

“It’s Like the Wild West”:

User Experience (UX) Designers on Ethics and Privacy in Aotearoa New Zealand

1. Alex Beattie

Media Studies

Victoria University of Wellington, N.Z.

Alex Beattie is a researcher at Victoria University Wellington. He studies the relationship between new media technologies, disconnecting from the internet and wellbeing. His work has featured in *Convergence*, *Science Technology & Human Values*, and in several books on technology and wellbeing.

alexander.beattie@vuw.ac.nz

2. Cherie Lacey

ORCID: 0000-0002-6248-6793

Lecturer, Media Studies

Victoria University of Wellington, N.Z.

Dr Cherie Lacey is a lecturer in Media Studies at Victoria University of Wellington. Her research explores aspects of health and wellbeing as it relates to digital media technologies. She has published in *Convergence*, *Journal of Popular Culture*, *Media, Society and Culture*, and *Perspectives in Biology and Medicine*.

cherie.lacey@vuw.ac.nz

3. Catherine Caudwell

ORCID: 0000-0002-3496-337X

Lecturer, School of Design

Victoria University of Wellington, N.Z.

Dr Catherine Caudwell is a lecturer in User Experience Design at the School of Design, Victoria University of Wellington. Catherine’s research takes a qualitative and interdisciplinary approach to exploring how relationships with emerging technologies are created, reinforced, and reimaged through design. Her work has featured in *Convergence*, *M/C* and *The Journal of Asia-Pacific Pop Culture*.

catherine.caudwell@vuw.ac.nz

ABSTRACT The degree to which User Experience (UX) designers unfairly steer users' behavior through the use of 'dark patterns' is a topical and contentious issue. Scholarship has largely assumed that designers are complicit in manipulating the user and undermining their privacy. In this paper, we investigate privacy dark patterns and report on interviews conducted with UX practitioners, describing three findings: (1) designers feel motivated to act ethically due to their 'moral compasses'; (2) designers are restricted in their ability to act ethically due to commercial pressures and a limited purview of the project; (3) designers' understanding of the ethics of their practice do not currently match determinations made by international privacy and design scholars and demonstrate a limited understanding of how user behavior can be shaped that, in turn, obfuscates beneficial privacy outcomes for users. We conclude by outlining the benefits of independent regulation and progressive ethics education in UX.

KEYWORDS dark patterns, privacy, user experience (UX) design, ethics, informed consent.

FUNDING This work was generously supported by the Privacy Good Research Fund (PGRF), provided by the Office of the Privacy Commissioner in conjunction with the Social Wellbeing Agency, New Zealand.

1. Introduction

The degree to which User Experience (UX) designers unfairly steer the behavior of online users is a contentious and topical issue. In 2016, the influence of the online interface on consumer behavior was legally debated in New Zealand. The New Zealand Commerce Commission called for New Zealand businesses to end the use of ‘opt out’ pricing in online checkout processes, where optional services have been preselected for the user (Commerce Commission 2016). It was determined that low-cost airline operator Jetstar used opt out pricing to encourage customers to purchase the maximum number of additional services, such as travel insurance, seat selection and extra baggage. The Commission (2016) determined opt out pricing “can mislead consumers over the price of the product or service they are buying and can cause them to purchase something they did not intend to”. Following the ruling by the Commission, Jetstar shortly thereafter ceased the practice of opt out pricing for domestic and international flights sold in New Zealand.

The influence of the UX designer on user behaviors also raises significant privacy implications. For example, it is alleged that the Facebook interface is designed to influence how Facebook users make privacy choices with the intent of encouraging users to disclose personal information and give up more of their personal data (Perdes 2020). In 2019 Facebook was ordered by the United States (U.S.) Federal Trade Commission (2019) to pay a five billion dollar fine for making “deceptive claims about consumers’ ability to control the privacy of their personal data” and called for Facebook to change their privacy practices. In short, online privacy is increasingly seen as an *ethical* issue of UX design (Waldman 2020; Bösch et al. 2016), with certain designs techniques and patterns identified as encouraging users towards the least privacy-friendly options.

In this paper, we investigate the development of UX design ethics in New Zealand in relation to user privacy. In contrast to design research that strictly advocates for ethically aware design (Friedman and Hendry 2019) or makes normative claims about the ethical responsibilities of designers (Berdichevsky and Neuenschwander 1999), we spotlight the perspectives of UX designers on the ethics of their practice and the privacy of end users. We do so to assess the ethical awareness of UX designers in relation to user privacy, understand how ethical decision-making occurs in practice and where the agency of designers lies. Chivukula and colleagues (2020) argue that a UX designer's capacity to make ethical decisions on projects depends on multiple factors, including the status of UX within the hierarchy of the organization, the balancing of business goals versus ethical considerations, and the organization's and individual's appetite for professional development in ethical knowledge. In this paper, we test whether these claims are evident in the specific ethical context of user privacy. We therefore ask: *What is the agency of designers regarding decisions about user choice, consent, and privacy decision-making in the course of a digital project?*

In a review of literature on the influence of design on user privacy, we highlight a recent turn in privacy law and design scholarship that emphasizes the increased agency of designers to influence privacy outcomes. This largely centers on the term 'dark patterns' and we outline the various ways dark patterns can supposedly shape user behavior and interfere with users' privacy. We also note that scholarship has largely neglected to ask what design practitioners think of dark patterns, with an assumption that designers themselves are complicit in manipulating the user and undermining their privacy. To address this gap, we interviewed 13 design practitioners in New Zealand (see Table 1), asking them to describe their "interactions, experiences, and judgements ... *on their own terms*" (Chivukula et al. 2020). Our findings identify three main

themes concerning the agency of New Zealand designers with regards to privacy decision making: (1) designers feel motivated to act ethically; (2) however, designers are restricted in their ability to do so due to commercial pressures; and (3) designers have limited understanding of their capacity to affect privacy decisions. We conclude this paper by making three recommendations to improve privacy practices in the UX design industry in New Zealand.

