an interdisciplinary context, the methods of communication and understandings developed in the process, and the design insights that have emerged for us thus far.

BIOGRAPHY

<u>Chris Thornton</u> has over 25 years' experience as a designer and educator in the UK and in Australia. He is program director for the Bachelor of Graphic and Communication Design at the University of South Australia and a researcher in design for environmental and human wellbeing. Chris works within the Australian Research Centre for Virtual and Interactive Environments (IVE), and the Design Clinic (Design Research for Health and Well-being) at the University of South Australia.

He specialises in design-led investigations of embodied experience and uses participatory and hermeneutic frameworks to engage, articulate, and interpret aspects of human socio-environmental perception relative to mental, physical, cultural and ecological health.



Medical Information Design

Chris Thornton, Renly Lim, Eyob Alemayehu Gebreyohannes University of South Australia **Myra Thiessen, Indae Hwang** Monash University

Sieta T DeVries University of Groningen





ABSTRACT

Sara Goldchmit Universidade de São Paulo, Brasil

Information design for health education in hip and knee osteoarthritis. Communicating actionable strategies to reduce pain and enhance quality of life through videos

In the context of medical information design, health literacy is crucial for enhancing the quality of life of people with chronic conditions such as osteoarthritis (OA). Current guidelines emphasize healthy behaviour, such as physical exercises and an anti-inflammatory diet, to mitigate the OA symptoms. This study builds upon previous human-centred design research from the authors indicating that the use of videos might have a positive impact on the health education of the targeted audience.

This presentation aims to report and reflect on the information design process and results of the development of 7 richly illustrated educational videos on hip and knee osteoarthritis to be disseminated in the Brazilian public health digital channels. Its tailored communication considers the informational needs, stigmas, equity, contextual factors, and sociocultural profiles, as well as barriers and drivers of behaviour change.

Key activities developed by the team were concept strategy, script writing, storyboards, graphic layout, illustration, narration recording, soundtrack, and animation assembly. The patients made two assessments during the development: they commented on the storyboards, and currently, the final videos are being assessed by the patients through a survey that aims to investigate the dimensions of comprehension, aesthetics, utility, credibility, and satisfaction.

BIOGRAPHY

Sara Goldchmit is an Assistant Professor of Design at the School of Architecture and Urbanism at the University of São Paulo (FAU USP). She is the founder and director of the Design for Health Research Lab, where she leads collaborative research projects focused on information design for health and wellbeing. With a background in visual communications, her main research topics are patient education materials, digital health and ageing. She is a member of the Brazilian Information Design Society (SBDI) and currently the managing editor of InfoDesign journal.



Information design for health education in hip and knee osteoarthritis – Communicating actionable strategies to reduce pain and enhance quality of life through videos

Sara Goldchmit, Cristiane Aun Bertoldi, Julia Zacchi

School of Architecture and Urbanism and Design, University of Sao Paulo, Brazil

DISCOVER

- 1 Desktop research: current patient education materials
- 2 Field research: patients' experiences and needs
- 3 Literature review: patient education on OA
- 4 User interviews: evaluation of the existing booklet
- 5 Survey: socioeconomic profile and media preferences
- 6 Literature review: health communication for older adults through videos

Marcelo Cavalheiro de Queiroz Oswaldo Cruz German Hospital, Sao Paulo, Brazil

Henrique Gurgel, Márcia Uchoa Rezende

Medical School, Hospital das Clínicas, University of Sao Paulo, Sao Paulo, Brazil

DEFINE

How might we improve the delivery of information about hip and knee osteoarthritis (OA) to the brazilian public health users through videos, to increase accessibility comprehension, usefulness credibility and satisfaction?

DEVELOP

Strategy
Iteration
Development
Implementation
Evaluation
Knowledge mobilisation





Mandar Rane IDC School of Design, Mumbai, India

Exploring design of icons for motorised ICU beds

ABSTRACT

The project is about exploring the design of icons for motorized ICU beds, focusing on the control panel interface. This includes creating icons for caregiver controls, attendant control panel, and patient controls, each serving distinct functions in managing the bed's operations. Emphasizing the importance of consistency in rule formation, the project delves into establishing a coherent visual language across all icons to ensure intuitive user interaction.

Central to the endeavor is the investigation of syntactic and semantic elements in icon design. By analyzing the syntactic structure, the project aims to achieve consistency in the visual representation of different functions, enhancing usability and reducing the learning curve for users. Similarly, delving into semantics involves exploring the meaning conveyed by each icon, ensuring that it aligns with user expectations and effectively communicates its intended function.

Furthermore, the project delves into the exploration of visual affordances, understanding how visual cues can guide users in interacting with the control panel. This involves designing icons that not only convey information but also provide clear indications of how to operate the ICU bed effectively.

By meticulously addressing these aspects of icon design, the project endeavors to create a control panel interface that is intuitive, user-friendly, and conducive to efficient operation in critical care settings.

Research

I identified various ICU bed manufacturers and examined the icons used in their control panels. This involved analyzing the design choices and functionalities of icons across different bed models to understand common practices and user expectations. By studying existing designs, I gained insights into effective iconography and potential improvements for the project.

Understanding the visual language

In understanding the visual language of icons, I noticed a common pattern: angle adjustment icons feature two human figures in different colors to depict the lowest and highest positions. Additionally, when a bed is shown, control arrows match its color, enhancing the connection between controls and bed functions. These insights guided the creation of clear and consistent iconography for the control panel.

BIOGRAPHY

<u>Mandar Rane</u> is currently a Professor of Communication Design at the IDC School of Design, IIT Bombay. He has taught courses in basic design, semantics and communication theory for two decades. Most of his work is documented on his personal website: <u>www.mrane.com</u>



About the project

The project is about exploring the design of icons for motorized ICU beds, focusing on the control panel interface. This includes creating icons for caregiver controls, attendant control panel, and patient controls, each serving distinct functions in managing the bed's operations. Emphasizing the importance of consistency in rule formation, the project delves into establishing a coherent visual language across all icons to ensure intuitive user interaction.

