"Nothing Comes Before Profit": *Asshole Design* in the Wild

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ABSTRACT

Researchers in HCI and STS are increasingly interested in describing ethics and values relevant for design practice, including the formulation of methods to guide value application. However, little work has addressed ethical considerations as they emerge in everyday conversations about ethics in venues such as social media. In this late breaking work, we describe online conversations about a concept known as "asshole design" on Reddit, and the relationship of this concept to another practitioner-focused concept known as "dark patterns." We analyzed 1002 posts from the subreddit '/r/assholedesign' to identify the types of artifact being shared and the interaction purposes that were perceived to be manipulative or unethical as a type of "asshole design." We identified a subset of these posts relating to dark patterns, quantifying their occurrences using an existing dark patterns typology.

KEYWORDS

Asshole design; dark patterns; design ethics; values; Reddit

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INTRODUCTION

Numerous approaches have been proposed to engage designers in applying ethics and values in their everyday work [11]. Structured methodologies such as value-sensitive design have shown promise in shaping the work practices of everyday designers; however, relatively little is known about how designers and everyday users engage with ethics in evaluating design artifacts.

In our prior work, we have attempted to bridge the gap between academic and theoretical understanding of ethical frameworks and "on the ground" practices in UX design [3, 5], including the role of ethical concepts in "everyday" conversations (e.g., [2]). By building upon these everyday conversations about ethics, we are able to build more situated accounts of ethical engagement, with the potential to strengthen methods and frameworks for ethical awareness in pedagogy and practice. In this study, we analyze social media discourses on Reddit, with the goal of describing how ethical concerns framed through the lens of "asshole design" are presented on a specific subreddit. Our goal is to identify and describe relationships among "asshole" design and other frameworks such as "dark patterns" that we have evaluated in previous work [2, 4].

Our contribution to the HCI literature with this late-breaking work is threefold: First, we describe how Reddit users engage with ethics in relation to real-world design artifacts, providing opportunities to identify and study design artifacts perceived to be manipulative. Second, we build upon an existing typology of "dark patterns" [4] to identify the occurrence of various "asshole" strategies, providing further description of how end-users and practitioners perceive manipulative or unethical design. Third, we identify the various types of artifacts being shared, including interaction domains and interaction purposes, providing opportunities for expanding a current typology of dark pattern strategies.

RELATED WORK

Social Media Discourses about Design

Online communities are a popular place to build design competence through open sharing of knowledge [7], critiquing work [12], socializing with community members [8], and other conversational interactions. Our prior work [2] has shown that practitioners and users engage in conversations about ethical practices, creating awareness among others on social media platforms. We focus here on Reddit, a social media platform that contains over 1 million subreddits that allow for focused conversation, including guidelines for posting, moderation, and interaction [9].

Dark Patterns and Ethical Engagement of Practitioners

The term *dark patterns,* coined in 2010 by Harry Brignull, has been used by practitioners to describe "a user interface that has been carefully crafted to trick users into doing things [...that do] not have the user's interests in mind" [1]. We have previously identified five strategies that capture designers'

Dark Pattern Strategy	Definition
Nagging	Redirection of expected functionality that persists beyond one or more interactions.
Obstruction	Making a process more difficult than it needs to be, with the intent of dissuading certain action(s).
Sneaking	Attempting to hide, disguise, or delay the divulging of information that is relevant to the user.
Interface Interference	Manipulation of the user interface that privileges certain actions over others.
Forced Action	Requiring the user to perform a certain action to access (or continue to access) certain functionality.

Sidebar 1: Dark Pattern Strategies and descriptions as proposed in [4].

engagement with dark patterns based on artifacts shared by practitioners: Nagging, Obstruction, Sneaking, Interface Interference, and Forced Action (Sidebar 1; [4]). These strategies were then used to identify examples that practitioners shared on Twitter [2]. The examples that were shared in these prior studies were primarily relating to screen-based ethical concerns, while examples of "asshole design" span a wider range of physical interactions. Thus, this study expands upon these findings, with the goal of identifying how the concept of "asshole design" might productively broaden the notion of dark patterns in the practitioner and research literature. We use our existing dark patterns typology [4] as a point of departure to explore and describe this range of ethically-valenced artifacts.