2. The Influence of Design on User Privacy

Privacy scholarship has tended to overlook the influence of the designer in digital media ecologies. This is partly because privacy and legal scholars have long argued that individuals make rational disclosure decisions (see Westin 1970) that are independent of how choices are presented to them. For this reason, in countries such as New Zealand, Australia, the U.K. and the U.S., it is deemed by privacy law that users consent to disclosing private information if they are provided with sufficient notice. Notice-and-consent is based upon an informed consent framework that requires websites and other data collectors to disclose the methods they use to collect, analyze, and distribute end-user data (Waldman 2020). Notice-and-consent supposedly provides users control over their data by giving them the information they need to make rational disclosure decisions.

Notice-and-consent is criticized by some scholars as insufficiently protecting the privacy of users for a number of reasons. One reason is that notice-and-consent largely borrows from the concept of informed consent, which derives from medicine and bioethics (Hostiuc 2018). Describing the demands of informed consent, bioethicist Beauchamp (2011: 517–518) writes that informed consent becomes legitimate “if and only if the person, with substantial understanding

and in substantial absence of control by others, intentionally authorizes a health professional to do something”. Informed consent is thought to create an unrealistic standard in online environments because of asymmetrical relationships between the consent seeker and consentee, where users are not adequately equipped to understand the privacy notices and a relationship of trust cannot be easily obtained (Flick 2013). It is also argued that notice-and-consent offers an illusion of choice as the decision for the user is typically all-or-nothing, where the user must accept the terms and conditions set forth in the T&Cs or end-user license agreement or do not use the product or service at all (Nissenbaum 2011).

Perhaps most significantly, notice-and-consent is also informed by the rational choice model of disclosure decision-making (Reidenberg et al. 2015), which is called ‘privacy pragmatism’ in legal scholarship (Westin 1970). Privacy pragmatists assume users are utility-maximizing individuals who base their decisions to share on “how the information in front of them compares to their privacy preferences” (Weldman 2020: 105). Moreover, social science research has debunked many of the assumptions of human decision-making based on rational choice theory (Ariely 2008; Kahneman 2011; Thaler and Sunstein 2009), proving that individuals do not make rational disclosure decisions online (Acquisti and Grossklags 2007) and are susceptible to manipulation. Richards and Hartzog (2019) and Cohen (2012) discuss the many ways in which technology companies overuse legalese and mechanisms within privacy policies and terms and conditions to direct users towards disclosing personal information.

Scholars contend that UX designers can influence users’ privacy outcomes in a number of ways. For example, designers can repeatedly “nag” the user with requests for consent that drains the user’s willpower to refuse, or obstruct access to a website until registration is completed and personal information is disclosed (Gray et al. 2018). Waldman (2020)

summarizes four cognitive and behavioral barricades to rational privacy and disclosure decision making: 1) *anchoring*, or the disproportionate reliance on the information first available to users (Ariely 2008; Chang et al. 2016); 2) *framing*, or the way an opportunity is presented to the user (Hanna 2011); 3) *hyperbolic discounting*, which is the tendency people have to overweight the immediate consequences of a decision and to underweight those that will occur in the future; and 4) *overchoice*, or the problem of having too many choices, which can overwhelm or paralyze consumers (Scheibehenne et al. 2010). Moreover, design scholars have tested the effectiveness of the design of the terms of service, in particular the ‘I agree’ button, finding design can both streamline the consent process and encourage users to understand their legal rights and responsibilities in more detail (Robinson and Zhu 2020). The design of the consent process has particular relevance following the European Union’s (EU) General Data Protection Regulations (GDPR) requirement for websites to ask users for consent prior to setting cookies [endnote 1]. In a study on cookie consent notifications Ultz et al. (2019) concluded that the position of the notice on the screen, the default option or ‘nudges’ with respect to use of color or stylization of choices, and presence of a privacy policy link all increased the likelihood of the visitor consenting to cookies.

Much of the debate concerning the relationship between design and privacy disclosure has focused on ‘dark patterns’. The term ‘dark pattern’ was coined by UX Designer Harry Brignull (n.d.) on the website darkpatterns.org, which catalogues instances where established design patterns and user behaviors are leveraged to manipulate or deceive users. Dark patterns are derived from the concept of design patterns, where designers capture an instance of a problem and a corresponding solution, abstract it from a specific use case and shape it in a more generic way so that it can be applied and reused in various matching scenarios. In instances

where interactions are prescriptive—for example, entering an email address in a form—the design can make the user’s task easier by providing options that predict their response. A dark pattern is the use of this approach to mislead a user for the benefit of another, and tricks users into performing unintended and unwanted actions. Mathur et al. (2019) summarise dark patterns as “interface design choices that benefit an online service by coercing, steering, or deceiving users into making decisions that, if fully informed and capable of selecting alternatives, they might not make.”

By using a familiar interaction design language against the user, dark patterns effectively disregard the ethical notions of transparency, user trust, and reasonable expectations of privacy. Bösch et al. (2016) demonstrate that online service providers have become increasingly sophisticated in steering users towards data-maximizing options, and that dark patterns have become widespread. Lugiri and Strahilivaitz, in the first major empirical study of the effectiveness of dark patterns in eliciting personal data, write: “Our bottom line is that *dark patterns are strikingly effective in getting consumers to do what they would not do when confronted with more neutral user interfaces*” (2019: 5; original emphasis). In short, dark patterns are demonstrably effective at nudging users towards the least privacy-friendly options for the purpose of commercial gain.