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Methodology

1) Research

I identified various ICU bed manufacturers and examined the icons used in their control panels. This involved analyzing the design choices and functionalities of icons across different bed models to understand common practices and user expectations. By studying existing designs, I gained insights into effective iconography and potential improvements for the project.

2) Understanding the visual language

In understanding the visual language of icons, I noticed a common pattern: angle adjustment icons feature two human figures in different colors to depict the lowest and highest positions. Additionally, when a bed is shown, control arrows match its color, enhancing the connection between controls and bed functions. These insights guided the creation of clear and consistent iconography for the control panel.

3) Concept Development

In the concept development phase, I began creating icons for the required buttons, ensuring consistency in colors and adherence to design guidelines. This involved establishing specifications such as the distance between icons and arrows, maintaining visual harmony across the control panel. By adhering to these guidelines, the icons were designed to facilitate intuitive interaction and enhance the overall user experience.

4) Feedback & Improvement

Following the creation of icons, a rapid survey was conducted with students. Iterations of icons were presented, and participants were asked to interpret the icons both with and without contextual information. Based on the feedback received, adjustments were made to finalize the icons. This iterative process ensured that the icons effectively conveyed their intended meanings to users, enhancing usability and clarity within the control panel interface.

Exploration Outcome





Tingyi S. Lin National Taiwan University of Science & Technology

Diverse needs, various behavioral patterns, and one way to show

ABSTRACT

The former Songshan Cultural and Creative Park (SCCP) was completed 1937 as the Songshan Tobacco Factory, the first professional tobacco plant and one of Taiwan's pioneers of modern industry. Modern SCCP was built on the historical site and transformed into a production base for designers to boost cultural creativities, as well as a venue for performances, exhibitions and businesses. The current SCCP, along with the Taipei Dome and Taipei New Horizon, forms a cultural and sports park.

Despite its popularity for events and exhibitions, the navigation problem has been an issue that concerns all patrons. To address this, our project focuses on optimizing the wayfinding and signage systems. We first investigated current status of this site, conducted a series of user studies, and disclosed design ideas and solutions for future discussions and implementations. We not only understood the limitation of adding signage in the historical sites and investigated the surroundings and spaces in SCCP, but also considered diverse needs and behavioral patterns that visitors usually have with different visiting purposes on this site.

BIOGRAPHY

Dr. <u>Tingyi S. Lin</u> is an information designer and visual storyteller, teaching at National Taiwan University of Science and Technology and as an adjunct at National Taiwan University. She is a board member of the International Committee on Design History and Studies and the Taiwan Society of Basic Design and Art. Additionally, she co-founded the Design Network for Emergency Management, serving on its Executive Board. Her work focuses on new media, visual planning, and design for societal needs, earning her recognition in visual storytelling and graphic creation.

During her tenure as a visiting scholar at the University of Chicago (2017-2018) with the TUSA Fellowship, Tingyi focused on technology and health promotion visual translation. She emphasizes the interdependence of design research and creative practice, using each to enhance the other's effectiveness.

Dr. Lin is dedicated to design research, focusing on fundamental design principles, strategic visual planning, user-centered design, and information design. Her contributions include research papers, international conference presentations, and global lectures. Her work continues to influence art, design, and human learning through her expertise in visual language and information design.



Diverse needs, various behavioral patterns, and one way to show

Tingyi S. Lin

VIDIab, Design Department, Taiwan Tech, National Taiwan University of Science & Technology





Diana Frank Information Designer, Germany

Changing Communication in Product Teams Using Semantic (Visual) Modeling to Efficiently Define or Refine Products and Services

ABSTRACT

While modeling is regularly used in both business process models and IT architecture, Designers barely use models to describe human-centered processes (e.g. in User Experience or Service Design...).

Through various projects in diverse fields (transportation, logistics, navigation, insurance service processes, public services), semantic models have proven to be highly efficient in bridging the gap between different domains. These models are visually oriented yet process-driven, using natural language to describe challenges and benefits of different scenarios or potential solutions. They have been utilized in workshops to establish common ground, delve into necessary details, and provide generic yet detailed support for decision-making processes or identifying open questions requiring further research.

Semantic models serve various purposes, including:

- Collaboration tool during meetings or to prepare work sessions
- Visualization of different points of views
- Foundation for mockups
- Basis for process models
- Highlighting risks and values of products and services
- Documenting open questions and forming the basis for action plans
- Providing an overview and big picture

BIOGRAPHY

Diana Frank works as a strategic counterpart and product coach for companies such as Munich Re, UEFA, Deutsche Bank, MAN, BMW, BMW Bank, Allianz, Raiffeisen, Deutsche Bahn and Deutsche Rentenversicherung, as well as privately owned organizations.

She enables business owners and teams to focus on humanity-based processes to create offers that matter.

She assists them in understanding why somebody wants a product or service and how potential offers address customers' needs and demands.



Changing Communication in Product Teams Using Semantic (Visual) Modeling to Efficiently Define or Refine Products and Services

Diana Frank Information designer, Germany

We all know – and have the best intentions

Yet, we do have different views and perspectives Different languages and different contexts likely result in different truths.



Visualization helps greatly in gaining a common understanding of a task ahead

Semantic models serve various purposes, including:



- * Collaboration tool during meetings or to prepare work sessions
- * Visualization of different points of view
- * Foundation for mockups
- * Basis for process models
- * Highlighting risks and values of products and services
- * Documenting open questions and forming the basis for action plans
- * Providing an overview and big picture

Here a simple example showing the different levels of complexity from a basic understanding to both the customer and technical views in one model.