OUR APPROACH

We used a content analysis approach [10] to describe how Reddit users on the '/r/assholedesign' subreddit engage with ethical concerns in their posts. This subreddit is dedicated to the posting of design exemplars which include some form of intentional malice, with the sardonic tagline: "Because nothing comes before profit, especially not the consumer." For a post to indeed qualify as an example of "asshole design", its depicted artifact must possess clear malicious or deceptive intent on the part of its creator/s, rather than simply be inconvenient to a user due to a poor design decision or implementation. We conducted this research as part of a larger research study investigating the emergence of ethical conversations regarding sociotechnical systems on social media. Through this study, we seek to answer the following research questions:

(1) What ethical concerns are present in the artifacts shared through the subreddit posts?
(2) How do these artifacts relate to existing dark pattern strategies?
(3) How do posts containing physical artifact relate to screen-based dark patterns?

Data Collection and Analysis

We collected and analyzed a set of artifacts posted by members of the subreddit '/r/assholedesign,' comprising real-world examples where corporations or individuals were deemed to have designed with a malicious intent. Through the Reddit API, we collected a portion of all posts to the subreddit in a sixteen-month period (July 2017 to November 2018; n=4775). We compiled all available metadata and media content into a MySQL database; 1002 of the total posts were randomly selected for analysis using a random number generator. This subset forms our dataset for this study.

A team of five researchers with experience in UX design performed a content analysis of the dataset. Each artifact and its associated post information were coded to confirm whether it was an example of "asshole design" by the subreddit's definition. Additionally, each artifact was coded for the type of modality present, the interaction domain/s and purpose/s, and whether or not one of the five strategies of dark patterns from our typology [4] was present in the artifact. We carried out this

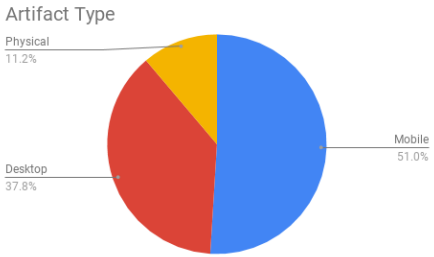

Figure 1: Distribution of Artifact Types

Figure 2: Example of an "asshole design."

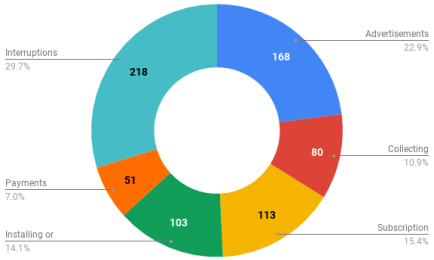

Figure 3: Distribution of posting purpose.

content analysis iteratively, with three rounds of thematic analysis and member checks supporting the creation of a codebook for each content characteristic. Upon the completion of coding, we used descriptive statistics to characterize the dataset and answer our research questions.

RESULTS

Nature of Ethical Concerns in the Posts

690 of the 1002 posts were consistent with the principles of "asshole design," while 207 were examples of bad design and 105 were examples of neither label. Figure 1 shows the distribution of posts by artifact format. The posts containing bad design or no clear ethical concern were excluded from further analysis. Figure 2 includes an example of an asshole design: a physical artifact that is designed with spikes in such a way that it does not allow homeless individuals to sit or sleep on the platform.

Through our thematic analysis, we coded the *activity* represented in the post and the *domain* or context of the activity. Activity domains included: healthcare, games, social media, communication, common apps from large companies, physical products, infrastructure, and permission settings. Apps from large companies (e.g., Google, Microsoft, Apple; n=188) and social media apps (e.g., Facebook, Snapchat, Instagram; n=91) were most commonly represented in the examples. Other frequently occurring domains included games (n=55), physical products (n=54), permission settings (n=43), shopping (n=27), and communication channels (n=22). Users mentioned a variety of reasons for posting these artifacts, including: interrupting or misleading the users' task flow, presenting advertisements, collecting user information, signing up for services, enrolling for subscriptions, and tasks involving payments that take user's credits (Figure 3. One such example is presented in Figure 4 where a user posted a screen shot of the Foscam Viewer app and commented: "[App] opens to intrusive nonskippable picture that links you to their new shitty cloud linked app."