Yet there is an implication in many discussions of dark patterns that designers themselves are complicit in the undermining of a user’s privacy by virtue of their coercive designs. Gray, Chivukula and Lee (2020) argue a key component of a dark pattern is the intent of the designer. They differentiate dark patterns from ‘bad’ design, suggesting that the former is when the designer intentionally manipulates the user and the latter occurs where there is no malicious intent by the designer to the user, but their design causes inconvenience due to usability issues.

But there is currently little academic analysis that tests what designers themselves think of, or know about, dark patterns. In a study of online conversations about dark patterns on Twitter, Fansher, Chivukula and Gray (2018) observed the use of the hashtag #darkpatterns by designers to call out and publicly shame organizations that engage in manipulative design practices. The authors of these studies call for additional investigations to understand how designers situate and frame their personal and ethical responsibilities. Although online conversations about dark patterns by designers in networked publics like Twitter demonstrates an awareness and interest in rethinking privacy disclosure and manipulative design, we do not yet have a good sense of the agency of designers in their everyday practice to make ethical decisions regarding the privacy of their users.

3. Our Approach

Our work acknowledges and builds upon previous research in human-computer interaction [HCI], which has sought to articulate the *design complexity* inherent in HCI practice (Chivukula et al. 2020; Goodman, Stolterman and Wakkary 2014; Gray 2014; Stolterman and Pierce 2012; Zhang and Wakkary 2014). In particular, our research extends the research undertaken by Gray and Chivukula (2019) and Chivukula et al. (2020), which describes the ethical concerns of UX design practitioners in the U.S. in situated, contextual, and practice-led ways. Our approach constitutes an effort to spotlight designers' own perspectives—including their potential blind-spots—on the ethical complexities of their work practices, rather than make normative claims about ethical design.

We conducted a series of ethnographic interviews with 13 designers and design consultants across New Zealand, whose roles relate to the design and development of digital products and services. Although our original aim was to study UX practitioners across New Zealand and

Australia, the Covid-19 pandemic limited our study to New Zealand, and we acknowledge this as a limitation of our research. Our aim was to understand a range of sectors and organizations, with participants' workplaces ranging from in-house design at large companies, design consultancies, and government departments. Recruitment of participants was via our professional networks and snowball sampling. The interviews were semi-structured and sought to capture rich descriptive detail of the experience of the participants in their day-to-day design practice. An interview guide was provided to prompt discussion of how and where aspects of ethical decision-making presented in the course of a digital project. Each interview was 60 minutes in length, and all were recorded using an iPhone. A research assistant manually transcribed the interviews, which were then checked by the researchers to ensure accuracy.

3.1 The participants

Participants' job titles ranged from experience designer, service designer, content consultant, and digital creative director. Although most participants acknowledged that there was no "typical" project and their role varied from one project to the next, most participants' jobs involved aspects of user design, user research, prototyping, interaction design, visual design, and user testing. We refer to the study participants simply as 'designers' for the remainder of the paper.

<i>Name (anonymized)</i>	<i>Industry type</i>	<i>Role</i>
<i>Adele</i>	Agency or consultancy	Experience designer
<i>Connor</i>	Government	Senior designer
<i>Lola</i>	Agency or consultancy	Experience designer
<i>Aaron</i>	Agency or consultancy	Creative director
<i>Clara</i>	Enterprise	Digital creative director
<i>Evie</i>	Agency or consultancy	Content consultant
<i>Jane</i>	Agency or consultancy	Content consultant
<i>Linda</i>	Agency or consultancy	Content consultant
<i>Louie</i>	Agency or consultancy	Content consultant
<i>Max</i>	Agency or consultancy	Content consultant
<i>Iris</i>	Agency or consultancy	Content consultant
<i>Oliver</i>	Agency or consultancy	Content consultant
<i>May</i>	Government	Service designer

Table 1

Study participants, their industries and roles

3.2 Data analysis

Following the interviews, we conducted a grounded thematic analysis of the transcripts to identify emergent themes. Guided by our research question, *What is the agency of designers regarding decisions about user choice, consent, and privacy decision-making in the course of a digital project?*, we identified three principles themes: (1) designers feel motivated to act ethically due to their own ‘moral compass’; (2) however, designers are often restricted in their ability to act ethically due to commercial pressures to reduce costs, the lack of ethical inquiry integrated into projects or workflows, and limited purview of the entire project; (3) designers’

understanding of the ethics of their practice do not currently match determinations made by international privacy and design scholars. These themes suggest important motivations for, and obstacles to, the mobilization of ethical decisions in design practice, and are analyzed and discussed in detail below.

4. The Day-to-Day Ethics of UX Design in Aotearoa New Zealand

4.1 “Moral compass” and how designers see themselves

The first theme we identified was that designers often saw their personal ethics to be an important part of their job, considering themselves as “advocates” for users within the scope of a project. Many of the designers referred to this as their own “moral compass”, indicating that they try to be guided by “what resides in [their] own conscience as a designer” (Connor). The designers in our study overwhelmingly expressed a desire to work within an organization that aligned to their own ethical values, and could easily recall feelings of discomfort when they have been asked to work on projects that did not match these codes. Our finding supports research conducted by Gray and Chivukula (2019), which suggests that self-driven ethical practices by individual designers are an important mediating factor in their work. However, like Gray and Chiukula (2019), we too found that designers’ ‘moral compasses’ were frequently constrained by the contractual function of the job, workflow, and organization, which we discuss below.