DAY 2

SESSION 5: Culture 2

Brian Kwok Sze Hang (The Hong Kong Polytechnic University): 'From Legible London to Hong Kong: Localizing and Enhancing Accessibility and Legibility in Pedestrian Wayfinding through User-Centered Design.'

Chad Hall (University of Washington): 'Teaching information visualization through Quantified Self.'

Q&A discussion

SESSION 6: Science and Technology

Giuseppe Attoma Pepe & Camille Étienne (Assist Digital France): 'Liquid consistency. A new information design paradigm for omnichannel digital ecosystems: a case in a sensitive public service area.'

David Skopec (University of the Arts Berlin): 'Bridging Design and Social Science for Innovation.'

Tomáš Chochole (University of West Bohemia, Czech Republic): 'Applied research from an information design perspective.'

Q&A discussion

session 7: Methods

Sue Perks (Information Designer, UK): 'Can Unicode learn from experimental symbol classification methods from the 1950s?'

Enrico Bravi (Information Designer, Austria): 'Meta, Macro, Meso, Micro: developing a teaching model for data visualisation.'

Dr Sara C Klohn Reader (Loughborough University): 'Infographic design: teaching practices.'

Q&A discussion

SESSION 8: Mobility

Myra Thiessen & Indae Hwang (Monash University, Australia): 'Pass: transforming the airport security screening experience.'

Colette Jeffrey (Birmingham City University): 'An Epic Journey With A Magpie: How information design helps us find the way in buildings.'

Jaap Knevel (Information Designer, The Netherlands): 'There must be other ways: A personal plea for more complexity, dialogue, and otherness in wayfinding design.'

Q&A discussion



Brian Kwok Sze Hang The Hong Kong Polytechnic University

From Legible London to Hong Kong: Localizing and Enhancing Accessibility and Legibility in Pedestrian Wayfinding through User-Centered Design

ABSTRACT

This project focuses on the design and evaluation of a Pedestrian Wayfinding Signage System in Hong Kong, taking inspiration from the internationally acclaimed Legible London's wayfinding system. Legible London, introduced in 2007 and operated by Transport for London, has received numerous design awards for its success in creating accessible and walkable cities.

However, when the Transport Department in Hong Kong adopted the Legible London principles, challenges emerged due to the lack of proper localization. One significant challenge was presenting information in both Chinese and English languages, considering Hong Kong's bilingual status. This led to reduced usability and difficulties in accessing information within the wayfinding system. To overcome these challenges, the project conducted user tests, focusing on three crucial variables: legibility, color usage, and information relevancy on the map. The research team collaborated closely with the Transport Department to identify and prioritize these variables, considering the unique needs of Hong Kong as a bilingual international city.

Ten participants, comprising both local and non-local individuals aged 18 to 50+, participated in three rounds of user tests. The study evaluated legibility by testing Chinese font sizes ranging from 9 to 11 points and explored the optimal amount of information to be included in different sections of the totem.

Based on the findings, the project provided design recommendations to enhance localization, improve legibility, optimize color usage, and enhance information hierarchy within the Pedestrian Wayfinding Signage System. By incorporating insights from the localization challenges faced and drawing upon the success of the Legible London project, this user-centered design approach aims to contribute to the development of a more effective and user-friendly wayfinding system in the complex urban environment of Hong Kong.

BIOGRAPHY

<u>Brian Kwok</u> is an Associate Professor at the School of Design of the Hong Kong Polytechnic University (PolyU). He serves as the Programme Leader of Communication Design and is a Lab Leader of the Information Design Lab at PolyU. His research interests focus on user-centered design and visual culture, encompassing a broad range of areas, including health communication design, Chinese typography, wayfinding design, spatial representation in Hong Kong, and the visual culture surrounding neon signs.

He is the author of seven publications, including notable works such as "City of Scripts 2: Hong Kong Type Designers" in Chinese (2024), "Fading Neon Lights: An Archive of Hong Kong's Visual Culture" in English (2023), "Hong Kong Neon Sign Artworks: Vol. 1 — Restaurants" in Chinese & English (2021), and "City of Scripts: The Craftsmanship of Vernacular Lettering in Hong Kong" in Chinese (2020).



From Legible London to Hong Kong: Localizing and Enhancing Accessibility and Legibility in Pedestrian Wayfinding through User-Centered Design

Brian Kwok Sze Hang

The Hong Kong Polytechnic, China

Background

The Pedestrian Wayfinding Signage System (PWSS) in Hong Kong was developed collaboratively by the Transport Department, ARUP Group Limited, and Maynard. Inspired by Legible London, it aims to create accessible cities. Initial implementation was in Tsim Sha Shui, with plans for further installations. Challenges arose due to localization issues in Hong Kong's bilingual environment. A research project conducted user tests on font size, color usage, and relevant visual information. The Information Design Lab at Hong Kong Polytechnic University worked with the Transport Department to identify and improve PWSS prototypes in Tsim Sha Shui.

Research Methods and Participants

The user testing process utilized a task-based approach with the think-aloud technique. Participants were assigned specific tasks to accomplish using the prototype, such as locating streets and landmarks while describing the information on the map during their journey. Performance was assessed using time-checking. Legibility was evaluated through testing Chinese font sizes, suitable highlighted colors, and optimal visual information on the map.

The entire user testing process was video-recorded for analysis. Participants rated different prototypes using a 5-point Likert scale, and follow-up questions were posed to gain deeper insights into design frustrations.

Ten participants aged 18 to 50+ were recruited,

Conclusion and Discussion

After three rounds of user tests on color usage, font size, and information hierarchy, the study found that tangerine and magenta as highlighted colors outperformed Landen Red. Red caused eye fatigue and distraction. Font sizes of 9-10 points were preferred for legibility, and street name angle and length affected search time. Reading distance showed no significant differences for font sizes of 9-10 points. Presenting rich textual information on the map had minimal impact on functionality, but reducing visual information load improved focus.