Relationship of Posts to Dark Pattern Strategies

Dark patterns were a subset of the asshole design artifacts shared in the subreddit (n=565/690). The posts primarily expressed annoyance, discomfort, and frustration faced by the authors while using the services presented in the artifacts. In 156 of these posts (27.66%), authors also explicitly called out the companies involved in creating such artifacts as a form of "shaming." Artifacts were shared through images (n=497), videos (n=31), and links (n=79). Shared artifacts were primarily screen-based (e.g., desktop, mobile; n=500), with 63 (11.2%) of the posts containing references to unethical concerns in physical products. Among posts containing evidence of dark patterns, we non-exclusively identified the presence of "dark" strategies [4]. All posts contained at least one strategy, with an average occurrence of 1.38 strategies per post (min=1; max=3; sd=0.63). In Figure 5 we present the distribution of these strategies; *sneaking* was the most frequent (n=179) and nagging was the least frequent (n=112).

Figure 4: Example of asshole design in the Foscam Viewer app.

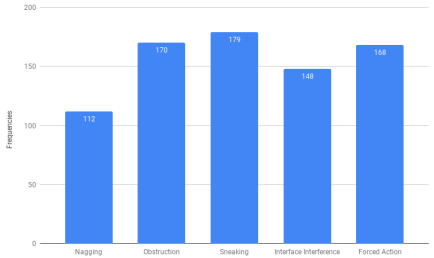

Figure 5: Distribution of posts by dark pattern strategy [4].

Dark Patterns in Physical Artifacts

63 posts (11.2%) involved examples of physical artifacts, which represent the most substantial departure from artifacts already included in the dark patterns taxonomy. These posts included instances of advertisement signage, infrastructure, packaging, and other physical products. Further analysis of these physical artifacts in tandem with findings from Greenberg et al. [6] allow us to conclude that existing dark pattern strategies have relevance in describing physical forms of manipulation, particularly those forms that remediate patterns found in digital form.

To show this connection, we evaluate two examples that exemplify the dark pattern strategy *sneaking* (n=36) in physical (a) and digital (b) forms. In our taxonomy [4], sneaking is an "attempt to hide, disguise, or delay the divulging of information that has relevance to the user." In Figure 6a, an author posted an image of a price tag with a new "lower price" graphic that hides the real price, which is the same price as the offer. In a parallel example of digital sneaking (Figure 6b), an author posted a screenshot where Adobe asked the user to update payment information, which was automatically recharged without confirmation. In the case of *obstruction* (n=16), we identified physical obstructions that blocked a user's way, obstructing the user from seeing or interacting with something (Figure 2). *Nagging* was the least common pattern in our physical artifacts (n=5); often, this included a digital interface to nag about something physically, such as a printer that repeatedly requested more ink.

DISCUSSION

In this study, we found evidence of conversation about ethical concerns on social media, indicating some level of interest in discussing ethical phenomena and complexity using real-world artifacts. The examples presented in these posts show potential to expand our understanding about how these ethical concerns are discussed by everyday users. Through analysis of a specific subreddit, we have expanded our study of dark patterns beyond digital interfaces to investigate ethical concern in relation to physical artifacts, describing artifacts that supplant user needs in favor of shareholder profit.

Through this late breaking work, we have identified similarities and differences in the presentation of dark patterns and "asshole design". We found that dark patterns were mostly designed to trick users to *use* a certain service whereas "asshole design" tended to *restrict* the use of some products, or a certain manner of using them. Future research should further differentiate among these practices, building upon prior work [4, 6] to investigate new vocabulary to describe ethical concerns as they exist in digital, physical, and multimodal forms. Some occurrences highlighted how existing "dark" strategies were built with digital interfaces in mind, not adequetely accounting for the physical space and other types of manipulative possibilities. These insights may encourage impacts in ethics education in HCI and UX design domains as well as bring awareness about ethical practices in everyday design objects.

(a) Sneaking in Physical Artifacts

Billing History

Date	Type	Payment	Print
10 Feb, 2018	Invoice	A$527.87	
10 Feb, 2017	Invoice	A$382.67	
10 Feb, 2016	Invoice	A$299.88	
10 Feb, 2015	Invoice	A$179.88	

(b) Sneaking in Digital Interactions

Figure 6: Comparing sneaking in physical and digital mediums.

CONCLUSION

In this late breaking work, we have investigated the concept of "asshole design." We collected posts from the '/r/assholedesign' subreddit to describe the breadth of artifacts, including their presentation, type, and interaction purpose. By comparing this ethical phenomenon to prior work on dark patterns, we identified that a subset of "asshole" designs contained dark patterns. We propose further investigation of these phenomena to highlight ethical valence in discourses surrounding unethical design, which may have potential uptakes in ethics-related methodology and HCI pedagogy.

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