The language used by designers when discussing their ‘moral compass’ was particularly revealing. The designers indicated that there was a boundary point in HCI at which they considered interface design to become unethical. However, this boundary point was identified by the designers only by their subjective, emotional or affective response. For example, Connor described the feeling of “alarm bells” when an aspect of the project clashed with his personal

values. Similarly, Adele said she could identify this ethical boundary by an “inkling” that something did not “sit right” with her. She explained: “it’s just a human thing—you get a feeling.” Similarly, Evie shared that she sometimes reaches a point in a project where “things just don’t feel right”. Here, the participants articulate a notion of design as a trajectory (cf. Gray et al. 2018), from ethical to unethical. For these designers, crossing this intangible ethical line is signaled only by an affective feeling-state rather than, say, an external or mediating agent.

In our discussions with the designers, it was apparent that their moral compass was aligned to their identification with the user position. It was common to hear designers describe themselves as the user’s “proxy” or “advocate”. Many designers mentioned that they were specifically trained to empathize with and advocate for the user. As Clara explained: “my role is literally representing humans the best I can.” Adele also describes her role as empathizing with this user, which she calls “a kind of emotional labor”.

However, what became clear when analyzing our interview material is that the term ‘ethics’ functions a “floating signifier” (Hall 2019). As signifier, *ethics* becomes attached to a number of domains, including accessibility standards, cultural awareness, and research methods. In particular, we found that the designers’ concept of ethics has a strong orientation towards accessibility standards, to the point that ethical design was frequently conflated with issues of accessibility. The New Zealand Web Accessibility Standard was introduced in 2003 and is defined as “online content [that] provide[s] equal access and opportunity to disabled people” (Digital Government NZ, 2020). Notably, the information sheet we provided to participants prior to the interviews explained that we were interested in talking to them about the ethics of their practice, but did not specifically mention data privacy. We suggest that the strong correlation between the concept of ‘design ethics’ and accessibility standards in the New Zealand design

industry reflects the cultural shift brought about by the 2003 introduction of government-mandated accessibility standards. We will return to this point in the conclusion.

4.2. Informality of ethical activities and commercial pressures

A second major theme we identified was the informality of ethical activities and the lack of formal integration into project planning and workflow. Our participants revealed that discussions about ethics and user privacy are not a clear or conscious step during a design project. Several participants described the state of ethical enquiry for design projects as “like the Wild West”. In the absence of formalized ethics, it became apparent that commercial pressures can reduce a designer’s ability to raise privacy-related questions or undertake such assessments. We observed that commercial pressure could reduce a designer’s agency in a number of ways. The first is that design is a commercial business where all activities are costed to the potential client, which frames ethical assessment as a business cost. Aaron shared that the responsibility to identify and raise ethical issues was often on the client. They acknowledged limits to this approach, saying “when it comes to design, there’s only so much we can push, ‘cos we’re not the client; theoretically, they should know their content better than we do, so we would hope they would be coming to us with the issues, saying ‘This needs to be designed’, which we’d help them with.” Aaron discussed the design of a New Zealand company’s website that originally included a ‘cookie banner’—a notification for visitors explaining how their information will be collected and used—which is required in the EU under the GDPR. When the client realised they were not legally required by New Zealand law to provide cookie information, they did not want it included in the design. This highlights that ethical decisions in design are often seen as a ‘nice to have’, but not prioritized unless mandated. Our findings support other studies that concluded

design is typically positioned at the bottom of the business hierarchy, in comparison to engineering or legal departments (Chivukula and Gray 2020).

Designers described feeling frustrated that they cannot always advocate for the user to the extent they would like. For example, the content consultants discussed a project where they felt morally conflicted about the purpose of the client's business. They deliberated whether helping to improve the business's user experience was further perpetuating practices they disagreed with, or whether they were supporting the user by making information easier to understand. This suggests that the place and time for ethical conversations is unclear and is very context-specific. By seeing themselves as the 'go-between' or 'middle layer', there is a lack of clarity around designers' agency in privacy decision-making. Adele highlighted that, because of their place as "middle- men or -women", designers did not have the level of long-term involvement in a project needed to strongly advocate for users. Similarly, May said that the design team she worked in strongly advocated for clearly defined data privacy, where they only collected information that was completely necessary, and communicated to the user what it would be specifically used for. However, she also noted the issue of funding, saying that sometimes there was not budget for design to be included early in a project, and that made it harder for her design team to communicate their stance on data privacy.

Having a limited purview of the project is one of the commercial realities of design work. The content consultants commented that there are fewer opportunities to raise ethical or access concerns when parts of a project are developed in isolation, and design is kept separate from content. Oliver noted that design and content are often "developed in parallel but completely separately, so they then just have to squish together at the end the content and the design, which is also quite difficult." Consultants are not necessarily involved in the project from the start, and

don't always have input on content or design. Linda explained that if the design is already developed and they are asked to slot in their content,

then we have less opportunity to say, 'Actually, for the type of users who are using this, they might need this here or there, or only need this, really.', or whatever it is. And so that affects where and how and what information you give them too about making the choice, and where you place it in the design so that they don't just kind of *click, click, click, boom* on buttons without understanding the consequences of that choice.

Designers from agencies shared that they are often restricted by the brief from their clients. Having conversations about ethics depended on team make-up, professional position or authority, level of comfort with the client, or the opportunity to raise such issues with the client. Adele highlighted that there is much in-house negotiation about raising concerns with clients, and it was mediated by organizational and team culture. She explained that "our experience team view on a whole lot of things is quite different from client services, but they actually are gate keepers of the way that work runs and what flies and what doesn't, and they have, you know, a bit of a litmus or a judge on whether or not clients are going to accept something."