Ten participants were recruited to identify problems in various prototypes of totems. Searching tasks were conducted for each prototype, followed by follow-up questions after the user tests.

including both local and non-local individuals. The user tests were conducted in three rounds, with four participants in the initial round to identify common usability problems. Subsequent rounds involved participants verifying improved prototypes based on feedback. Each participant's involvement lasted approximately 90-100 minutes.



The user tests focused on three key variables: colors, Chinese font sizes, and information relevancy.

Certain pictograms and symbols caused confusion, and visual representations of road and alley weights created visual noise. The project offers design recommendations to enhance localization, legibility, color usage, and information hierarchy in the PWSS, aiming for a more effective and user-friendly wayfinding system in Hong Kong's urban environment.



The final design of the PWSS's totem was released in different districts in Hong Kong.



Chad Hall University of Washington

Teaching information visualization through Quantified Self

ABSTRACT

The Quantified Self movement, also known as self-tracking, encourages people to gain "self-knowledge through numbers." However, students rarely understand the data trails they create in their daily lives, nor do they reflect on how this data could give them new insights.

This paper describes an assignment aimed to teach visualization through a Quantified Self project that was given in an undergraduate Information Visualization course. The 10-week project prompted students to collect personal data over the course of six weeks, with the goal of providing insight into their self-identified research questions. Students could select any variables of their choice including nutrition intake, coffee consumption, sleep duration, and credit card points.

From their collected datasets, students either created 1) a data report of insights from their data or 2) a product concept that could enable others to collect and gain insight from their own data. By collecting, analyzing, and visualizing this data, students learned how to define a research question, how to structure and generate a unique dataset, and how to process data to ingest into visualization tools. They also applied visual principles to ensure clear communication of the data, and storytelling to communicate their findings to a general audience. Beyond refining these hard skills, students also identified new insights about themselves—including changeable behaviors that may help them lead healthier or more productive lives.

BIOGRAPHY

<u>Chad P. Hall</u> (he/him) is an Assistant Professor in the Division of Design at the University of Washington in Seattle, USA. He also practices as a Design Director at Artefact, which uses research, strategy, and design to envision better futures. With over 10 years of consulting experience, Hall has collaborated with clients in global health, biotechnology, and technology, including the Bill and Melinda Gates Foundation, Exemplars in Global Health, Google, Meta, and Samsung, among others. Hall specializes in transforming abstract ideas into tangible, accessible, and actionable insights through visualizing datasets, mapping systems, designing frameworks, and envisioning futures.

Hall co-hosts the podcast "This is Design School" alongside Jp Avila. The podcast features interviews with a diverse range of designers, exploring their journeys into the design field and how they practice design in their current work. Prior to joining the Division of Design, Hall served as an Affiliate Instructor in Human Centered Design and Engineering at the University of Washington. He holds a Master of Design from the University of Washington's School of Art + Art History + Design and a Bachelor of Arts in Communication from Pacific Lutheran University.



Teaching information visualization through Quantified Self Chad Hall

University of Washington, USA

Students rarely understand the data trails they create—nor do they reflect on how this data could give them new insights.

THE PROJECT

This 10-week project prompted students to collect personal data over the course of six weeks, with the goal of providing insight into their self-identified research questions. Students could select any variables of their choice; examples included nutrition intake, coffee consumption, sleep duration, and credit card points.

THE OUTCOME

By collecting, analyzing, and visualizing this data, students learned how to define a research question, how to structure and generate a unique dataset, and how to process data to ingest into visualization tools. Students also identified new insights about themselves including changeable behaviors that may help them lead healthier or more productive lives.



Example project

HAS ASTROLOGY PREDICTED MY LIFE? Visualization from an interactive website by Elisha Jeon exploring perceptions of astrology through astrological data, reflections, and surveys of friends.

"Ultimately, this quantified self report was not a means of proving astrology wrong or right, but to explore myself and my relationships a little deeper."

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Example project

SAVOR THE FLAVOR: A BRIEF INQUIRY INTO MINDFUL EATING Visualization from an interactive website by Haipei Chen, that tracked and explored mindful eating through food and mindfulness logging, and nutrional data.

"60 days. Over 100 meals. What started out as an experimentation turned out to be such a rewarding journey of selfdiscovery and growth."



Giuseppe Attoma Pepe & Camille Étienne Assist Digital France

Liquid consistency. A new information design paradigm for omnichannel digital ecosystems: a case in a sensitive public service area

ABSTRACT

The CNAF (Caisse Nationale des Allocations Familiales) is the National Family Allowance Fund, a cornerstone of the French welfare system. As of 2022, it serves 13.7 million beneficiaries, disbursing €95.5 billion annually, and employs 35,200 individuals.

To streamline user contact and enhance experience while reducing agent workload, CNAF initiated a program to redesign its digital ecosystem. In collaboration with Eurogroup, a consultancy specializing in the public sector, Assist Digital France (formerly known as Attoma) aimed to redesign user experiences including conversational AI interfaces as part of a new omnichannel strategy.

Project Goal

The goal was to diminish service escalations by resolving first-level queries through AI-driven self-care channels.

Challenge

Ensuring consistent information delivery across channels while maintaining user recognition of content throughout their journey was crucial for user trust in this sensitive service. This is what "Liquid consistency" is about.

Solution

A focused sampling approach was adopted, prioritizing critical use cases and designing content adaptable to each channel's format yet consistent in message. To effectively communicate strategic insights to CNAF's stakeholders, we created a simplified contact escalation rules map to outline the sequential navigation steps across different channels for each user persona, categorized by user inquiry typologies.

