

Ugly Design frameworks that outline the benefits of thinking in terms of binaries suggest that, as designers, we can situate ourselves and our work in relation to opposite extremes. Doing so is more likely to bring about innovation and imagine ideological possibilities. This Special Issue creates a binary between ugly and beautiful with a specific focus on the former. The standard dictionary definitions of *ugly* are in relation to an unpleasant or repulsive appearance or a topic that is likely to involve violence or other unpleasantities. We draw both definitions into our discussion.

We have collected articles that have at their heart ugly topics, including the climate crisis, racism and digital surveillance, which reflect contemporary times. As we write, a war has begun in Ukraine. The news shifts the global pandemic to second position and shunts Black Lives Matter, the rising cost of living in the UK, widening social inequality and the climate crisis out of the news headline. Each news package is filled to the brim with infinite amounts of ugly information. We push for a rebellion against the convention of beautifying data, such as became mainstream following the popularity of *Information Is Beautiful* (McCandless, 2009) and other works emphasizing the sleek graphic design of data visualization. Instead, we seek to engage people in exploring how to research, analyse and present ugly information in other ways.

We aim to encourage thinking beyond one mode and focus attention on the complex array of ways in which modes can meet and combine. We suggest that hybrid assemblages of digital and physical materials can reach audiences via their senses in new ways. We seek to encourage readers to find their own connections between modes, materials and senses in order to understand and communicate complex and particularly ugly issues in innovative ways. We shift our emphasis from visual communication towards experience and interaction. In other words, we try to bring about ugly information experiences, ones that more accurately reflect the profound crises of capital (Fisher, 2009), nature (Chase et al., 2020), and spirit (Danese et al., 2020) that characterize the present moment.

Information

When we think about the word *information*, our minds tend to start with an entirely abstract impression, a formless fog but, like a magnet attracting iron filings, we jump quickly to words, images, numbers or other discernible forms. In other words, information wants to be manifest: in the mind and in the world. It seeks ontological status. Information is like water or sand – it has measurable material qualities but no fixed form. We can assign aesthetic, perceivable properties to these qualities that can then provide a basis for deciding whether information is beautiful or ugly. These qualities can be deliberately mismatched or harmoniously complemented. We can do this to re-engage audiences with well-worn topics or in a more manipulative and misleading way to make ugly information look beautiful and, in this way, make it more palatable, fit a wider audience or hide aspects of the data. Indeed, many systems seek to stamp out the emergence of ugly information in the first place. This can be seen in Mee and Jackson's contribution to this Special Issue, 'Imagine talking about politics in a kids' game: Making sense of #BLM in Nintendo's Splatoon 2'. They show how the video game Splatoon became a space for Black Lives Matters protests as people used the game's ability to import images as a means of political activism. This is rare as many online gaming platforms use automated text recognition technologies to censor sensitive discussion. Thus, these Splatoon users exploit the affordances of drawing, which cannot be detected by AI, to avoid censorship.

[Dourish \(2017\)](#) has shown that the material arrangements of digital information – how digital information is represented, how it is accessed, how it is interpreted – have a profound influence on how we live our lives. For example, the way information is arranged in spreadsheet software reinforces the social organization and professional hierarchies through which decision making is enacted. This is a topic also touched on by Main and Yamada-Rice in their contribution, ‘Evading Big Brother: Using visual methods to understand children’s perception of sensors and interest in subverting digital surveillance’, which sought to show children how to subvert or block the sensors in their digital devices. One aim of this work was to build awareness of the many ways in which the rich multimodal nature of children’s lives is turned into narrow data representations that can be monetized. This offers a specific example of how the ruthlessly inescapable grid of boxes in a spreadsheet constitutes an ugly arrangement, one that has real consequences for how resources are distributed or income tracked.

[Campagna \(2018\)](#) refers to such structures as ‘Technic’, as manifestations of our realities. In this sense, ‘Technic’ can be used to refer to the societal structures and also the means by which we make them visible. Following this definition, one interpretation of the influx of ‘ugly’ societal issues of contemporary times could be that they are caused by the current version of Technic structures reaching breaking point. In other words, the dominant exchange models of global capital, outsourced labour and transnational finance show their true effects in our rapidly degrading ecosphere, unchecked species loss and climbing income inequality. [Fisher \(2018: 435\)](#) says that this asserts itself on humans through the rapid increase of psychiatric disorders and, in doing so, makes visible the inability of our species to cope with these outdated models. Yet, as researchers and teachers of art and design, we ask students to look closely and observe the breaking point of this contemporary Technic because each crack offers new opportunities and the possibility of hope. We often use [Campagna’s \(2018: 115–116\)](#) suggestion that ‘magic’, a term he uses to define all irrational acts, ‘can also be considered a form of therapy to (counter) Technic’s brutal regime over the world’. As artists, we are comfortable with the unstable, the uncertain and the irrational, and suggest that our methods could now be of greater use than other more traditionally ‘rational’ approaches to produce innovative methods – a form of methodological ‘activism’ that can provide new ways of understanding and engaging with the world.