Ethical decisions and privacy-related issues were also described as risks to the business. Clara noted that her workplace is particularly cautious, and all decisions are checked by the legal and risk departments. She drew a correlation between 'easy' customer experience and risk to the business, stating "there's always this constant negotiation on how much risk the business is willing to take in terms of supporting an easier customer experience. I think those discussions get easier the further we get on, because we're kind of proving that good customer experience doesn't have to be risky; it's just we need to collaborate to work out the best way of doing those

things.” Connor mentioned that his workplace has a privacy expert, but the role is “relatively new”. He adds that the privacy expert does not oversee all processes or decisions, but “gets brought in on request.” Connor talked about this in contrast to the in-house designers, “who kind of poke our noses into every piece of work as early as we can”. The privacy expert becomes involved when someone else on a project says, ““Oh, you know what? That’s a privacy issue. Let’s put it before the privacy person.’, and so it gets ticked off. It’s not sort of baked into everything. So, it’s more for everyone to sort of think of and become aware of.”

A number of participants in our study drew an important distinction between what is legal and what is ethical for users. The content consultants aimed to provide a high standard of transparency and clarity for the users of their products, but have had push back from the client’s legal team, as “lawyers are often intentionally ambiguous” in order to cover themselves, and leave some clauses open to interpretation. Principles of plain and transparent language, in contrast, may provide less room for debate. Connor also noted that legal requirements are not considered from the perspective of a good, or ethical user experience. He explained that the legal team may tell the designers:

‘Oh, we have a prerequisite to ask this certain question.’ It just gets asked, and you kind of go, ‘Wow, that’s so in your face. Have you thought of asking it in this way?’ You know, it really seems to come to, really, the user experience of designers to sort of take that, to always be the advocate for the user and go, ‘Do you think that’s how you’d like to be asked that question?’.

4.3. Limited awareness of the agency to influence privacy outcomes

Our participants also demonstrated limited awareness of their agency to influence privacy outcomes. The topic of dark patterns was framed by binary understandings of ‘good’ versus ‘bad’ design, with dark patterns generically identified as ‘bad’ and associated as a design mistake

that is not the intention of the designer. Clara noted that an interface can be designed that unintentionally directs users to skip over information, suggesting, “I think you have to kind of be conscious of *accidentally* doing dark patterns—you know, customers will click through and just constantly click the green button, and they don’t read a thing. One of the basics that we go by is our general customers aren’t going to read it until they’re stuck, and then they’re going to come back and read it” (emphasis added). In contrast, Aaron claimed that “good basic design work” leads to transparent and informative processes and avoids design scenarios such as dark patterns. These findings contrast with scholarly literature that claim dark patterns are intentional design techniques that aim to manipulate the user against their wishes and are distinct from ‘bad design’ or the unintentional creation of an inconvenient user experience (Gray et al. 2020). In addition, it was not always clear whether ‘good’ or ‘bad’ design refers to a beneficial outcome for the user or the commercial client. Connor described ‘good design’ as a requirement for effectively capturing personal information, suggesting that a designer’s decision can increase a user’s inclination to provide data—a design outcome that is ‘good’ for the commercial client. In contrast, Clara felt it was her role to push back on any ethical issues that impact ‘good experience’, suggesting ethical issues were evaluated on the level in which they impacted usability.

Dark patterns were also predominantly discussed in the context of the notice-and-consent mechanisms. Adele referred to design elements that play a role in users’ comprehension of a process, explaining that her team will look at where in a process the user is given terms and conditions, the size of important text, and the prominence of buttons that must be clicked to ‘accept’. Clara also interpreted the ethical dilemma of a dark pattern as a question of adding or removing ‘design friction’: “we often have discussions around whether or not there’s enough

friction at a certain point. So, like, is this too slick? Is this leading you through?” Other interview participants similarly evaluated dark patterns as an ‘interaction cost’ of an interface. An interaction cost is the combined cognitive and physical efforts required from a user to navigate a digital interface. Low interaction costs are generally believed to improve the usability of a product or service (Budiu 2013). The alternative, often articulated as designing ‘friction’, involves adding design elements and interactions that ask the user to confirm their agreement in a process. Our interviews found a resistance to—or at the very least an ambivalence towards—embedding friction into the interface since it might be seen as bad design. Connor said it is a matter of finding the “sweet spot” between ease-of-use and friction at key moments of personal data collection. Similarly, Linda questioned where the “balance lies” between providing a user-friendly interface and enabling informed consent:

Make it really easy, fast, simple; everybody wants that. But sometimes there’s a case for slowing that process down so that people actually are making an informed decision. And I don’t know where the balance lies, but when it’s just a link next to something that you click, and you have to do that to get on with the process, the temptation for most people is just to click it and go, and not to actually understand what the consequences of doing that are.

Usability was often positioned as a reason why a consent process may be designed to be relatively frictionless for the user. Clara mentioned that what a user might see as a secure process can be at odds with the designer’s usability goals, observing that “people perceive that the harder something is, the more secure it is, which is like the opposite of what we’re trying to do, right? A designer’s trying to make something easy all the time, so we have to have that in mind”. She

queried how to know whether there was an appropriate balance between friction and ease-of-use, saying,

if we really want you to read the details of the thing you're about to sign up for, then have we not made that clear or should we be using a UI [user interaction] element where you tick each thing as you've read it, or, you know, we slow you down and create a bit of friction. I think there's always a bit of a discussion to be had.

Positioning usability in opposition to privacy or framing dark patterns as an interaction cost appears to be a limited understanding of the ethics of design in relation to user privacy. As discussed in the literature review of this paper, scholars have outlined the various ways design and dark patterns can shape user behavior. 'Anchoring' and 'framing' are design techniques that draw upon behavioral science to make certain choices more appealing than others and can influence how users make privacy disclosure decisions (Waldman 2020). In addition, users can be forced by designers to register and reveal personal details to be able to access certain websites (Bösch et al. 2016). Both of these examples are instances where the user experience is designed beyond the simple addition or subtraction of friction into the interface.