BIOGRAPHIES

Giuseppe Attoma Pepe

<u>Giuseppe</u>, born (1957) and raised in Italy, is the founder of Attoma, a Parisian design agency pioneering information design, service design, and user experience since 1997. Leveraging over 25 years of international design experience, he currently serves as Strategic Design Director, leading missions that encompass the comprehensive structuring, design, and evaluation of complex service systems.

In 2019, Attoma joined the Assist Digital group, an international company with expertise in Customer Experience, operating in Italy, France, Germany, and the Netherlands. Following the acquisition, Attoma became Assist Digital France.

A speaker and author, Giuseppe curates <u>attomalab.eu</u>, a blog exploring design culture and trends.

Camille Étienne

<u>Camille</u> focuses on the design of complex interfaces and user-centered services, following studies in Graphic Design (École Estienne, ESAAB, ENS Cachan) and a Master's Degree in UX Design at the Sorbonne.

In 2016, she joined Attoma (renamed Assist Digital France in 2022) to leverage her skills at the intersection of user experience and user interface design. She has led large design projects of various digital products and services for French and International corporations or public bodies like Orange, Schneider Electric, the City of Paris, SNCF, CNAF, etc.



Liquid consistency. A new information design paradigm for omnichannel digital ecosystems: a case in a sensitive public service area.

Giuseppe Attoma Pepe and Camille Étienne Assist Digital, France

Enhancing the relationship between a Social Welfare Agency and its beneficiaries, regardless of the channel used.



Ensuring consistent information delivery across contact channels while maintaining user recognition of content throughout their journey.



Empowering stakeholders to align on shared strategic insights with clear, engaging visual models.





Escalation based on known contact details

Contact escalation diagram by persona

Global contact escalation matrix



David Skopec University of the Arts Berlin

Bridging Design and Social Science for Innovation

ABSTRACT

Social inequality, demographic shifts, participation, digitalization, and conflicts continuously present our society with new, complex challenges. Those seeking answers require innovative methods. The interdisciplinary collaboration between social sciences and visual communication has a rich and successful history. Social sciences provide empirical insights, while visual communication offers clarity, knowledge, and participation through its ability to illustrate and communicate complex ideas. However, to keep up with societal changes, this collaboration must constantly evolve.

The Visual Society Program (VISOP) establishes a framework for this partnership, where science and design come together to develop new concepts for understanding and communicating social issues. This collaboration is exemplified by the partnership between the University of the Arts Berlin (UdK) and the Berlin Social Science Center (WZB), which provides a platform for merging design with social science. Students and researchers are encouraged to explore the methods and fields of the other discipline, aiming to improve the conveyance of complex topics and foster joint interdisciplinary research approaches. Now in its 10th successful year, VISOP's structure and methodology offer a unique approach. In my presentation, I will detail this program's structure and procedures, highlighted by select project examples and a glimpse into our future activities.

BIOGRAPHY

Born in Prague and raised in Ulm, <u>David Skopec</u> pursued his studies in Schwäbisch Gmünd and became a designer specializing in Information Design. His focus developed through his work on an exhibition about the visual language of the ISOTYPE movement, earning his diploma with a thesis on pictorial statistics and innovative teaching strategies using interactive media.

In 1993, Skopec began his academic career at the Berlin University of the Arts and founded the design studio "kognito gestaltung." He has served as a consultant and designer for major companies, collaborated with scientific institutions, and given numerous lectures and workshops worldwide. He has been a professor in China, Germany, Mexico and Switzerland.

His publications from 2002 to 2024 include "show", "Digital Layout", "Info Pop", "Infoklasse", and "Info Chat".

Since 2011, Skopec has been a professor at the Berlin University of the Arts, heading the 'Infoklasse' for Information Design. He leads VISOP, a collaboration between his university and the Berlin Social Science Center, aiming to integrate social research with design.



Bridging Design and Social Science for Innovation

David Skopec

University of the Arts Berlin, Germany

knowledge representation, and documentation.

The Infoklasse offers a unique intersection with the social sciences within an integrated master's

program: in the Visual Society Program (VISOP),



UdK Berlin, Prof. David Skopec d.skopec@udk-berlin.de www.infoklasse.de



Tomáš Chochole University of West Bohemia, Czech Republic

Applied research from an information design perspective

ABSTRACT

When scientific research goes beyond the boundaries of a single discipline and becomes interdisciplinary, information within the research team becomes a key area that fundamentally influences team functioning, climate, work dynamics and results. At such a point, however, it is no longer just about the information message itself, but about the design of the entire information/communication design, which, in addition to the content of the message, also includes the ways and processes by which the research work will be conducted, communicated and shared in order to be efficient, effective and successful.

As a former professional journalist who has worked in applied research for more than a decade and has led research teams, I create communication strategies that help deliver international interdisciplinary research projects.

Thus, the presentation will be based on case studies of projects that mostly concern areas of strong social and societal interest. These include, for example, the fields of spa and prosthetics, which develop the necessary compensatory aids for clients and patients to improve their health situation in an effective way. In other cases, it involves prototype research into a system for rescuing young children in floods, or the development of aids to improve home care for the elderly and infirm.

As leader of these research teams, I have long been designing the strategic information concepts on which the research teams work, including collaboration with business and social partners, as this is applied research with knowledge transfer know-how. This ecosystem thus has an overall impact on the wellbeing of the researchers involved, reflects the patient experience in testing and enables the development of a network of collaborating partners so that research results find their application in practice.

BIOGRAPHY

Tomáš Chochole loves projects and interdisciplinary teamwork. His interests brought him to interdisciplinary cooperation in several international projects. He is an independent journalist, lecturer, researcher, and head of interdisciplinary cooperation at Ladislav Sutnar Faculty of Design and Art, University of West Bohemia in Pilsen, Czech Republic.