Methodological Activism

Working outside conventions of traditional social science research practices, we are defining new approaches to knowledge production and dissemination. Matching a critical and socially committed creative sensibility with a tacit understanding of physical and digital materials allows us to access new ways of being and thinking through making. These already connect to our long human history of learning and sense-making through physical materials with our bodies ([Ingold, 2013](#)). We aim to provoke questions about how to imagine different possible futures where narratives are plural and evolving, and where we honour each other and the earth. Ben-Meir et al.’s visual essay in this issue, ‘Forging new narratives’, showcases four of our graduating students’ work. They invite us to come together, to make and listen, as part of a collaboration between artist and audience, to the ‘ugly’ topics they are presenting. For example, Ben-Meir’s work *Destabilised Common Ground* invites the

audience to interact with a moss colony using heat and water to understand how it responds to extreme human forces.

In Antonopoulou and Dare's article, 'The Riverine Archive: Nausea and information loss on the neoliberal ship of fools', we are asked to engage with an archive that takes the form of an unstable VR experience, one that causes nausea in the pursuit of information, which can never be stable and often sinks without trace. The flow of the article is unsettling, making us consider the very function of a traditional academic article structure and its capacity to explore ugly topics. Indeed, the authors concur that information is not beautiful but, rather, a fallacy of stability servicing a neoliberal epistemology.

Connectivity and Mess

As a group of researchers and artists, our backgrounds are truly interdisciplinary, taking in exhibition, spatial and game design, interaction and interface design, as well as art and science, and a critical take on the big data generated from digital sensors. The way we work means it is not unusual for a philosopher, a musician, a scientist, a computer programmer and a fine artist to work together. As a result, our disciplines remain fluid and responsive to change. We are working in diverse areas where the 'information' of our work connects with space/time, critical technologies, stories/play and art/science. Working in this way produces an abundance of mess, which we embrace.

As a group, we often seek to introduce messiness, texture and disarray into creative work, specifically in the field of user experience design where information is typically presented as clean, smooth, and unencumbered by political or social uncertainty. Designing ugly information experiences requires a radically different approach to that structured by industrial design processes such as Agile, lean, V-Model, waterfall, etc. It starts with our bodies, how they may be controlled, defined or suppressed by the information we are presenting (Reeve, 2011) and moves through the lenses of the behavioural, social and political influence we may be unconsciously wielding (Costanza-Chock, 2020). Of course, there are many ways of determining this influence and many ways of proceeding towards creative realization. Our response is a kind of methodological Wabi Sabi (Koren, 2008), an infosthetics of transience, imperfection, ambiguity and trouble-making.

This experimentation happens at various levels, firstly through the transduction of information from one mode to another, then through the relationship between modes and the reciprocal tension between digital and physical materials. This process is oriented primarily towards the experiential. So, we are interested in the abductive matching of the sensorial and the informational. This is not a step-by-step approach, it is more an entanglement of elements that are balanced over time, what Ingold (2013) calls *correspondence*. Important to this Special Issue is the understanding that neither *information* nor its output need be beautiful. This is something picked up in Robson's contribution to this issue, 'Learning through mess: Sensemaking visual communication practices in a UK multidisciplinary applied health study', where he argues that new visual communication practices may emerge from mess and ugliness, and shows how the researcher-artist can embrace failure in order to do this.

Finally, we invite the reader to reflect on Ronnie Deelen's cover art (see also [Figure 1](#)) for this Special Issue in which he uses speculative design ([Auger, 2013](#); [Dunne and Raby, 2013](#)) to produce ideas for machines and organisms that collect, measure, analyse, generate and curate data. The drawings are an invitation to interact in different ways in order to experience evolving narratives where the audience and the space are allowed as much agency as the artist–researcher. To do so, we might need to be courageous enough to critique the neoliberal academic system where metrics and outputs have left little space for experimentation. We are a group motivated by process, the formation of new ideas and experiences rather than the old structures of status or power. We draw on the enriching and rewardingly 'ugly' traditions of DIY, create and innovate, exchange, swap, remix and collaborate.