In contrast, our participants equated dark patterns with 'bad' or poor usability design techniques with an inappropriate level of friction or a high interaction cost. Moreover, their awareness of how privacy disclosure behaviors can be shaped was only considered within the context of notice-and-consent processes. These perspectives constitute a binary view of design ethics in relation to user privacy: either designers believe they can enhance a user's privacy by adding friction to the interface to encourage (and sometimes force) them to engage with terms and conditions or privacy policy, or the designer can remove friction that encourages the reader to click the consent button as quickly as possible. The point of a term like 'dark pattern' is to

raise awareness about the multiple ways users' behaviors can be surreptitiously steered to a platform's benefit instead of their own. Our participants' narrow understanding of dark patterns leads to a limited understanding of their possible ethical responsibilities with regards to users' data privacy. Our findings support previous studies (see Waldman 2018) that argue practitioners in the technology sector demonstrate narrow understandings of privacy.

Some participants did reflect on the ethics of influencing user behavior through design. Clara stated that she wanted to design products that help the customer: "so how can we use their behaviors and their data and the stuff that we know about them to, I don't know, suggest behavioral changes or automate something, or when does that become creepy—when is that invasive?" In other instances, participants believed that the purpose of the product or service can justify what data is collected and used. For example, Connor stated that, "if you're designing for a product or service that might provide wellbeing, you want the user to be able to actually get something from it. They might be getting welfare or health or some other form of wellbeing that's got a higher kind of moral value than just a consumer relationship". However, participants did not reflect on how design can influence the collection of personal data, beyond the context of notice-and-consent.

Privacy and ethics was discussed more in the context of how data is used, as opposed to how data is obtained. In particular, the interview material indicates a disconnection between data capture and data use. For example, the designers might take into account how their organization is using data, but the mechanisms for the capture of the data are overlooked. Designers therefore appear to be disconnected from international conversations about the ethical obtainment of data. When asked by the interviewer whether, in the course of a project, there are conversations around what data might be used for, Adele acknowledged that it is usually the more senior

people in an organization who will bring up data privacy concerns “because they know to because they’ve seen it before and they’ve got into trouble with it before.” As mentioned, Connor’s workplace had recently hired a privacy expert, but this person was only available to consult on a project if specifically requested—which would require a designer (or another person) to proactively identify a potential privacy issue, then on-refer it to the privacy person. Participants also believed that being transparent about why data is being collected makes the use of it more reasonable. Connor said that his team “are trying to frame as clearly as possible why we are asking certain things, and we’re trying to design very much based on what we require, and if we do require something to be extracted from somebody, we have to frame it very, very clearly as to why.”

5. Conclusions

Our findings regarding the agency and ability of designers to advocate for privacy-led approaches in the New Zealand UX industry suggest several areas of application, as well as avenues for future research. First, we argue that there is a need for the formalization of ethics with regards to privacy. There appears to be a strong desire by design practitioners for *an official or legal instrument to support them in advocating for greater ethics and privacy measures*. A number of the designers drew comparisons with the accessibility guidelines, suggesting a similar tool could be introduced to support privacy decision-making in design. As Adele put it:

I wish [privacy] was more formalized, like a formalized checklist. We’ve got an accessibility formalised checklist [...] So I guess maybe that’s what’s on the horizon for somebody’s privacy, so we will have to have checklists in-house, but until the law changes it’s so hard to find the time-in-budget internally, for us so reliant on the client, to even have the space to think about what that requires or what that needs.

She suggested that if there was a set, government-mandated standard, designers would have the grounds to embed “privacy testing” into their process. She also noted that it would suit their model of business to provide clients with a distinct process that could be appropriately billed for:

If there was—say, the Privacy Commission set a standard for what we all had to do for digital interfaces for privacy, then you’d be like, “OK, well, we’re going to sell that in to our clients. We’ll offshoot the costs to them and be like, ‘Well, you have to do privacy testing now. This is our set up for privacy testing. If that’s how much it will cost you, you can use us’.”

In contrast to the current *ad hoc* application of privacy-led design practice, a privacy standard would likely provide designers with clarity on what constitutes ethical design and allow them to budget privacy standards as an integral part of the digital project. This finding supports Hartzog’s (2018) calls for a design agenda at the regulatory level to protect users from data privacy harms. Similar to the introduction of accessibility standards in New Zealand in 2003, the introduction of privacy standards [endnote 2] could help generate a cultural shift regarding data privacy in the UX industry.

A second point, related to the first, is that there appears to be a *missing layer of accountability* in the development of digital products in New Zealand. The missing layer exists between the product owner and the end user. Could UX designers be better equipped, supported, and empowered to mediate between the product owner and user for better privacy measures? Given that designers already see themselves as a proxy of the user within a product’s development, we propose that their role as user-advocate could be formalized with support from privacy standards. On this point, it is worth noting that there is no clear place for the regulation of dark patterns in the New Zealand jurisdiction [endnote 3]. This is in contrast to the U.S., for example, which introduced the Deceptive Experiences To Online Users Reduction (DETOUR) Act in 2019 to

regulate the use of dark patterns in user interfaces. Empowering designers to advocate for user privacy within a product's development could go some way towards addressing this regulatory gap in New Zealand.

Third, our findings suggest the need for *privacy ethics to be taught in UX training institutions* in New Zealand. We also suggest that existing UX design practitioners in New Zealand might benefit in ongoing professional training in data privacy. This finding supports the work of Gray et al. (2020), who call for more progressive ethics education in UX courses and training programs, and builds upon the work of Wong et al. (2017), which argues for the normalization of privacy issues in design education. Incorporating privacy into UX design education would further support designers to advocate for user privacy in the course of a digital project.