He helps to connect the world of business and creativity and brings orders and practical tasks among students so that they can work on them and build their portfolios. He was educated at West Bohemia University in Pilsen and at Jan Amos Comenius University in Prague. In his doctoral thesis, he focused on the development of competencies of basic skills tutors with regard to better employment of people with low literacy, numeracy, and IT in the labour market. In his research and lecturer activities he is focusing and exploring innovative ways of cooperation, problem solving and creativity, using his journalistic experience.



Applied research from an information design perspective

Tomáš Chochole

University of West Bohemia, Czech Republic

KEY FACTS

- 95 % of employees in most organizations do not understand their organization's strategy
- 80 % of people working in teams consider communication to be risky

QUESTION

- How can we design an overall communication plan for an interdisciplinary project and still be successful, satisfied and happy with it?



CONCLUSION: Through effective communication, we can influence the various elements and phases of an interdisciplinary project. Communication must respect all possible specificities and is close to diplomacy. For example, it is possible to apply the principle of design thinking to improve the overall process.



Sue Perks Information Designer, UK

Can Unicode learn from experimental symbol classification methods from the 1950s?

ABSTRACT

In 1958, Henry Dreyfuss and Rudolf Modley applied for funding to test out the feasibility of producing a symbol dictionary. Alvin Eurich director of The Foundation for the Advancement of Education agreed to fund a year-long project – the 'Preparatory Survey for a Study of Communication through Graphic Symbols'. Modley, Dreyfuss (and others) worked on the US side of the project and Marie Neurath became European representative. Modley outlined her tasks in June 1958: to produce a survey showing how existing graphic symbols could be collected and classified, prepare a comprehensive symbol dictionary and set up a workshop for people who need new symbols – a very big ask!

Correspondence between Neurath and Modley describes methods of symbol collection, contact with leading symbol experts, but crucially experimental methods for symbol classification, which Martin Krampen also contributed to. In 1959 the results were submitted. They included two papers by Krampen on symbol classification, and an alternative classification system by Neurath.

The project failed to attract further funding, deemed too technical, and over-reaching. However, the experimental classification methods (some of which were adopted by Dreyfuss in his Symbol Sourcebook) are worthy of re-examination with the aim of ascertaining whether they have any resonance for today's digital society.

BIOGRAPHY

<u>Sue Perks</u> is a UK based archival researcher, writer and designer with a particular interest in Isotype, Henry Dreyfuss's work with symbols and how archives connect with each other. She is currently writing a series of blog posts 'Signs of the Times' to support the 'Give Me a Sign: The Language of Symbols' exhibition for Cooper Hewitt, Smithsonian Design Museum in New York, based on her research in the Henry Dreyfuss Symbol Sourcebook Archive.

In 2022 she co-founded The Symbol Group <u>www.symbol-group.org</u>. Their second conference 'Symbol '24: Icons for Society' takes place on 19/20 September 2024.



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Can Unicode learn from experimental symbol classification methods from the 1950s?

Sue Perks

perkswillisdesign, UK



Can Unicode learn from symbol classifiction methods from the 1950s?

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Dr Sue Perks

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In 1958, Henry Dreyfuss and Rudolf Modley applied for funding to test out the feasibility of producing a symbol dictionary. The Foundation for the Advancement of Education agreed to fund a year-long project – the 'Preparatory Survey for a Study of Communication through Graphic Symbols'. Modley, Dreyfuss (and others) worked on the US side of the project and Marie Neurath became European representative. The aim was to produce a survey showing how existing graphic symbols could be collected and classified in the form of a comprehensive symbol dictionary.

This presentation will examine experimental methods for symbol classification put forward by Neurath and Modley, some of which were adopted by Dreyfuss in his Symbol Sourcebook a decade later.



Enrico Bravi Information Designer, Austria

Meta, Macro, Meso, Micro: developing a teaching model for data visualisation

ABSTRACT

During the summer semester 2022 and 2023, bachelor students, attending a Data Visualisation class (4. Semester), explored different visualisation strategies in order to communicate complex topic such as water balance (2022) and earthquake data (2023).

In order to frame the complex subject matter and adapt it to the needs of an undergraduate course, a model for teaching data visualisation, was developed. Based on four levels of analysis (Meta, Macro, Meso and Micro) and subdivided in four work-phases (Acquire, Analyse, Visualise and Evaluate), this 'modular-cyclical' model, turned out to be an essential tool in order to structure and organise the didactic work, and distribute complexity over the semester.

The work process, documented throughout the semester, included regular inputs, interactions and reviews with teaching staff, scientists and guests, as well as activities such as workshops, excursions etc. For both projects, selected results were collected within a process documentation, in order to share not just the outcomes, but also the effects of both teaching practices with a wider audience. The presentation should provide a systematic look at the teaching model, offering the possibility to reflect on its didactic and pedagogical benefits and the challenges connected with the communication of complex topics.

BIOGRAPHY

<u>Enrico Bravi</u> is a graphic and information designer based in Vienna (AT). He graduated from 'ISIA Urbino' (IT) and earned a master's degree at 'Werkplaats Typografie' in Arnhem (NL). His professional experiences across Europe—within companies, organizations, and cultural institutions in particular—have allowed him to develop a skill set that covers several aspects of visual communication, pertaining to both the fields of information design and book design, with a special focus on education.

Since 2008, he has been a regular lecturer in the fields of typography and information design. Professor for Graphic and Information Design at the New Design University in St. Pölten from 2015–2024, he is currently a lecturer at the Vienna Technical University, Faculty of Architecture.



Meta, Macro, Meso, Micro: developing a teaching model for data visualisation

Enrico Bravi Information designer, Austria

Model workflow of a concentric-cyclic design process for a data vis. assignment, based on four levels of analysis (Meta, Macro, Meso, Micro) and subdivided in four work-phases (Acquire, Analyse, Visualise and Evaluate).





Sara C Klohn Reader

Loughborough University, UK

Infographic design: teaching practices

ABSTRACT

In this study, we discuss information design teaching practice in higher education, through six iterations of teaching infographic design. The core activity involved students' personal narratives to scaffold knowledge on familiar subjects while introducing or deepening understanding of graphic design concepts such as narrative, and drawing. The latter was used as a means of communication, thinking and reflective enquiry for data collection and organisation, and as an end in itself.

The teaching experiences approached here span over five years, two countries, three programmes (at undergraduate and postgraduate level), and four academic modules. In all settings, the teaching practice started with introducing infographics and personal narratives, including what makes an infographic efficient, and how to develop an easy-to-follow narrative. Adjacent information design concepts provided theoretical support. The following steps varied in each iteration of this activity but always included collecting and selecting personal data, and visually representing it in an infographic.

Reflecting on each experience and students' graphic outputs from this practice, we suggest that probing students to use their personal narratives increases engagement with the activity which reflects in learning core concepts of infographic design and data visualisation. We propose a workflow for teaching infographics and related information design concepts.

BIOGRAPHY

Dr <u>Sara C. Klohn Reader</u> is a lecturer and Graphic Design Programme Leader at Loughborough University, UK. Her research interested rely on how we teach, design, and use visual information artefacts, recently with increasing interest in infographics. With previous experience living and teaching in Brazil, she investigates these issues cross-culturally - and is always looking for interesting new collaborations!



Infographic design: teaching practices

Dr Sara C Klohn Reader & Dr Anelise Zimmermann

School of Design and Creative Arts, Loughborough Universit, UK

The flowchart below shows six instances of running an infographic design activity as a teaching practice in higher education. The core activity involved students' personal narratives to scaffold knowledge on familiar subjects while introducing or deepening understanding of graphic design concepts such as narrative, and drawing. The activity requirements were defined depending on the teaching objective and students' prior knowledge. Reflecting on each experience and students' graphic outputs from this practice, we suggest that probing students to use their personal narratives increases engagement with the activity, which reflects in learning core concepts of infographic design and data visualisation.





Myra Thiessen & Indae Hwang Monash University, Australia

Pass: transforming the airport security screening experience

ABSTRACT

Airport security screening processes are complex tasks involving complicated equipment that can be confusing and intimidating for passengers, which often results in frustration and anxiety. Compounding this, airports are high stress environments that are crowded, loud, and full of distractions that can make it difficult to comprehend complex instructions. As a result, passengers tend to wait for direct instruction from security officers and are generally very passive when moving through screening procedures. In an attempt to address this, and as part of an ongoing project, we are developing a system for self-screening that aims to return agency and autonomy to passengers empowering them to take a more active role in this important security procedure. For the purposes of this paper, we will focus our discussion on our passenger-focused approach to the pictographic system, which has been designed using highly recognisable forms that are stylised to embody a warm, approachable, and accessible tone and to enhance communication. As part of our strategy we personify the digital interaction design through the character development of the 'friendly security officer', PASS (Public Assistant for Security-Screening), and consider essential aspects related to inclusivity including the development of and a range of relevant applications for an all gender inclusive figure.

Acknowledgements

This project is funded by the Department of Homeland Security (DHS) Science and Technology Directorate Screening at Speed Program. It is important to note that although this project is funded by the DHS, the background and research observations that will be discussed in this paper presentation do not reflect the views of the DHS or the Transport Security Administration (TSA).

Team of authors

Monash University: Myra Thiessen, Indae Hwang, Maryke Laubscher, Richard Morfuni, Daphne Flynn, Nyein Aung Micro-X Ltd.: Brian Gonzales

BIOGRAPHIES

Myra Thiessen

Dr Myra Thiessen is a researcher in the Design Health Collab at Monash University and is the Program Coordinator for the Bachelor of Design (Communication Design) program in the Faculty of Art, Design, and Architecture. She has rounded expertise as a design practitioner, educator, and researcher specialising in design for legibility, readability, and usability. Her work focuses on information translation and accessibility, which is applied in the development of communication systems that enable all people to share and use information and to navigate complex environments. Dr Thiessen is especially interested in how motivation, context, and environment affect comprehension and decision making and she specialises in evidence-based design drawing on empirical research methods to test both the preference for and performance of visual materials.

Indae Hwang

Dr Indae Hwang is a Melbourne-based interactive artist, designer, and lecturer at Monash University. His passion lies in crafting meaningful user experiences within digital technologies, which is evident in his collaborations with industry giants like Samsung and LG. Dr Hwang's research explores the intersection of user experiences and emerging digital technologies, advocating for critical reflections on their integration into contemporary society. He emphasises the importance of understanding and navigating this relationship through interactive arts and Interaction Design. Alongside his research, Dr Hwang teaches User Experience and Interaction Design, guiding students in utilising new media technologies to design immersive experiences and fostering effective communication between humans and digital interfaces.



PASS: transforming the airport security screening experience

Dr Myra Thiessen and Dr Indae Hwang Monash University, Australia

Modularity & adaptability for inclusion

• Modular approach for PASS character



• Examples of character variation





• Applications for Self Screen Experience





All Gender Inclusive Figure

• Basic Figure Construction



• Applications for Self Screen Experience



PASS: transforming the airport security screening experience

MICRO-X

MONASH University MONASH

DESIGN HEALTH COLLAB



Colette Jeffrey Birmingham City University, UK

An Epic Journey With A Magpie: How information design helps us find the way in buildings

ABSTRACT

This illustrated talk introduces new theory on why people get lost in buildings and how information design can help. Based on my doctoral study findings, I identify six factors that influence wayfinding success and show how the MAGPIE matrix can be used by information designers to help create more navigable buildings.