We consider a fruitful avenue of future research would be to map the range of UX workflows to identify where privacy guidelines or discussions could be inserted. We believe this would contribute usefully to calls made by Chivukula et al. (2020) and Gray and Chivukula (2019) to arrive at a better understanding of the *design complexity* within a practice-led framework. There are also clear benefits to extending this study beyond New Zealand to get a better sense of the agency of designers to advocate for privacy in other jurisdictions. The researchers of this paper invite members of the UX design community, and well as privacy researchers from other disciplines, to engage with our work with the aim of supporting better privacy outcomes for users.

References

- Acquisti, Alessandro, and Jens Grossklags. 2007. What can behavioral economics teach us about privacy? In *Digital Privacy: Theory, Technologies, and Practices*. Edited by Alessandro Acquisti, Stefanos Gritzalis, Costas Lambrinoudakis, Sabrina di Vimercati. New York: Routledge: 363-377.
- Ariely, Dan. 2008. *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. New York: HarperCollins.
- Beauchamp, Tom. 2011. Informed consent: Its history, meaning, and present challenges. *Cambridge Quarterly of Healthcare Ethics* 20, no. 04 (October 2011): 515–23.
doi:10.1017/S0963180111000259
- Bösch, Christoph, Benjamin Erb, Frank Kargl, Henning Kopp and Stefan Pfattheicher, 2016. Tales from the dark side: Privacy dark strategies and privacy dark patterns. *Proceedings on Privacy Enhancing Technologies* (4): 237-254.
- Berdichevsky, Daniel, and Erik Neuenschwander. 1999. Toward an ethics of persuasive technology. *Communications of the ACM* 42 (5): 51-58.
- Brignall, Harry. n.d. "Dark Patterns." Dark Patterns. Accessed 28 August, 2020.
<https://darkpatterns.org/>.
- Budiu, Raluca. 2013. Interaction cost. *Nielsen Norman Group*. Retrieved from <https://www.nngroup.com/articles/interaction-cost-definition/>

- Chang Daphne, Erin L. Krupka, Eytan Adar, and Alessandro Acquisti. 2016. Engineering information disclosure: Norm shaping designs. *Proceedings of the Conference on Human Factors in Computing Systems (CHI'16)*, ACM 2016: 587-597.
- Chivukula, Shruthi Sai, Chris Rhys Watkins, Rhea Manocha, Jingle Chen, and Colin M. Gray. 2020. Dimensions of UX practice that shape ethical awareness. In *Proceedings of the 2020 CHI Conference on Humane Factors in Computing Systems*, 1-13 Honolulu: ACM.
- Cohen, Julie E. 2012. *Configuring the Networked Self: Law, Code, and the Play of Everyday Practice*. New Haven, CT: Yale University Press.
- Commerce Commission. 2016. Jetstar: <https://comcom.govt.nz/news-and-media/media-releases/2016/jetstar-gives-enforceable-undertakings-to-end-opt-out-pricing>
- Digital Government New Zealand. 2020. Accessibility. at <https://www.digital.govt.nz/standards-and-guidance/design-and-ux/accessibility/#:~:text=The%20New%20Zealand%20Web%20Accessibility,international%20standard%20for%20web%20accessibility>.
- Fansher, Madison, Shruthi Sai Chivukula and Colin M Gray. 2018. #darkpatterns: UX practitioner conversations about ethical design.” In *In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*. ACM, New York, <http://dx.doi.org/10.1145/3170427.3188553>.
- Federal Trade Commission. 2019. FTC’s \$5 billion Facebook settlement: Record-breaking and history-making. at <https://www.ftc.gov/news-events/blogs/business-blog/2019/07/ftcs-5-billion-facebook-settlement-record-breaking-history>

Flick, Catherine. 2013. Informed consent in information technology. In John Weckert (ed.), *The Importance of Being Professional: Professionalism in the ICT Industry*. Canberra: ANU E-Press.

Friedman, Batya and David G Hendry. 2019. *Value Sensitive Design: Shaping Technology with Moral Imagination*. MIT Press.

GDPR. 2020. Cookies, the GDPR, and the ePrivacy Directive. at

<https://gdpr.eu/cookies/#:~:text=Despite%20their%20importance%2C%20the%20regulations,stored%20by%20your%20web%20browser.&text=Cookies%20can%20also%20generally%20be%20easily%20viewed%20and%20deleted.>

Goodman, Elizabeth, Erik Stolterman and Ron Wakkary. 2011. Understanding interaction design practices. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '11)*. ACM, New York, USA: 1061-1070.

<http://dx.doi.org/10.1145/1978942.1979100>

Gray, Colin. 2014. Evolution of design competence in UX practice. In *Proceedings of the 32nd annual ACM conference on Human factors in computing systems – CHI '14 (CHI '14)*. ACM Press, New York, USA: 1645-1654. <http://dx.doi.org/10.1145/2556288.2557264>

Gray, Colin M, Yubo Kou, Bryan Battles, Joseph Hoggatt, and Austin L. Toombs. 2018. The dark (patterns) side of UX design. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1-14 Montreal: ACM.

[https://doi.org/10.1145/3173574.3174108.](https://doi.org/10.1145/3173574.3174108)

Gray, Colin, and Shruthi Sai Chivukula. 2019. Ethical mediation in design practice. In

Proceedings of the 2019 conference on Human factors in computing systems – CHI '19

(CHI '19). ACM Press, New York, USA: 11 pages.