I also share my EPIC approach to designing information to help make my solutions inclusive to all. Using design examples from hospitals and universities, this talk will explore how different people find their way, why we get lost and what information designers can do to help everyone enjoy indoor journeys regardless of the type of building and the navigator's cognitive ability. I am currently working with a large children's hospital in the UK to help them find ways to improve the wayfinding experience for their patients, families, and staff. Findings from my audit of wayfinding information at this site and 4 other children's hospitals provides interesting insights into the challenges of designing for NHS hospitals and creating solutions that will appeal to all ages of children.

BIOGRAPHY

Dr. <u>Colette Jeffrey</u> is an Associate Professor of Wayfinding and Inclusive Design at Birmingham City University. She completed her PhD on why people get lost in buildings, focusing on the impact of information design and architecture, and is writing a book for Routledge's Research in Architecture Series. In recognition of her contributions to inclusive human navigation systems and research on navigator cognition, she was named a Fellow of the Royal Institute of Navigation (FRIN) in 2022. Before joining academia in 2009, Colette held significant roles in wayfinding design, including Inclusive Design Director at Applied Wayfinding and Wayfinding Design Director at Information Design Unit and Brand Union.

Colette has developed wayfinding strategies for over 25 NHS hospitals, the Natural History Museum, Tower Bridge, Wembley Arena, Heathrow Airport, and shopping centers in Dublin and Dubai. She advised on the inclusivity of wayfinding systems for the London 2012 Olympic and Paralympic Games. Her consultancy project for Birmingham Children's Hospital was recognized as 'Most Impactful Consultancy' in the Knowledge Exchange awards at BCU. She also led the Birmingham Institute of Fashion and Creative Arts in Wuhan, China, and has taught in Hong Kong. Currently, she supervises PhD students researching wayfinding for city cyclists in Lisbon and bilingual advertising design in Bahrain, and continues to advance inclusive wayfinding design theories and practices.



An Epic Journey With A Magpie: How information design helps us find the way in buildings

Dr Colette Jeffrey Birmingham City University, UK

The presented paper shares new theory on why people get lost in buildings based on my PhD study and experiences from designing over 50 wayfinding systems for buildings.

People navigate in an EPIC way...





MAIN STUDIES

Waylosing

Main Survey

Wayfinding

26 Participants

Main Survey

····> Wayguiding

130 Participants

Think-Aloud Protocol

. 40 Design Practitioners

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Data

Analysis

. - - ->

Data

Analysi

Data

Analysis





Environment

PRELIMINARY

Waylosing

Pilot Survey

20 Participants

Wayfinding

Wayguiding

Pilot Survey

Field Observations

Sketch-Map (Pilot)

10 Design Practitioners

STUDIES

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Analysi

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Analysis

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Data

Analvsis

Data

Data

Information

Waylosing

6 Participants

Wayfinding

7 Particibants

Wayguiding

7 Design Practitioners

Interviews

Focus Group

Focus Group

Cognition Mixed method PhD study...

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Analysis

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Analysis

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Data

Analysis

Data

Data

Designers expect different behaviour. **Recalled** wayfinding strategies differ...



Jeffrey, J.C. (2020) Why people get lost in buildings: The influence of architecture, information and navigator cognition. PhD Thesis. Birmingham City University, UK.

Soon to be published: Jeffrey, C. (2025) Waylosing and Wayfinding in Buildings: How design can help people navigate architecture. Research in Architecture series. London, UK: Routledge





Jaap Knevel Information Designer, The Netherlands

There must be other ways: A personal plea for more complexity, dialogue, and otherness in wayfinding design

ABSTRACT

t may seem that wayfinding design has remained largely the same since its emergence and subsequent growth in the 1970s and 80s. During that period, simplification, standardisation, and globalisation became fundamental concepts guiding the practice. Ideas such as conforming sign systems to modernist typography and adopting pictograms as the world's lingua franca were promoted by a handful of design studios. As a result, alternative ways of working were marginalised in favour of a methodology that dominates to this day.

Nevertheless, there exists a vibrant community of unconventional designers challenging those basic assumptions. They ignore international standards for pictograms in favour of grassroots initiatives. They modify words and languages on road signs to represent local cultures more authentically. They confront methodologies that echo colonial mapmaking in order to allow for more diverse ways of representing how people navigate. Across the world, groups of people are taking it upon themselves to initiate change.

'There must be other ways' concluded a two year artistic research project at the department of Visual Communication at Konstfack University in Stockholm, Sweden. Jaap Knevel discusses the lessons learned from engaging with different groups who challenge the norms of wayfinding design, shares the personal experiences that led him to question his creative preconceptions and reflects on a series of experimental maps, signs, and pictograms he created as a reaction.

(It is an ongoing artistic/design research which originated in my 2023 MFA thesis at the department of Visual Communication at Konstfack in Stockholm, Sweden. The work intersects on several subjects surrounding the conference: wayfinding design, social design, and education.)

BIOGRAPHY

Jaap Knevel (he/his) is a wayfinding designer specialising in maps, pictograms, guides, and archives and their cultural complexities. Initially a student and designer at Mijksenaar, he now operates as an independent studio under the name Tokyo Monorail.

In 2020, he co-created the Future Materials Bank at the Jan van Eyck Academy, a crowd-sourced online archive that promotes sharing knowledge of sustainable materials between artists and designers across the world. As of 2024, he also co-curates the Living Library, a two-year research and education project about regional biomaterials at the Staatliche Hochschule für Gestaltung Karlsruhe.

As an educator, he has hosted over 250 workshops on wayfinding and graphic design for schools such as the Willem de Kooning Academy, Amsterdam University of the Arts, Central Saint Martins UAL, and ITESO Universidad Jesuita de Guadalajara in México.

He holds a BA in design from the department of Media and Culture at Design Academy Eindhoven (The Netherlands) and received his MFA from the department of Visual Communication at Konstfack (Sweden).



There must be other ways: A personal plea for more complexity, dialogue, and otherness in wayfinding design

Jaap Knevel

Information Designer, The Netherlands

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