<https://doi.org/10.1145/3290605.3300408>

Gray, Colin M, Shruthi Sai Chivukula and Ahreum Less. 2020. What kind of work do ‘asshole designers’ create? Describing properties of ethical concern on Reddit.” In *Proceedings of the 2020 DIS Conference on Activism, Ethics and Resistance*, 61-73 Eindhoven: ACM.

Hall, Stuart. 2019. *Essential Essays Vol. 2: Identity and Diaspora*. Ed. David Morley. Durham: Duke University Press.

Hanna, Jason. 2011. Consent and the problem of framing effects. *Ethical Theory and Moral Practice* 14(5): 517–31.

Hartzog, Woodrow. 2018. *Privacy’s Blueprint: The Battle to Control the Design of New Technologies*. Cambridge, M.A.: Harvard University Press.

Hostiuc, Sorin. 2018. Introduction, In *The Age of Informed Consent: A European History*. Edited by Octavian Buda and Sorin Hostiuc. Newcastle upon Tyne: Cambridge Scholars Publishing.

Kahneman, Daniel. 2011. *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux.

Lugiri, Jamie and Lior Strahilivaitz. 2019. Shining a light on dark patterns. U of Chicago, Public Law Working Paper No. 719, University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 879, <http://dx.doi.org/10.2139/ssrn.3431205>

Mathur Arunesh, Gunes Acar, Michael J. Friedman, Elena Lucherini, Jonathan Mayer, Marshini Chetty, Arvind Narayanan. 2019. Dark patterns at scale: findings from a crawl of 11K shopping websites. ACM Conf. Comp.-Supported Cooperative Work.

Nissenbaum, Helen. 2011. A contextual approach to privacy online. *Daedalus* 140 (4), Fall: 32-48, Available at SSRN: <https://ssrn.com/abstract=2567042>

Pardes, Arielle. 2020. How Facebook and other sites manipulate your privacy choices. *Wired*, 12 August, at <https://www.wired.com/story/facebook-social-media-privacy-dark-patterns/>

Privacy Commission. Privacy Trust Mark FAQs. at <https://www.privacy.org.nz/resources-2/applying-for-a-privacy-trust-mark/faqs>

Richards Neil, and Woodrow Hartzog. 2019. The pathologies of consent. *Washington University Law Review*, 1461, <https://ssrn.com/abstract=3370433>

Robinson, Eric P., and Yicheng Zhu. 2020 Beyond ‘I Agree’: Users’ understanding of web site Terms of Service.” *Social Media + Society*. doi:10.1177/2056305119897321.

Reidenberg, Joel, N. Cameron Russell, Alexander Callen, Sophia Qasir, and Thomas Norton. 2015. Privacy harms and the effectiveness of the notice and choice framework. *I/S: A Journal of Law and Policy for the Information Society* Vol. 11, No. 2: 485-524.

Scheibehenne, Benjamin, Rainer Greifeneder and Peter M Todd. 2010. Can there ever be too many options? A meta-analytic review of choice overload. *Journal of Consumer Research*, 37: 409-425. DOI: 10.1086/651235

Stolterman, Erik, and James Pierce. 2012. Design tools in practice: Studying the designer-tool relationship in interaction design. In *Proceedings of the Designing Interactive Systems Conference – DIS ’12*. ACM Press, New York, USA: 25-28.

<http://dx.doi.org/10.1145/2317956.2317961>

Thaler, Richard H, and Cass R Sunstein. 2009. *Nudge: Improving decisions about health, wealth, and happiness*. London: Penguin Books.

Ultz, Christine, Martin Degeling, Sascha Fahl, Florian Schaub and Thorsten Holz. 2019. (Un)informed consent: Studying GDPR consent notices in the field. *CCS '19: Proceedings of the 2019 ACM SIGSAC Conference on Computer and Communications Security*: 973-990.

Waldman, Ari Ezra. 2020. Cognitive biases, dark patterns, and the ‘privacy paradox’. *Current Opinion in Psychology*, 31: 105-109.

Westin A., 1970. *Privacy and Freedom*. London: Bodley Head.

Wong, Richmond Y, Deirdre K Mulligan, Ellen Van Wyk, James Pierce, and John Chuang. 2017. Eliciting values reflections by engaging privacy futures using design workbooks. In *Proceedings of the ACM on Human-Computer Interaction 1*, CSCW (Dec. 2017), Article No. 111. DOI: <http://dx.doi.org/10.1145/3134746>

Zhang, Xiao, and Ron Wakkary. 2014. Understanding the role of designers’ personal experiences in interaction design practices. In *Proceedings of the 2014 conference on Design interactive systems – DIS '14*. ACM Press, New York, USA: 895-904.
<https://doi.org/10.1145/2598510.2598556>

Ziewitz, Malte. 2019. Rethinking gaming: The ethical work of optimization in web search engines. *Social Studies of Science* 49 (5): 707-731.
<https://doi.org/10.1177/0306312719865607>

Notes

1. Cookies are defined by the GDPR as “small text files that websites place on your device as you are browsing. They are processed and stored by your web browser ... [C]ookies can store a wealth of data, enough to potentially identify you without your consent. Cookies are the primary tool that advertisers use to track your online activity so that they can target you with highly specific ads. Given the amount of data that cookies can contain, they can be considered personal data in certain circumstances” (GDPR, 2020).
2. We contrast privacy standards to the Privacy Mark in New Zealand, which is a Privacy by Design (PBD) initiative to identify gold-standard practices in managing personally identifiable data (Privacy Commission, n.d).
3. It is unclear whether they are an issue of illegal trading (currently captured under the Fair Trading Act, 1986, enforced by the Commerce Commission); of privacy (Privacy Act, 1993, enforced by the Office of the Privacy Commissioner); or unsolicited communications (Unsolicited Electronic Messages Act, 2007, enforced by the Department of Internal Affairs).